

September 30, 2014

TO: Members of the MAG Management Committee

FROM: Christopher Brady, Mesa, Chair

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Wednesday, October 8, 2014 - 12:00 noon
MAG Office, Suite 200 - Saguaro Room
302 North 1st Avenue, Phoenix

The next Management Committee meeting will be held at the MAG offices at the time and place noted above. Members of the Management Committee may attend the meeting either in person, by videoconference or by telephone conference call. The agenda and summaries also are being transmitted to the members of the Regional Council to foster increased dialogue between members of the Management Committee and Regional Council. You are encouraged to review the supporting information enclosed. A working lunch will be provided.

Please park in the garage under the building, bring your ticket, parking will be validated. For those who purchased a transit ticket to attend the meeting, Valley Metro/RPTA will provide transit tickets for your trip. For those using bicycles, please lock your bicycle in the bike rack in the garage.

Pursuant to Title II of the Americans with Disabilities Act (ADA), MAG does not discriminate on the basis of disability in admissions to or participation in its public meetings. Persons with a disability may request a reasonable accommodation, such as a sign language interpreter, by contacting Valerie Day at the MAG office. Requests should be made as early as possible to allow time to arrange the accommodation.

Members are reminded of the importance of attendance by yourself or a proxy. Any time that a quorum is not present, we cannot conduct the meeting. Please set aside sufficient time for the meeting, and for all matters to be reviewed and acted upon by the Management Committee. Your presence and vote count.

**MAG MANAGEMENT COMMITTEE
TENTATIVE AGENDA
October 8, 2014**

COMMITTEE ACTION REQUESTED

1. Call to Order

2. Pledge of Allegiance

3. Call to the Audience

An opportunity is provided to the public to address the Management Committee ON ITEMS THAT ARE NOT ON THE AGENDA THAT ARE WITHIN THE JURISDICTION OF MAG, or non-action agenda items that are on the agenda for discussion or information only. Citizens will be requested not to exceed a three minute time period for their comments. A total of 15 minutes will be provided for the Call to the Audience agenda item, unless the Management Committee requests an exception to this limit. Please note that those wishing to comment on agenda items posted for action will be provided the opportunity at the time the item is heard.

4. Executive Director's Report

The MAG Executive Director will provide a report to the Management Committee on activities of general interest.

5. Approval of Consent Agenda

Prior to action on the consent agenda, members of the audience will be provided an opportunity to comment on consent items that are being presented for action. Following the comment period, Committee members may request that an item be removed from the consent agenda. Consent items are marked with an asterisk (*).

3. Information.

4. Information.

5. Recommend approval of the Consent Agenda.

ITEMS PROPOSED FOR CONSENT*

MINUTES

*5A. Approval of the September 10, 2014, Meeting Minutes

5A. Review and approval of the September 10, 2014, meeting minutes.

TRANSPORTATION ITEMS***5B. MAG Bicycles Count Project - Final Report**

The FY 2013 MAG Unified Planning Work Program and Annual Budget, approved in May 2012 by the MAG Regional Council, included \$96,000 to develop a methodology and conduct a bicycle count in the region. The bicycle count data can be used in safety and air quality analyses, estimates of regional bicycle demand, local transportation planning, and federal funding project applications. The final report for the MAG Bicycles Count project was completed in June 2014. The report summarizes the results and analysis of the Fall 2013 bicycle data count collection effort that included 128 locations throughout the MAG region, and establishes a framework for future data collection in the region. The final report was recommended for acceptance at the September 25, 2014, Transportation Review Committee meeting. The full report can be accessed here: <http://www.azmag.gov/Committees/Committee.asp?CMSID=1044>. Please refer to the enclosed material.

***5C. Pedestrian and Bicycle Facilities Design Assistance Program**

The FY 2015 MAG Unified Planning Work Program and Annual Budget, approved by the MAG Regional Council in May 2014, includes \$300,000 for the MAG Design Assistance for Bicycle and Pedestrian Facilities Program. The Design Assistance Program allows MAG member agencies to apply for funding for the preliminary design portion of a bicycle or pedestrian project. At the July 15, 2014, and August 19, 2014, meetings, the Bicycle and Pedestrian Committee reviewed and ranked applications, and voted to recommend the five top ranked projects for approval. On September 25, 2014, the Transportation Review Committee recommended funding the five top ranked projects for the Design Assistance Program. Please refer to the enclosed material.

5B. Recommend acceptance of the MAG Bicycles Count Project Final Report.

5C. Recommend approval of the following projects for MAG Design Assistance for the Pedestrian and Bicycle Facilities Program: Tempe: Alameda Drive Bicycle and Pedestrian Facilities Improvements Project for \$75,000; Mesa: Dobson Road Complete Street - US-60 to Broadway Road for \$75,000; Fort McDowell Yavapai Nation: Fort McDowell Multi-use Pathway Connector for \$75,000; Surprise: Grand Avenue Sidewalk Gap Improvement Project for \$36,000; and Peoria: New River Multi-use Path Access at Deer Valley Road for \$39,000.

*5D. Project Changes - Amendment and Administrative Modification to the FY 2014 MAG Transportation Improvement Program, FY 2015 Arterial Life Cycle Program, and to the 2035 Regional Transportation Plan

The Fiscal Year (FY) 2014-2018 MAG Transportation Improvement Program (TIP) and 2035 Regional Transportation Plan (RTP), approved by the MAG Regional Council on January 29, 2014, have been modified five times. The FY 2015 Arterial Life Cycle Program, approved by the MAG Regional Council on June 25, 2014, has been modified one time. Additional project changes are needed. Tables A and B contain a list of changes to the Arterial Life Cycle Program; the changes are minor in nature and do not impact the fiscal balance of the program. Table C includes changes to the transit program. These changes incorporate Job Access and Reverse Commute projects based on the priority ranking that was approved by the MAG Regional Council on August 27, 2014. Table D contains a material cost change and additional changes to the freeway program requested by the Arizona Department of Transportation (ADOT), non-Arterial Life Cycle Program project changes requested by member agencies, and general clerical corrections. The detailed listing to fund the cost of the Department of Public Safety officers in the ADOT Traffic Operations Center for three years is included as part of this table. On September 25, 2014, the MAG Transportation Review Committee recommended approval of this item. Please refer to the enclosed material.

5D. Recommend approval of amendments and administrative modifications to the FY 2014-2018 MAG Transportation Improvement Program, FY 2015 Arterial Life Cycle Program, and as appropriate, to the 2035 Regional Transportation Plan.

GENERAL ITEMS

*5E. MAG FY 2016 PSAP Annual Element/Funding Request and FY 2016-2020 Equipment Program

Each year, the MAG Public Safety Answering Point (PSAP) Managers submit inventory and upgrade requests that are used to develop a five-year equipment program that forecasts future 9-1-1 equipment needs of the region and enables MAG to provide estimates of future funding needs to the Arizona Department of Administration (ADOA).

5E. Recommend approval of the MAG FY 2016 PSAP Annual Element/Funding Request and FY 2016-2020 Equipment Program.

The ADOA Order of Adoption stipulates allowable funding under the Emergency Telecommunications Services Revolving Fund. The MAG FY 2016 PSAP Annual Element/Funding Request and FY 2016-2020 Equipment Program were recommended for approval on July 10, 2014, by the MAG PSAP Managers and on September 22, 2014, by the MAG 9-1-1 Oversight Team. Please refer to the enclosed material.

AIR QUALITY ITEMS

*5F. Conformity Consultation

The Maricopa Association of Governments is conducting consultation on a conformity assessment for an amendment and administrative modification to the FY 2014-2018 MAG Transportation Improvement Program (TIP) and 2035 Regional Transportation Plan. The amendment and administrative modification involve several projects, including Arterial Life Cycle Program and Job Access and Reverse Commute projects. The amendment includes projects that may be categorized as exempt from conformity determinations. The administrative modification includes minor project revisions that do not require a conformity determination. Please refer to the enclosed material.

5F. Consultation.

ITEMS PROPOSED TO BE HEARD

6. Service Contract for 9-1-1

The State 9-1-1 Office is proposing that the funding model for 9-1-1 services and equipment change to a bundled monthly fee. The monthly fee would include 9-1-1 equipment, maintenance, and networking costs. On September 22, 2014, the MAG 9-1-1 Oversight Team was briefed on this new model and its impact to the region. The committee recommended conducting a study that will provide an overview of the fiscal and technical status of regional and statewide 9-1-1 and an analysis of the 9-1-1 Managed Services proposal. MAG staff is recommending that a Request for Qualifications be issued. A report will be provided

6. Recommend approval of issuing a Request for Qualifications.

to the Management Committee. Please refer to the enclosed material.

7. Consultant Selection for the MAG Regional Household Travel Survey

The fiscal year (FY) 2014 MAG Unified Planning Work Program and Annual Budget, approved by the MAG Regional Council in May 2013, includes \$4,500,000 for On-Call Consulting Services for Travel Survey - Data Application. The main purpose of the three-year project is to collect regional travel survey data from residential households and non-residential establishments. The On-Call contracts will include up to \$2,500,000 for the regional household travel survey and up to \$2,000,000 for establishment surveys and required modeling support. All major projects within the on call framework are closely interrelated and will be coordinated by MAG to ensure consistency of survey schedules, sample designs and proper exchange of information between surveys and relevant MAG forecasting models. The survey data will be used to recalibrate and improve regional travel forecasting models, update regional travel forecasts, and provide information required for a variety of planning and analytical applications at MAG and MAG member agencies. A request for technical and pricing proposals for the MAG 2014 Travel Survey - Data Application Consultant Household Travel Survey Mini RFP was sent to pre-qualified consultants on June 30, 2014. MAG received two proposals by the July 30, 2014 deadline. On August 13, 2014, a multi-agency evaluation team met and reviewed the proposals. On September 3, 2014, the evaluation team conducted consultant interviews and recommended that MAG select Westat Inc., to conduct the Household Travel Survey for an amount not to exceed \$2,500,000. In addition, the evaluation team recommended that if negotiations with Westat Inc. are not successful, that MAG pursue negotiations with its second choice, Cambridge Systematics, Inc. Please refer to the enclosed material.

7. Recommend approval of the selection of Westat, Inc. to conduct the MAG regional household travel survey as a part of the Travel Survey - Data Application On-Call for an amount not to exceed \$2,500,000. If negotiations with Westat Inc. are not successful, that MAG pursue negotiations with its second choice, Cambridge Systematics, Inc., to conduct the project.

8. Census Test 2015

The U. S. Census Bureau has selected portions of the MAG region to conduct tests of collection technologies and sampling methods for the 2020 Census. The MAG region is the only place in the nation selected for this type of testing. Testing will take place in selected areas around the region between April and July 2015. The test will produce no official data and is not part of any special mid-decade count. Representatives from the Census Bureau will provide an overview.

9. Update on the Arizona Center for Law in the Public Interest Lawsuit on the MAG 2012 Five Percent Plan for PM-10

On September 24, 2014, the MAG Regional Council approved MAG's Washington legal counsel to file a motion for MAG to intervene on behalf of the respondent in the lawsuit filed by the Arizona Center for Law in the Public Interest to challenge the EPA approval of the MAG 2012 Five Percent Plan for PM-10. On August 28, 2014, the Arizona Department of Environmental Quality had filed a motion to intervene in the lawsuit on behalf of the respondent. MAG is also coordinating with Maricopa County on this issue. An update will be provided.

10. Economic Impact Study with the Thunderbird School of Global Management

In August 2014, the MAG Economic Development Committee recommended approval and the MAG Executive Committee approved funding to support a consultant practicum project with the Thunderbird School of Global Management. A team of Thunderbird students has been assigned to undertake the study. The focus of the study is the economic impact older adults have in the Greater Phoenix global economy through extended participation in the workforce and through the transfer of knowledge to younger workers. By December 2014, the study will quantify the economic impact older adults have in the region's global economy, an assessment of the benefits, and strategies for better leveraging older

8. Information and discussion.

9. Information and discussion.

10. Information and discussion.

adults as an economic development asset. This item is presented to engage the cities and towns in the study and for the committee members to offer input on the study.

11. Outcome of the Central Phoenix Transportation Framework Study

The Central Phoenix Transportation Framework Study was recently completed to identify long-range transportation needs for the center of the MAG region in an area bounded by SR-101L on the north, east, and west, and the Gila River Indian Community on the south. Since beginning this study in 2010, the study team has reached out to numerous representatives from the general public, MAG member agencies, and Valley Metro/RPTA. Through stakeholder meetings, geographic dialogues, two planning charettes, and fourteen Planning Partner events, the project has identified varying transportation opportunities to meet future travel demand and thereby inform development of the NextGen Regional Transportation Plan. During the tenure of this project, study findings have been used to launch other major planning efforts for Metropolitan Phoenix, including the Southeast Corridor Major Investment Study, MAG's COMPASS (Corridor Optimization, Access Management Plan, and Systems Study) initiatives for US-60/Grand Avenue and 99th Avenue, the MAG Managed Lanes Network Development Strategy, and the Interstate 10/Interstate 17 Corridor Master Plan. The Transportation Policy Committee will receive a briefing on the final work products in advance of accepting the project's findings later this year. Please refer to the enclosed material.

12. FY 2015 Regional Freeway and Highway Program Update

In October 2009 and May 2012, the Regional Freeway and Highway Program was reviewed and the MAG Regional Council approved scenarios to balance an estimated combined \$6.9 billion shortfall due to cost over-runs and revenue shortfalls. In light of the rebalancing efforts, MAG and the Arizona Department of Transportation

11. Information and discussion.

12. Information and discussion.

(ADOT) have made significant progress in delivering the \$9 billion program for meeting the region's transportation demand. An update will be provided on the program's implementation including financial and construction updates. Please refer to the enclosed material.

13. Election of Vice Chair

On June 11, 2014, the positions of Chair and Vice Chair were elected by the Management Committee. Mr. Rick Buss, Town of Gila Bend, who was elected Vice Chair, recently accepted a position of at the City of Surprise and is no longer a member of the MAG Management Committee. In accordance with the MAG Committee Operating Policies and Procedures, approved by the MAG Regional Council, the Chair works with members to nominate a manager for the Vice Chair position. The Management Committee is requested to elect a Vice Chair to fulfill the remainder of the term.

13. Elect a Vice Chair.

14. Legislative Update

An update will be provided on legislative issues of interest.

14. Information, discussion, and possible action.

15. Request for Future Agenda Items

Topics or issues of interest that the Management Committee would like to have considered for discussion at a future meeting will be requested.

15. Information.

16. Comments from the Committee

An opportunity will be provided for Management Committee members to present a brief summary of current events. The Management Committee is not allowed to propose, discuss, deliberate or take action at the meeting on any matter in the summary, unless the specific matter is properly noticed for legal action.

16. Information.

Adjournment

MINUTES OF THE
MAG MANAGEMENT COMMITTEE MEETING
September 10, 2014
MAG Office, Saguaro Room
Phoenix, Arizona

MEMBERS ATTENDING

- * Christopher Brady, Mesa
Matt Busby for George Hoffman,
Apache Junction
David Fitzhugh, Avondale
- # Stephen Cleveland, Buckeye
Gary Neiss, Carefree
Peter Jankowski, Cave Creek
Rich Dlugas, Chandler
Dr. Spencer Isom, El Mirage
- * Charles Montoya, Florence
Alfonso Rodriguez for Phil Dorchester,
Fort McDowell Yavapai Nation
Ken Buchanan, Fountain Hills
Vacant, Gila Bend
- * Tina Notah, Gila River Indian Community
Patrick Banger, Gilbert
Brent Stoddard for Brenda S. Fischer,
Glendale
- # Brian Dalke, Goodyear
- * Rosemary Arellano, Guadalupe
Sonny Culbreth for Darryl Crossman,
Litchfield Park
- # Gregory Rose, City of Maricopa
Jim Bacon, Paradise Valley
Kevin Tyne for Carl Swenson, Peoria
Ed Zuercher, Phoenix
- # Greg Stanley, Pinal County
John Kross, Queen Creek
- * Bryan Meyers, Salt River Pima-Maricopa
Indian Community
Brad Lundahl for Fritz Behring,
Scottsdale
- * Bob Wingenroth, Surprise
Marge Zylla for Andrew Ching, Tempe
Reyes Medrano, Tolleson
Joshua Wright, Wickenburg
- # Jeanne Blackman, Youngtown
Scott Omer for John Halikowski,
ADOT
John Hauskins for Tom Manos,
Maricopa County
Jyme Sue McLaren for Steve Banta,
Valley Metro/RPTA

- * Those members neither present nor represented by proxy.
- # Participated by telephone conference call. + Participated by videoconference call.

1. Call to Order

The meeting of the MAG Management Committee was called to order by Acting Chair Dr. Spencer Isom, El Mirage, at 12:01 p.m.

2. Pledge of Allegiance

The Pledge of Allegiance was recited.

Mr. Stephen Cleveland, Mr. Gregory Stanley, Mr. Brian Dalke, Ms. Jeanne Blackman, and Mr. Gregory Rose joined the meeting via teleconference.

Acting Chair Isom noted materials at each place: the revised agenda, the revised material for agenda item #5B, and material for agenda items #6, #7 and #8.

Acting Chair Isom noted that hearing assisted devices are available from MAG staff. He announced that public comment cards were available to members of the public who wish to comment. Parking validation was available for those who parked in the MAG parking garage and transit tickets were available for those who purchased transit tickets to come to the meeting.

3. Call to the Audience

Acting Chair Isom stated that Call to the Audience provides an opportunity to the public to address the Management Committee on items that are not on the agenda that are within the jurisdiction of MAG, or non-action agenda items that are on the agenda for discussion or information only. Those wishing to comment on agenda items posted for action will be provided the opportunity at the time the item is heard. Public comments have a three minute time limit. A total of 15 minutes will be provided for the Call to the Audience agenda item, unless the committee requests an exception to this limit.

Acting Chair Isom recognized public comment from Ms. Dianne Barker, who said that climate change raises alarms and people are unprepared for the future. Ms. Barker expressed appreciation for the transit ticket. She stated that multimodalism is good for your health. She spoke of a woman she met, who used to weigh 421 pounds, and is now a size nine as a result of adopting a multimodal lifestyle. Ms. Barker stated that the City of Phoenix approved the MAG dues, and she added her support for this. She stated that Voltaire and Joan Rivers have something in common: freedom of speech. Ms. Barker stated that multimodal feels good. Acting Chair Isom thanked Ms. Barker for her comments.

4. Executive Director's Report

Mr. Dennis Smith, MAG Executive Director, reported on items of interest to the MAG region. Mr. Smith spoke of the sessions staffed by MAG at the League of Arizona Cities and Towns Annual Conference on August 19-22, 2014. He first reported on the Interstate 11/CANAMEX: International Trade and Economic Development session, and he noted that the focus of the session was the corridor's potential economic impact. Mr. Smith stated that constructing the corridor could be expensive, but making improvements to two sections, a bottleneck at SR-189A at Nogales and another one north of Wickenburg, could lead across the Tillman Bridge to Interstate 15 and onward to Canada. Mr. Smith stated that MAG also staffed the Arizona-Sonora Binational Megaregion session, which was moderated by Phoenix Mayor Greg Stanton. Mr. Smith stated that an agreement was signed by Arizona and Sonoran leaders to continue collaboration, and he noted that relationship building is vital to our economy. Mr. Smith stated that MAG leaders have been invited to attend the group's next event, which will take place in Spring 2015 in Rocky Point, Mexico. He extended his compliments to the state's efforts on the relationship between Arizona and Mexico, and acknowledged the work by Margie Emmermann at the Arizona Mexico Commission for many years.

Mr. Smith stated that the Western Regional Alliance Transportation Symposium will take place on September 30, 2014, in Salt Lake City. Mr. Smith stated that Mr. Michael Gallis will present his second report on the Intermountain West. He stated that MAG Regional Council Chair, Youngtown Mayor Michael LeVault, and Phoenix Mayor Greg Stanton will be speaking. Mr. Smith added that Arizona State University also will be at the symposium speaking about the importance of the rail system.

Acting Chair Isom thanked Mr. Smith for his report.

5. Approval of Consent Agenda

Acting Chair Isom stated that agenda items #5A, #5B, and #5C were on the Consent Agenda.

No public comment cards were received.

Acting Chair Isom asked members if they had questions or requests to hear a presentation on any of the Consent Agenda items.

No requests or questions were noted.

Acting Chair Isom called for a motion to recommend approval of Consent Agenda items #5A, #5B, and #5C.

Mr. Ed Zuercher moved, Mr. John Kross seconded, and the motion passed unanimously.

5A. Approval of the August 6, 2014, Meeting Minutes

The MAG Management Committee, by consent, approved the August 6, 2014, meeting minutes.

5B. 2013 MAG Freight Transportation Plan Consultant Contract

The MAG Management Committee, by consent, recommended approval of a new contract with Parsons Brinckerhoff for the 2013 MAG Freight Transportation Plan Consultant (Phase II), for an amount not to exceed \$400,000. The MAG Fiscal Year (FY) 2011 Unified Planning Work Program and Annual Budget, approved by the MAG Regional Council in May 2010, included the MAG Freight Transportation Framework Study. In October 2010, the MAG Executive Committee approved the selection of Parsons Brinckerhoff for the first phase of the study. The Request for Proposals for this study included a provision that MAG may, at its discretion, offer an additional contract(s) to the successful respondent to extend the study into an additional phase(s) based on consultant performance and available funding. The MAG FY 2013 Unified Planning Work Program and Annual Budget, approved by the MAG Regional Council in May 2012, included \$400,000 for an additional phase for the Freight Framework Study. Due to the ongoing success of phase I and federal regulations requiring additional freight planning in our region, staff recommends initiating a new contract with Parsons Brinckerhoff for this additional phase of the original study, to prepare the 2013 MAG Freight Transportation Plan (phase II) for an amount not to exceed \$400,000. This project was carried forward in the FY 2015 Unified Planning Work Program and Annual Budget, approved by the Regional Council on May 28, 2014.

5C. 2015 Behavior Based Freight Model Development On-Call

The MAG Management Committee, by consent, recommended approval of the list of on-call consultants for the Area of Expertise A (Freight Modeling): Cambridge Systematics, Resource Systems Group, and RS&H, and for Area of Expertise B (Data Collection, Analysis and Management): American Transportation Research Institute, Cambridge Systematics, CDM Smith, Resource Systems Group, and RS&H, for the 2015 Behavior Based Freight Model Development On-Call, for a total amount not to exceed \$350,000. The fiscal year (FY) 2015 MAG Unified Planning Work Program and Annual Budget, approved by the MAG Regional Council in May 2014, includes \$350,000 for on-call consulting services for the 2015 Behavior Based Freight Model Development On-Call. On February 13, 2014, MAG, the Arizona Department of Transportation and the Pima Association of Governments submitted a joint application for implementation and technical assistance funds in Round 3 of the Federal Highway Administration (FHWA) Strategic Highway Research Program Implementation Assistance Program (SHRP2) (MAG was the lead agency in the Freight Demand Modeling portion of the proposal). On March 28, 2014, FHWA and AASHTO announced that MAG was one of the organizations selected in Round 3 of SHRP2 implementation assistance for freight demand modeling. On June 25, 2014, MAG issued a Request for Qualifications to create an on-call consulting list for the project with two areas of expertise: (A) Freight Modeling; and (B) Data Collection, Analysis and Management. A multi-agency evaluation team reviewed the Statements of Qualifications and recommended to MAG firms be included on a MAG on-call consulting list for the 2015 Behavior Based Freight Model Development On-Call.

6. Arizona Water Quality Management Plan and Streamlining of the 208 Water Quality Management Plan Process

Julie Hoffman, MAG staff, reported on an effort by the Arizona Department of Environmental Quality (ADEQ) to update the State Water Quality Management Plan, which had previously been completed in 1979. As part of that process, ADEQ is also proposing to streamline the 208 Water Quality Management Plan Process. Ms. Hoffman stated that this process is conducted by five councils of governments in Arizona, as well as Yuma, LaPaz and Mohave Counties. She noted that ADEQ is streamlining various processes in order to issue permits faster.

Ms. Hoffman reported that currently, the 208 streamlining approach being proposed by ADEQ would result in the issuance of permits for wastewater treatment facilities without first going through the MAG 208 Process and receiving Regional Council approval. In 1974, MAG was designated by the Governor as the Regional Water Quality Management Planning Agency for Maricopa County in accordance with Section 208 of the Clean Water Act. It is in this capacity that MAG prepares the 208 Water Quality Management Plan.

Ms. Hoffman stated that there are two major elements of the 208 Plan: the Point Source element and the Nonpoint Source element. The Point Source element describes the preferred wastewater treatment system to serve the wastewater treatment needs of the area over a twenty-year time period. The Nonpoint Source element primarily describes the regional surface and groundwater quality, and the federal and state program activities designed to control nonpoint source pollution.

Ms. Hoffman noted that the MAG 208 Plan is the key guiding document used by ADEQ and Maricopa County in granting permits for wastewater treatment plants in the MAG region. Consistency with the 208 Plan is required for the Aquifer Protection Permit and Arizona Pollutant Discharge Elimination System Permit issued by ADEQ. Consistency is also required for the Approval to Construct issued by the Maricopa County Environmental Services Department.

Ms. Hoffman displayed a chart of the wastewater treatment facility permits and approvals that are linked to the MAG 208 Plan. She noted that permits issued by ADEQ that require consistency with the 208 Plan include the Aquifer Protection Permit and the Arizona Pollutant Discharge Elimination System Permit. The Reclaimed Water Permit from ADEQ requires an Aquifer Protection Permit, which needs 208 Plan consistency. Ms. Hoffman noted permits issued by the Arizona Department of Water Resources that require the Aquifer Protection Permit from ADEQ, which needs 208 Plan consistency, including the Underground Storage Facility Permit and the Water Storage Permit. Approvals from Maricopa County that require consistency with the 208 Plan include the Approval to Construct and the Approval of Construction. The Arizona Corporation Commission approval which requires the Aquifer Protection Permit from ADEQ and therefore, consistency with the 208 Plan, includes the Certificate of Convenience and Necessity. Ms. Hoffman noted that the permits and approvals she listed are the ones linked to the 208 Plan, but are not all that are required for the construction and operation of a wastewater treatment facility.

Ms. Hoffman stated that ADEQ is looking to streamline various processes including the 208 Process in order to issue permits faster. The 208 streamlining approach currently proposed by ADEQ would result in the issuance of its permits for new facilities, expansions, or surface water discharges, without first going through the 208 Process and receiving Regional Council approval.

Ms. Hoffman indicated that according to ADEQ, MAG could continue to conduct a 208 process to make the region aware of changes, but it would not be linked to permitting. Ms. Hoffman stated that ADEQ is proposing that MAG include facilities in an inventory that would be used to annually update the 208 Plan. Ms. Hoffman said that meanwhile, ADEQ would be issuing permits for the facilities in the inventory before the facilities become part of the 208 Plan.

Ms. Hoffman stated that ADEQ would no longer use the wastewater treatment configuration identified in the Point Source element of the 208 Plan to determine 208 consistency. Instead, ADEQ would determine consistency based on the 208 Plan goals, processes, and proposed wastewater treatment options table. Ms. Hoffman stated that the options table was designed by ADEQ and included in rural 208 Plans. She noted that a copy of a proposed table was included in the agenda packet. If a new facility is consistent with the options table and the 208 Plan goals and processes, ADEQ would begin to issue the permits. Ms. Hoffman stated that by removing the need to amend the 208 Plan for changes such as new facilities, expansions, surface water discharges, or service area changes, ADEQ would then be able to issue its permits faster.

Ms. Hoffman stated that MAG staff has expressed concern about the current 208 streamlining approach being proposed by ADEQ. She remarked that the streamlining approach would result in facilities being permitted before MAG decides whether or not to include them in the 208 Plan.

Ms. Hoffman noted that this could have unintended consequences when it comes to areas such as reuse, recharge, discharge, and superfund sites that cross jurisdictional boundaries.

Ms. Hoffman stated that the options table may work in the rural areas, but the MAG region is significantly different. This region consists of numerous cities and towns that are back-to-back. Ms. Hoffman stated that the MAG 208 Process provides an opportunity to review facilities and discharges for environmental impacts on a regional basis, before permits are issued. In addition, MAG has made efforts to streamline the MAG 208 Plan Amendment and Small Plant Review and Approval Processes.

Ms. Hoffman displayed a graphic of the MAG 208 Water Quality Management Plan Amendment Process. She noted that the MAG process is typically conducted in six months or less. First, the jurisdiction in which the facility will be located requests an amendment to the MAG 208 Plan. Once the amendment is ready, a meeting of the Water Quality Advisory Committee is called. She explained that this committee meets as needed so there is no delay waiting for the next scheduled meeting.

Ms. Hoffman stated that the Water Quality Advisory Committee reviews the amendment and authorizes a public hearing, which, according to federal regulations, must be advertised 45 days in advance. She explained that to expedite the process, the Committee conducts the public hearing and makes a recommendation to the Management Committee at the same meeting.

Ms. Hoffman stated that the Management Committee makes a recommendation to the Regional Council and the Regional Council takes action on the amendment. Following Regional Council action, the State Water Quality Management Working Group makes a recommendation to ADEQ. ADEQ certifies the amendment is consistent with the State 208 Plan and MAG 208 Plan and submits it to the Environmental Protection Agency for approval.

Ms. Hoffman stated that MAG also has the Small Plant Review and Approval Process which is for facilities with an ultimate capacity of two million gallons per day or less, with no surface water discharge. Ms. Hoffman stated that this MAG process is shorter, taking approximately one-and-one-half months. First, the jurisdiction in which the facility will be located makes the request. Then the MAG Water Quality Advisory Committee reviews the small plant and makes a recommendation to the Management Committee. There is no public hearing. Ms. Hoffman stated that the Management Committee reviews the recommendation and makes a recommendation to the Regional Council who takes official action on the small plant. ADEQ certifies consistency with the State 208 Plan and MAG 208 Plan. Upon the approval letter from ADEQ, the developer submits plans and specifications, and a copy of the approved design concept to the Maricopa County Environmental Services Department for review and issuance of the Approval to Construct.

Ms. Hoffman stated that ADEQ is in the process of incorporating comments into the wastewater treatment options table and revising goals and objectives for the Arizona Water Quality Management Plan. She noted that there have been different 208 streamlining options presented, however, the options have not preserved local control. Ms. Hoffman said that MAG is requesting comments today in support of the 208 Process that can be conveyed to ADEQ. It is anticipated

that ADEQ will continue discussions on its proposed 208 streamlining approach at the State Water Quality Management Working Group meeting on October 14, 2014.

Acting Chair Isom thanked Ms. Hoffman for her report and asked members if they had questions.

Mr. Reyes Medrano asked if the majority of requests to amend the 208 Plan is for smaller plants that process two million gallons per day or less. Ms. Hoffman replied that the MAG 208 Plan includes a variety of plants. She added that since 2002, MAG processed twenty-two 208 amendments and six small plant reviews and approvals.

Mr. Medrano asked for clarification that under the proposed streamlining approach, ADEQ would determine compliance with the 208 process, but would not adhere to the 208 requirements, for example, notifying impacted cities within three miles of a proposed service area. Ms. Hoffman replied that ADEQ would determine consistency based on the options table, goals and processes, not on the wastewater treatment configuration identified in the 208 Plan. As long as there is consistency with the options table, goals and process identified in the 208 Plan, ADEQ would proceed with permitting the facility. Ms. Hoffman stated that MAG could continue to conduct its process, but it would not be tied to the permitting. She added that potentially, a facility could be permitted prior to being included in the 208 Plan by the MAG Regional Council.

Mr. Josh Wright asked if there is an appeals process at MAG if a jurisdiction goes through the 208 amendment process and is not successful. Ms. Hoffman stated that a recommendation to deny a 208 amendment by the MAG Water Quality Advisory Committee would go to the MAG Management Committee. If the Management Committee recommended denying the 208 amendment, that recommendation would go the MAG Regional Council. If the MAG Regional Council denied a 208 amendment, that action would then be sent to ADEQ.

Mr. Patrick Banger commented that he thought allowing permits to be issued ahead of formal approval creates problems for projects that could then be denied, especially if significant funds have been expended in the design and construction. Mr. Banger noted that there are legal interpretations to consider; judges are sometimes loathe to overturn a decision when a substantial amount of money has been expended. Mr. Banger stated that in effect, the permit issue would be the final say and cities and towns would lose their voice on these projects. He remarked that some are straightforward with very few issues, but some have substantial issues. Mr. Banger noted that everyone has concerns for timeframes, but to lose the input of cities and towns would have severe repercussions.

Mr. Brent Stoddard commented that in 1974, when MAG was designated by the Governor as the Regional Water Quality Management Planning Agency for Maricopa County, it was a victory for cities and towns because it gave them the ability to control their own destiny when it came to water and it would not be in the hands of others. Mr. Stoddard stated that any efforts at the state level, the development community, or the Legislature to water down control of this precious resource that is critical to the development and smart planning of communities should be opposed. He mentioned discussions on tightening up the process and increasing communication at the forefront so the development community does not feel it is meeting with a roadblock. Mr. Stoddard expressed that he felt there were things MAG could do to increase efficiency of the

process, but handing over that responsibility or giving up the ability to control that resource would not be in the best interest of the state or jurisdictions.

Mr. John Hauskins suggested that a two-step process might be possible. He stated that a cursory or quick review would allow design, but restrict construction before final approval is received. Mr. Hauskins noted that this could result in not delaying planning and design.

Mr. Dennis Smith referenced Mr. Medrano's question that under the proposed ADEQ 208 streamlining process the notification process conducted by MAG would be eliminated, no public hearings would be held and the public would not be aware. Mr. Smith stated that a 208 amendment might seem simple at first, but issues can be revealed during a public hearing. He gave as an example, a surrounding jurisdiction might indicate it has a Superfund site where another jurisdiction is planning to recharge, which could affect the plume. Mr. Smith remarked that unless there is a deliberative process, there is a risk of putting a lot of money into a treatment plant that could be harmful. Mr. Smith added that even though it is a six-month process, he felt it had a lot of value and is the precursor to all development. He explained how the Management Committee created the 208 process in 1975, and 208 amendments and Small Plant Review and Approvals go through the Management Committee because its members know their jurisdiction's development plans. Mr. Smith noted that MAG is not opposed to working with ADEQ, it just wants to keep the cities and towns involved in the 208 process. He stated that one option might be to bifurcate the 208 process between urban and rural areas. Mr. Smith noted that rural areas do not have back-to-back cities, nor do they have a lot of development.

Ms. Lindy Bauer, MAG Environmental Director, provided an update on the reasons for the streamlining. She noted that Henry Darwin, the ADEQ Director, testified on streamlining to Congress. Ms. Bauer stated that Mr. Darwin testified that his department's funding had been removed from the State General Fund, and currently, 85 percent of the agency's funding comes from services and fees, such as permitting fees. She added that Mr. Darwin indicated that even though this was a shakeup, it caused his department to be more streamlined in order to be more responsive to its customers – the regulated community. Ms. Bauer stated that ADEQ has been streamlining all of its permits.

Mr. Smith stated that ADEQ is looking at this from a customer basis to get this through the process quickly and MAG is looking at this from a regulatory developmental phasing perspective. He asked Ms. Bauer to describe how the Aquifer Protection Permit was linked to the 208 process.

Ms. Bauer stated that years ago, ADEQ would not start the permitting process until consistency with Areawide Water Quality Management Plans was assured. She added that this is directly from the Clean Water Act and federal regulations. Ms. Bauer stated that unified water rules were developed by ADEQ in an effort to streamline. She noted that the Groundwater Management Act, with its attention on the importance of recharge and reuse of wastewater, also came about, and ADEQ had the Aquifer Protection Permit. Ms. Bauer noted that in streamlining the process, the ADEQ took consistency with the 208 Plan and made it a step in the Aquifer Protection Permit process. She stated that ADEQ envisioned that the Aquifer Protection Permit would be the cornerstone of all of their water permits and that is why the Aquifer Protection Permit and the 208 process are linked. Ms. Bauer stated that the Legislature also established licensing timeframes for

permits. She noted that at the time, ADEQ thought it was streamlining the process, but it actually was lengthened.

Mr. Smith stated that one possible solution is to separate the Aquifer Protection Permit and the 208 Process.

Ms. Bauer commented on licensing timeframes. She stated that if the 208 is pulled out of the Aquifer Protection Permit Process, when an applicant comes in to apply for an Aquifer Protection Permit, ADEQ would start the clock. The ADEQ would not have to include the 208 Plan consistency in the Aquifer Protection Permit timeline.

Mr. David Fitzhugh stated that many jurisdictions have strip-annexed land in their planning areas and all of their plans include these strip-annexed properties to be developed in the future. He asked how the new process would work if a developer submitted an application for development to Maricopa County, and a city or town was not in a position to expand its wastewater treatment plant, would the developer be eligible to get permitted through ADEQ?

Ms. Bauer replied yes, under the proposed ADEQ scenario, an applicant could get a permit before a city/town and the county could work things out. She explained that the MAG 208 Plan defines the wastewater service area as the municipal planning area, which includes the incorporated and strip annexed areas.

Mr. Smith noted that currently, a developer who wants to add a facility to an unincorporated area within a municipal planning area would need a letter from the city/town and the county.

Mr. Alfonso Rodriguez stated that the Fort McDowell Yavapai Nation is in a semi-rural area and is located on the other side of Fountain Hills. He referenced the process his community went through a few years ago. Mr. Rodriguez stated that it was through MAG's support that helped them arrive at a proper position against a particular development that concerned the community with regard to the water table. He stated that MAG helped Fort McDowell to come out of that process favorably.

Mr. Smith asked Ms. Bauer to report on the development referenced by Mr. Rodriguez. Ms. Bauer stated that the development was called Goldfield. She stated that issues were identified through the MAG 208 process. Most of the issues were worked out, and the remaining issues were addressed in the Regional Council motion contingent upon the issues being resolved by the permitting agencies, especially with regard to recharge and drinking water concerns.

Mr. Stephen Cleveland stated that a number of comments have been made and keeping MAG's authority is very important. He asked how MAG would communicate these concerns, along with additional comments.

Mr. Smith replied that Ms. Hoffman would be representing MAG at the State Water Quality Management Working Group meeting on October 14, 2014. Ms. Hoffman stated that the comments will be put into a letter and conveyed to ADEQ at the meeting.

Mr. Cleveland asked there was a timeframe for submitting comments. Ms. Hoffman replied that they would incorporate comments submitted prior to the October 14 meeting.

Mr. Ed Zuercher expressed support for the comments made today. He stated that the 208 process is fundamental to jurisdictions' ability to manage and control development and environmental quality within their borders. Mr. Zuercher stated that defending this process is important. He remarked if there is an issue in rural Arizona that can be addressed through a separate process, so be it. He thanked MAG for having this on the agenda and he supported the comments made by his colleagues.

Mr. Medrano echoed Mr. Zuercher's comments. He stated that Tolleson has one of the larger wastewater treatment facilities in the state. Mr. Medrano stated that it is important to note ongoing coordination efforts through the West Valley Central Arizona Project Subcontractors (WESTCAPS) in the West Valley to identify existing facilities and opportunities to maximize public dollars. He reported that WESTCAPS kicked off its West Salt River Basin Study the day before and will be a significant effort at \$1.6 million.

Acting Chair Isom thanked everyone for their comments, which will all be included in the record.

7. Arizona Center for Law in the Public Interest Petition for Review of the EPA Approval of the MAG 2012 Five Percent Plan for PM-10

Lindy Bauer, MAG staff, stated that on June 10, 2014, the Environmental Protection Agency (EPA) published final approval of the MAG 2012 Five Percent Plan for PM-10, with an effective date of July 10, 2014. She explained that on August 20, 2014, the EPA notified MAG that the Arizona Center for Law in the Public Interest (Center) filed a petition to challenge EPA's approval of the MAG 2012 Five Percent Plan for PM-10 in the U.S. Ninth Circuit Court of Appeals. Ms. Bauer reported that the Center's brief is due October 17, 2014, and EPA's brief is due November 17, 2014.

Ms. Bauer noted that the Center indicated in its lawsuit that its most significant issue is the reliance upon the EPA Exceptional Events Rule to demonstrate attainment of the standard. Ms. Bauer stated that the Center contends that the EPA has abused its discretionary authority. She added that there could be additional issues, and staff will brief members as issues are identified.

Ms. Bauer stated that on August 28, 2014, the Arizona Department of Environmental Quality submitted a motion to intervene on behalf of EPA in this lawsuit. She noted that a copy of the motion was at each place. Ms. Bauer added that MAG staff will continue to update members as new information becomes available.

Acting Chair Isom thanked Ms. Bauer for her report. No questions from the committee were noted.

8. Coordinating to Save Lives: A Regional Response to Domestic Violence

Amy St. Peter, MAG staff, stated that the purpose of this presentation was to request support on a STOP grant that funds the MAG Domestic Violence Protocol Evaluation Project and to invite members to send information about their planned activities that could be included in the Domestic Violence Awareness month events calendar.

Ms. St. Peter stated that a MAG survey reported that 40 percent of people living in the Valley know someone personally who has been a victim of domestic violence. She then played a 9-1-1 recording, where the woman was able to call the police as soon as she saw her abuser in the parking lot because her order of protection had been served. Ms. St. Peter stated that the abuser killed her roommate, but police were able to come to her aid before her abuser shot her. She added that keeping people safe takes much coordination.

Ms. St. Peter stated that domestic violence impacts individuals as well as the criminal justice system. In 2010 in Maricopa County, there were 12,560 domestic violence cases. The most common outcome of these cases is court dismissal and the most common sentence is probation.

Ms. St. Peter stated that the Protocol Evaluation Project was developed in 2010 to improve these outcomes. Over the past four years, through collaboration with law enforcement agencies, prosecutors, and victim advocates, the region's first domestic violence misdemeanor protocol was developed. Ms. St. Peter stated that this past year, MAG has been working with the Maricopa County Attorney's Office to update the felony protocol manual to improve the way domestic violence cases are transferred between the county and cities and towns.

Ms. St. Peter encouraged members to sign a Memorandum of Understanding and providing letters of participation to be included in the grant request that will be submitted by September 26, 2014. Mr. Smith commented on how expensive domestic violence cases are for cities and towns. He said that cases get dropped and perpetrators cycle through over and over. He added that domestic violence calls are very dangerous for police officers. Ms. St. Peter introduced Ms. Hilary Weinberg, Bureau Chief from the Maricopa County Prosecutor's Office, to continue the presentation.

Ms. Weinberg stated that child abuse, elder abuse, and aggravated domestic violence cases are cycled through her office. She noted that approximately 15 attorneys work in her division. Ms. Weinberg stated that the goal for the grant is to implement a seamless transfer of cases between the Maricopa County Attorney's Office and cities and towns. She emphasized that a city needs to provide prior domestic violence conviction records to her office if they want felony charges pursued for a suspect. Ms. Weinberg explained that it takes time to assemble arrest records if the suspect has domestic violence arrests in multiple jurisdictions, but her office needs to see those records. She said they want to get the records quickly because any delay provides the suspect an opportunity to be released from jail and further endanger the victim. Ms. Weinberg stated that filing felony charges is hindered because her office is not getting the prior conviction records soon enough.

Ms. Weinberg stated that there is also a delay when her office feels that a felony conviction is unlikely and they want to send a case back to a city or town. She stated that the goal is to compile the documentation and submit it to a city prosecutor before a suspect is released from jail and can pose a risk to the victim. Ms. Weinberg stated that they currently rely on telephone calls, emails, and facsimiles to communicate, but the process does not work fast enough and delays are dangerous for victims.

Ms. Weinberg stated that improved communication between the Maricopa County Attorney's Office and cities and towns is one of the goals of the grant. This could be accomplished with an online system that would accommodate looking up a suspect's past arrest records to determine if charges will qualify for felony or misdemeanor charges. Ms. Weinberg stated that this will improve community safety.

Ms. St. Peter stated that this work is critically important to saving lives. She noted that in 2012, 139 people in Arizona died from domestic violence. Ms. St. Peter stated that 39 percent of all female homicides are committed by a domestic violence abuser and 70 percent of the time, these women are killed when they are attempting to leave. She said that the outcome can be changed by working together.

Ms. St. Peter requested that agencies submit their Domestic Violence Awareness Month calendar of events to be included on the MAG regional Domestic Violence Awareness Month calendar. She noted that the submission form was at each place. Ms. St. Peter stated that the calendar will be distributed at the annual Domestic Violence Awareness Month press conference on October 7, 2014, at 9:00am at the ASU College of Law mock courtroom in Tempe. She added that everyone is invited to attend that event.

Acting Chair Isom thanked Ms. Weinberg and Ms. St. Peter and asked members if they had questions.

Mr. John Kross stated that the Town of Queen Creek contracts with the Maricopa County Sheriff's Office. He asked the level of participation countywide, not limited to Queen Creek. Ms. St. Peter stated that MAG would like to increase its work with the Sheriff's Office on this issue.

Mr. Zuercher expressed his appreciation to Ms. St. Peter and he noted that City of Phoenix staff has been involved in this issue. Mr. Zuercher encouraged members to engage in this issue if possible. He commented on the significant costs and the dangers associated with domestic violence, not only to victims, but also to jurisdictions, because it is one of the most dangerous situations for their police and fire personnel.

Mr. Smith asked Ms. St. Peter to describe efforts to increase outreach to police departments. Ms. St. Peter stated that MAG met with the Maricopa County Attorney's Office to examine felony protocols and determine if any improvements could be made. She noted that three community meetings on this topic have been scheduled. The first meeting was held on September 9 in Mesa and upcoming meetings include September 23 at 10:00 a.m. at MAG and September 30 at 10:00 a.m. at the Southwest Family Advocacy Center in Goodyear. Ms. St. Peter stated that she could add the Management Committee to notifications about domestic violence trainings and activities.

Mr. Rodriguez asked if counseling activities were a part of the grant. Ms. St. Peter replied that the focus of their project was the arrest and prosecution of a suspect and working with victim advocates, as MAG is more of a planning agency than a direct service agency. She noted that federally, the STOP grant now allows prevention activities.

Mr. Gregory Rose asked if this project could extend to Pinal County and its municipalities. Ms. St. Peter replied that MAG has been working with Chief Stahl. She said they are applying through the urban statewide category and will be able to work with any city, town, or Indian community within the MAG region.

Mr. Jim Bacon stated that the way to change perceptions is to play recordings like the one played at the meeting that domestic violence is real and people are being hurt and killed. These types of useful communications could help reverse the statistics.

9. Legislative Update

Acting Chair Isom noted that there was no report.

10. Request for Future Agenda Items

Topics or issues of interest that the Management Committee would like to have considered for discussion at a future meeting were requested.

Acting Chair Isom noted that the election of a Vice Chair would be on a future agenda. He noted that the West Valley will work to identify an individual.

11. Comments from the Committee

An opportunity was provided for Management Committee members to present a brief summary of current events. The Management Committee is not allowed to propose, discuss, deliberate or take action at the meeting on any matter in the summary, unless the specific matter is properly noticed for legal action.

Mr. Smith expressed his appreciation to ADOT for their monumental efforts on the freeway system during the recent heavy rains that fell Valleywide.

Adjournment

There being no further business, the meeting was adjourned at 1:05 p.m.

Chair

Secretary

MARICOPA ASSOCIATION OF GOVERNMENTS

INFORMATION SUMMARY... for your review

DATE:

September 30, 2014

SUBJECT:

MAG Bicycles Count Project - Final Report

SUMMARY:

The Fiscal Year (FY) 2013 MAG Unified Planning Work Program and Annual Budget, approved by the MAG Regional Council in May 2012, included \$96,000 to develop a methodology and conduct a bicycle count in the region. Tracking bicycle counts across the region in a geographically comprehensive manner will allow for an assessment of a range of non-motorized performance measures, trends, and impacts. The bicycle count data can be used in safety and air quality analyses, estimates of regional bicycle demand, local transportation planning, and federal funding project applications.

Data collection for the Bicycles Count Project occurred in October and November 2013. Analysis of the data was conducted and a final report was completed in June 2014. Among its findings were that off-street bike paths, in general, showed the highest levels of cycling activity in the region, on both weekdays and weekend days. All bikeways experienced higher levels of cycling in the evening peak period compared to the morning peak on weekdays, while the morning peak period experienced higher levels than the evening peak period on the weekends. In addition, the report found that between 30 percent and 94 percent of cyclists were riding on the sidewalk, depending on the characteristics of the adjacent roadway.

The full report is available to download from the MAG Bicycle and Pedestrian Committee website, at <http://www.azmag.gov/Committees/Committee.asp?CMSID=1044>

Additional phases of data collection will start in October 2014, at the same locations at which data was collected in the FY 2013 MAG Bicycles Count Project. Collecting additional years of data will help to establish regional and local trends, as well as provide a more robust data set.

In addition to MAG data collection efforts, staff will also develop a program through which MAG member agencies may borrow the bicycle counting equipment for their own use in short-term data collection. It is anticipated that the equipment will be made available to MAG member agencies starting in December 2014 - January 2015. MAG member agencies will be responsible for checking out equipment from the MAG office, installing the borrowed equipment, conducting in-field fixes when necessary, uninstalling the equipment, and returning the equipment to the MAG office. MAG staff will process the collected data and provide the final datasets to MAG member agencies.

Attached to this agenda are a one-page summary of the MAG Bicycles Count project, three figures which provide an overview of the data observed, and a map and table indicating where the next round of data collection will occur.

PUBLIC INPUT:

None.

PROS & CONS:

PROS: This program assists MAG member agencies by offering data on a variety of roadways and off-street paths, for use in project applications, analysis of bicycling trends, impacts from the construction of new bikeways, safety and air quality analyses, and levels of sidewalk and wrong-way riding. The program also allows MAG member agencies to borrow bike count equipment in order to collect data specifically tailored to their individual needs.

CONS: None.

TECHNICAL & POLICY IMPLICATIONS:

TECHNICAL: MAG member agencies will be able to utilize the data collected to analyze future MAG project applications; perform before-and-after studies with new projects; and for MAG safety and air quality analysis.

POLICY: The data collected from this project can be used to inform the MAG project application evaluation process and can be used by member agencies in local transportation planning.

ACTION NEEDED:

Recommend acceptance of the MAG Bicycles Count Final Report.

PRIOR COMMITTEE ACTIONS:

On September 25, 2014, the MAG Transportation Review Committee recommended acceptance of the MAG Bicycles Count Final Report.

MEMBERS ATTENDING

- Avondale: David Fitzhugh, Chair
- Phoenix: Rick Naimark, Vice Chair
- ADOT: Brent Cain
- Buckeye: Scott Lowe
- * Cave Creek: Ian Cordwell
- Chandler: Dan Cook
- El Mirage: Jorge Gastelum
- Fountain Hills: Randy Harrel
- * Gila Bend: Ernie Rubi
- Gila River: Tim Oliver
- Gilbert: Leah Hubbard
- Glendale: Debbie Albert
- Goodyear: Cato Esquivel
- Litchfield Park: Woody Scoutten
- * Maricopa (City): Paul Jepson
- Maricopa County: John Hauskins
- # Mesa: Jeff Martin for Scott Butler
- * Paradise Valley: Jim Shano
- Peoria: Andrew Granger
- * Queen Creek: Mohamed Youssef
- Scottsdale: Paul Basha
- Surprise: Mike Gent
- Tempe: Shelly Seyler
- Valley Metro: John Farry
- # Wickenburg: Vince Lorefice
- Youngtown: Grant Anderson

EX-OFFICIO MEMBERS ATTENDING

- * Street Committee: Dana Owsiany, City of Phoenix
- * ITS Committee: Catherine Hollow, City of Tempe
- # FHWA: Ed Stillings
- * Bicycle/Pedestrian Committee: Denise Lacey, Maricopa County
- * Transportation Safety Committee: Renate Ehm, City of Mesa

* Members neither present nor represented by proxy.

+ - Attended by Videoconference
- Attended by Audioconference

On September 16, 2014, the MAG Bicycle and Pedestrian Committee recommended acceptance of the MAG Bicycles Count Final Report.

MEMBERS ATTENDING

- | | |
|---|--|
| Katherine Coles, Phoenix, Chair of Bicycle and Pedestrian Committee | # David Gue for Thomas Chlebanowski, Litchfield Park |
| Tracy Stevens, Avondale, Vice-Chair of Bicycle and Pedestrian Committee | # David Maestas, Maricopa |
| Michael Sanders, ADOT | # Denise Lacey, Maricopa Coounty |
| Raquel Schatz, Apache Junction | Jim Hash, Mesa |
| * Robert Wisener, Buckeye | Brandon Forrey, Peoria |
| # Stacy Bridge-Denzak, Carefree | # Sidney Urias for Brett Burningham, Queen Creek |
| * Ian Cordwell, Cave Creek | Amanda Leuker for Ben Limmer, Valley Metro |
| Ann Marie Riley for Jason Crampton, Chandler | Susan Conklu, Scottsdale |
| Jose Macias, El Mirage | Stephen Chang, Surprise |
| Kristin Myers, Gilbert | # Robert Yabes for Eric Iwersen, Tempe |
| Purab Adabala, Glendale | * Robert Carmona, Wickenburg |
| # Joe Schmitz, Goodyear | * Grant Anderson, Youngtown |

*Members neither present nor represented by proxy

#Attended via audio-conference

CONTACT PERSON:

Alex Oreschak, MAG, (602) 254-6300



MAG Bicycles Count:

Final Report and Implementation Plan
Executive Summary

June 2014



Coffman Studio



Graham Ware



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MAG Bicycles Count: Summary of Key Findings

The key purpose of this study was to develop a regional bicycle counting strategy, and then collect the first snapshot of bicycle counts in the region, with the anticipation of on-going counting to help build the region's understanding of cycling trends and patterns over time.

How We Counted

- 128 - Counting Sites
- 44 - Continuous Automated Sites
- 84 - Peak Period Manual Count Sites
- Developed Factors to Estimate Sidewalk Riding
- Calculated Weekday and Weekend Peak Period Percentages to Extrapolate Manual Counts to Daily Counts
- Developed Data Summaries
 - Average Daily Bicycle Volumes (Path, Lane or Route)
 - Temporal Patterns (Day of Week, Hour of Day)

Key Findings

- **Bike paths showed the highest levels of cycling activity** in the region, relative to other facilities, such as bike lanes, bike routes or roadways without bike facilities.
- **The Rio Salado Downstream Dam Bridge** in Tempe showed the highest average daily weekend bicycle count, collected via automated counters, at 859 cyclists per day on the weekend. This count site is a bike path.
- **107th Street and Thomas Road** in the City of Avondale showed the highest average daily weekday bicycle count, collected via automated counters, at 488 cyclists per day during the week.

This count site is a bike lane.

- **19th Avenue and Glendale Avenue** in the City of Phoenix showed the highest average daily bicycle volume, collected via automated counters, along roadways with no facility (or bike route) with 271 average daily cyclists on the weekend and 241 average daily cyclists during the week.
- **Mill Avenue and 10th Street** in the City of Tempe showed the highest average daily weekday bicycle volumes (estimated from peak period manual counts) with an estimated 2,244 average daily cyclists during the week.
- **College Avenue and Apache Boulevard** in the City of Tempe showed the highest average daily weekend bicycle volumes (estimated from peak period manual counts) with an estimated 719 cyclists during the weekend.
- All bicycle facility types experienced **higher PM peaks** compared to AM peaks **during weekdays**.
- The PM peak hour during weekdays was 5PM for all facility types. During weekdays, it was 10AM



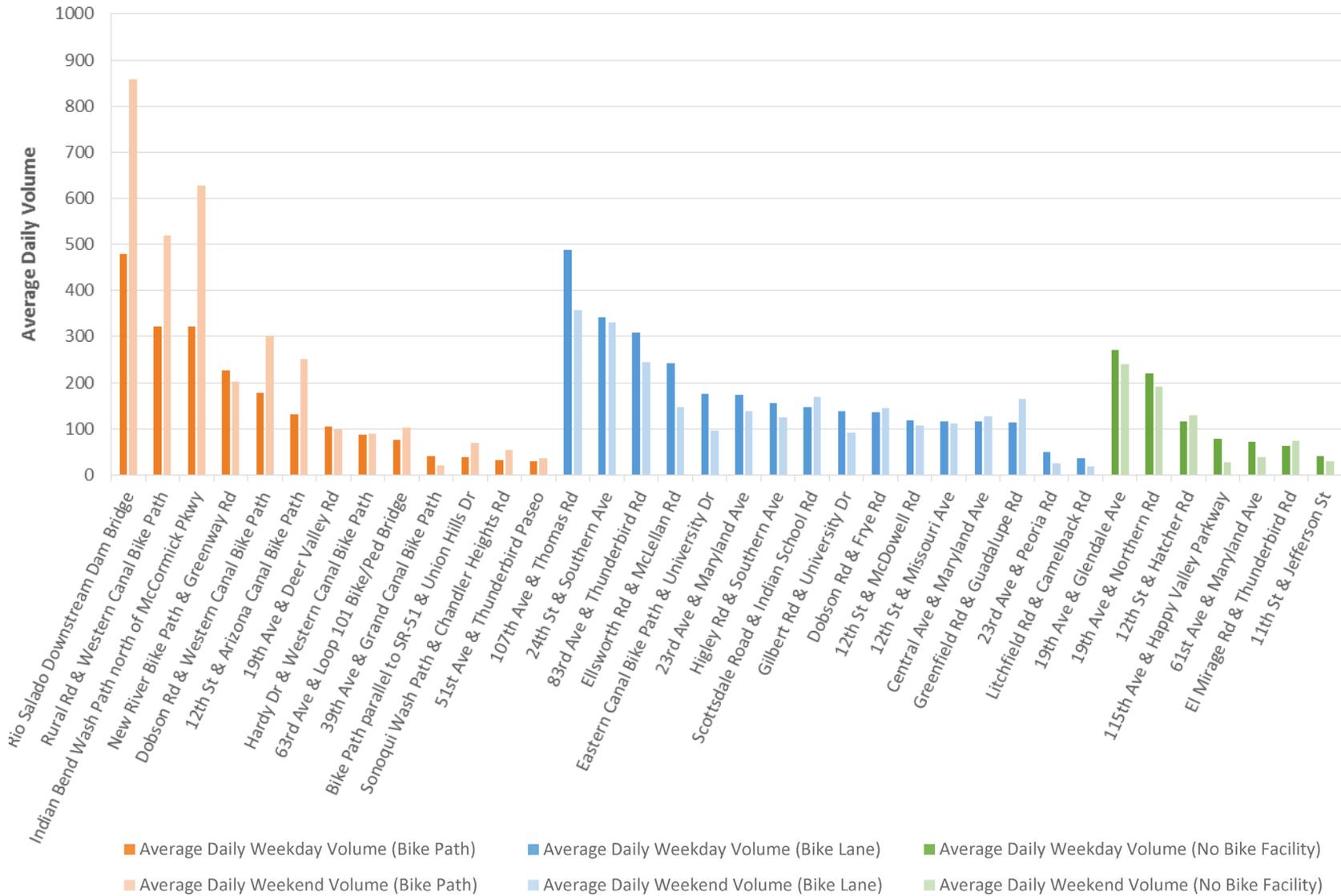
for bike paths, and 7AM for bike lanes and bike routes (or no facility).

- All bicycle facility types experienced **higher AM peak hours** compared to PM peaks **during weekends**. The PM peak hour during weekends was 4PM for bike paths and bike lanes, and 5PM for bike routes (or no facility).
- Saturdays showed the highest average daily bicycle volumes overall, with 180 average daily cyclists across all automated count sites. Friday showed the highest average daily weekday bicycle volumes across all automated count sites, with 161 average daily cyclists.
- The manual counts showed that during the AM peak hour, **between 30% and 94% of cyclists in Maricopa County are riding along the sidewalk**. The highest sidewalk cycling rates occurs along 6-lane roadways with no bike facility and with right-turn pockets.

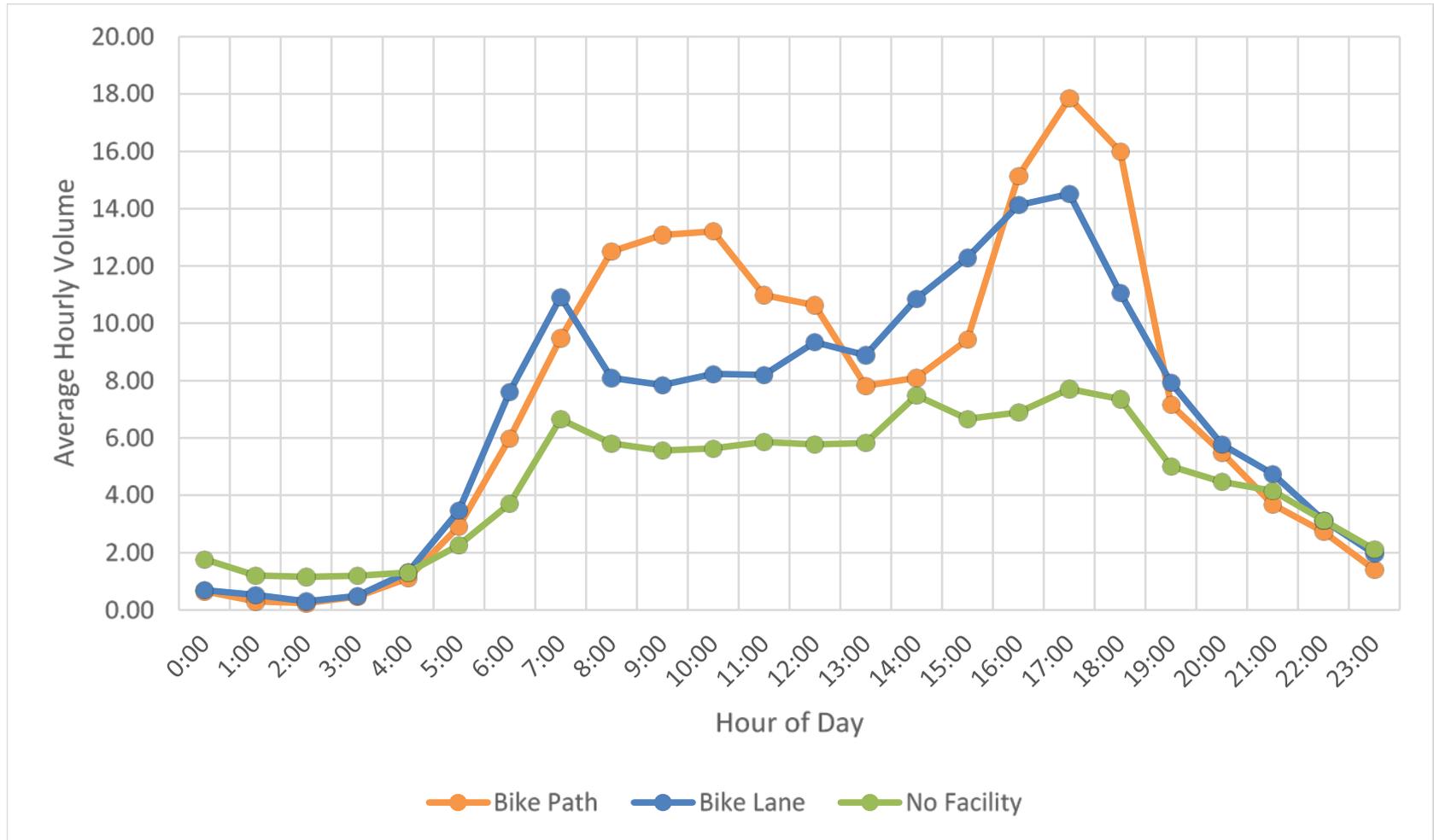
In summary, these findings reflect the fact that Maricopa County, especially considering its population density, has noteworthy cycling levels that fall within similar “Order of Magnitude” levels of other major regions across the country.

Generally, Bike Paths experienced greater average hourly volumes during weekdays and weekends than Bike Lanes or roadways without bike facilities. This finding is potentially indicative of a general preference for Bike Paths for both Commuting and Recreational uses.

Chart 7-6: Average Daily Automated Count Site Bicycle Volumes for Weekdays & Weekends by Facility Type

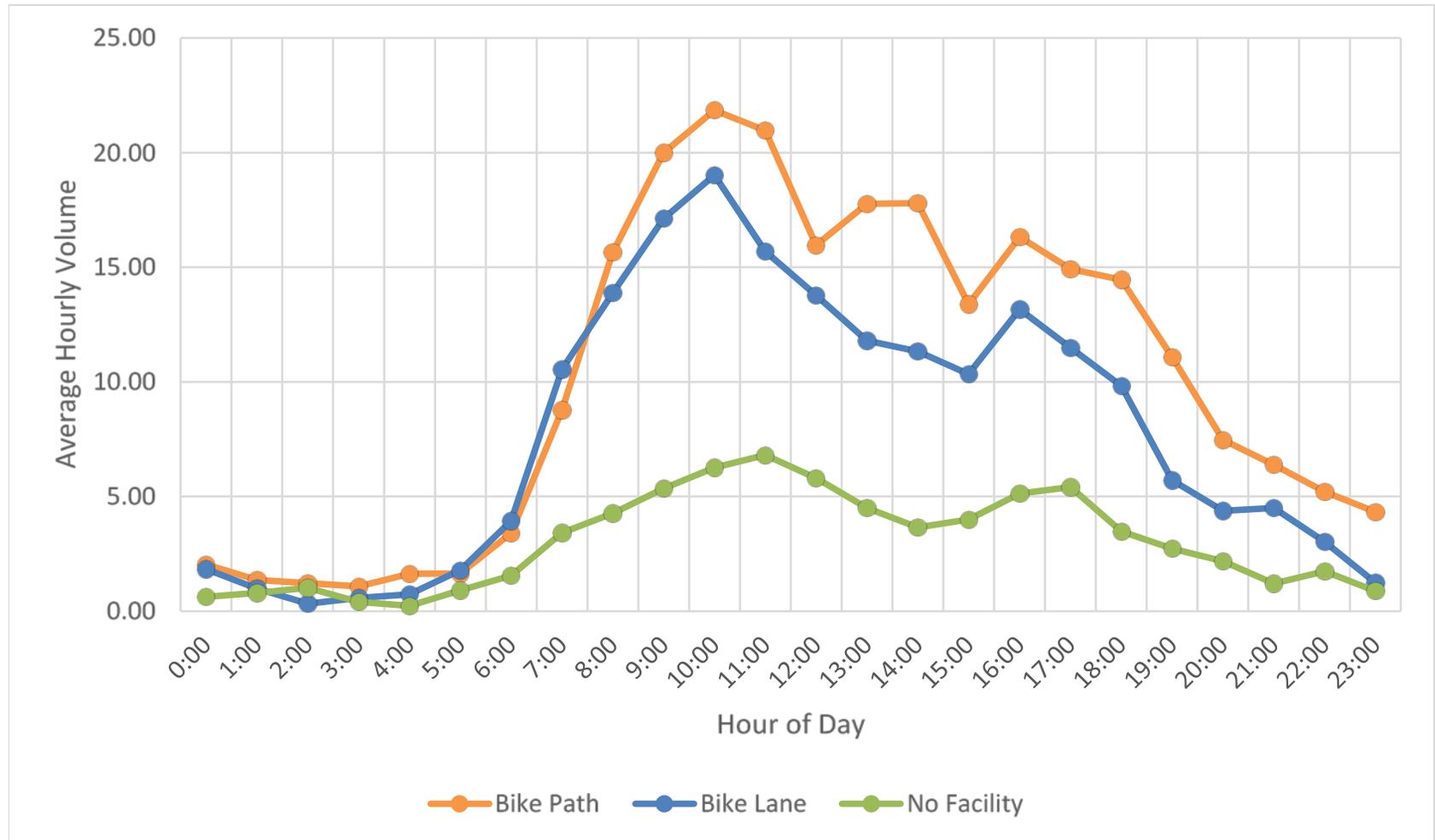


Average Hourly Weekday Volumes



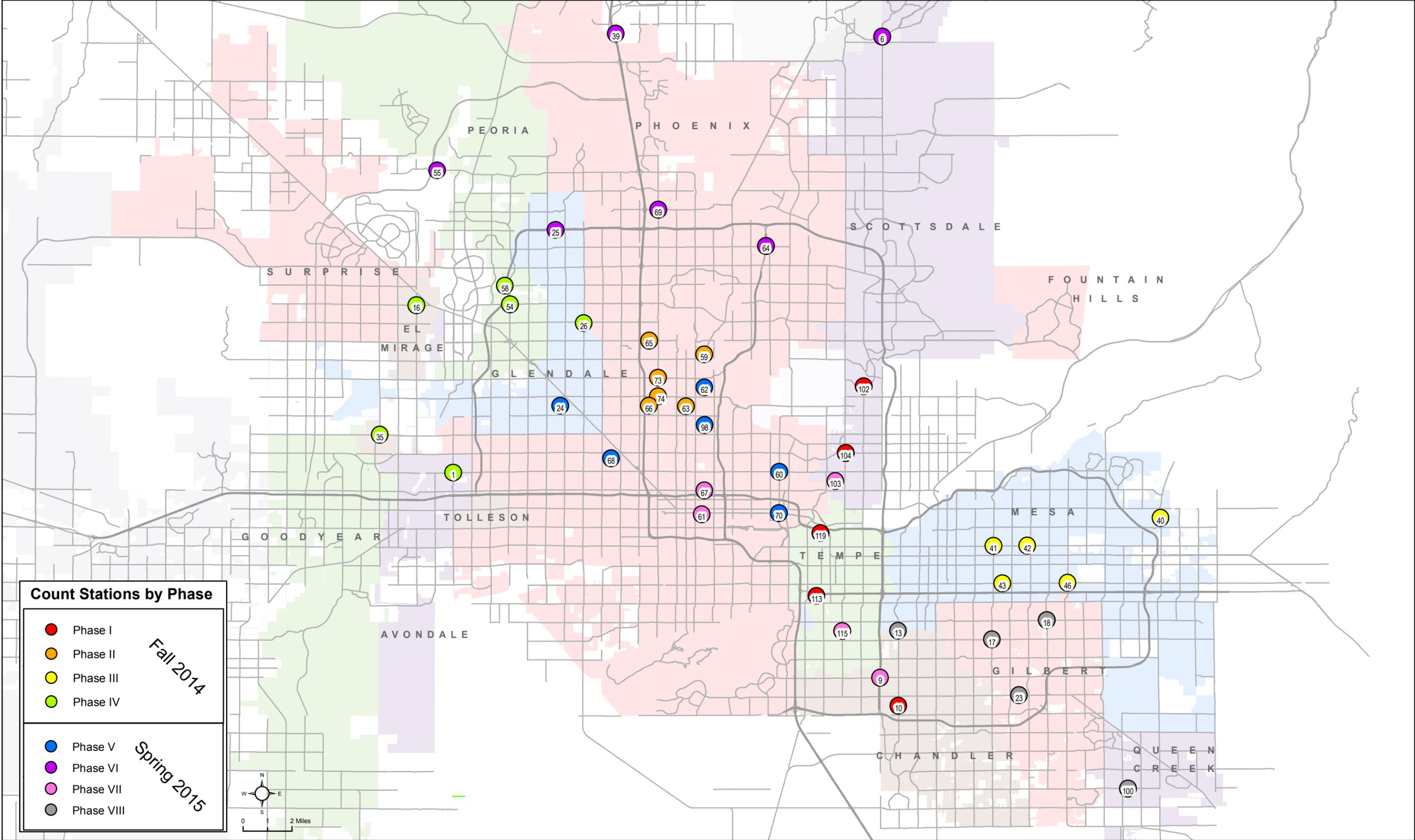
MAG Region, average of 37 automated count stations, October-November 2013

Average Hourly Weekend Volumes



MAG Region, average of 37 automated count stations, October-November 2013

FY 2015 Automated Count Stations By Phase



FY 2015 Automated Count Stations By Phase

Data collection will occur in (8) 2-week phases. The dates below indicate when each of the 8 installations should occur.

Phase	Date	Total Locations
Phase I	9/29/2014	2 on-street + 3 off-street
Phase II	10/13/2014	4 on-street + 2 off-street
Phase III	10/27/2014	5 on-street
Phase IV	11/10/2014	4 on-street + 2 off-street
Phase V	3/30/2015	4 on-street + 2 off-street
Phase VI	4/13/2015	4 on-street + 2 off-street
Phase VII	4/27/2015	4 on-street + 1 off-street
Phase VIII	5/11/2015	3 on-street + 2 off-street
		Total
		44

Count ID	Jurisdiction	Count Location	Count Direction	Phase
102	Scottsdale	Indian Bend Wash Path north of McCormick Pkw	NS	1
104	Scottsdale	Indian School Road east of Scottsdale Road	EW	1
119	Tempe	Rio Salado Downstream Dam Bridge	Off-Street	1
10	Chandler	Dobson Rd & Frye Rd	NS	1
113	Tempe	Hardy Dr & Western Canal Bike Path	Off-Street	1
59	Phoenix	12th St & Hatcher Rd	EW	2
63	Phoenix	Central Ave & Maryland Ave	EW	2
65	Phoenix	23rd Ave & Peoria Rd	NS	2
66	Phoenix	23rd Ave & Maryland Ave	NS	2
73	Phoenix	19th Ave & Northern Rd	Sidewalk EW	2
74	Phoenix	19th Ave & Glendale	Sidewalk EW	2
40	Mesa	Ellsworth Rd & McLellan Rd	NS	3
41	Mesa	Gilbert Rd & University Dr	EW	3
42	Mesa	Eastern Canal Bike Path and University Dr	EW	3
43	Mesa	24th St & Southern Ave	EW	3
46	Mesa	Higley Rd & Southern Ave	NS	3
1	Avondale	107th Ave & Thomas Rd	NS	4
16	El Mirage	El Mirage Rd & Thunderbird Rd	NS	4
26	Glendale	51st Ave & Thunderbird Paseo (Canal Path)	Off-Street	4
35	Litchfield Park	Litchfield Rd & Camelback Rd	EW	4
54	Peoria	83rd Ave & Thunderbird Rd	NS	4
58	Peoria	New River Bike Path & Greenway Rd	Off-Street	4
24	Glendale	61st Ave & Maryland Ave	EW	5
60	Phoenix	44th St & Thomas Rd	NS	5
62	Phoenix	12th St & Arizona Canal Bike Path	Off-Street	5
68	Phoenix	39th Ave & Grand Canal Bike Path	Off-Street	5
70	Phoenix	44th St & Washington St	EW	5
98	Phoenix	12th St & Missouri Ave	NS	5
6	Carefree	Pima Rd & Cave Creek Rd	NS	6
25	Glendale	63rd Ave & Loop 101 Bike/Ped Bridge	Off-Street	6
39	Maricopa County	Gavilan Peak Pkwy & Pioneer Rd	NS	6
55	Peoria	Happy Valley Parkway (west of the Agua Fria River)	EW	6
64	Phoenix	Bike Path parallel to SR-51 & Union Hills Dr	Off-Street	6
69	Phoenix	19th Ave & Deer Valley Rd	EW	6
61	Phoenix	11th St & Jefferson St	EW	7
67	Phoenix	12th St and McDowell Rd	NS	7
9	Chandler	Price Rd & W Ray Rd	EW	7
103	Scottsdale	68th St & Oak St	NS	7
115	Tempe	Rural Rd & Western Canal Bike Path	Off-Street	7
13	Chandler	Dobson Rd & Western Canal Bike Path	Off-Street	8
17	Gilbert	Gilbert Rd and Elliott Rd	NS	8
18	Gilbert	Greenfield Rd & Guadalupe Rd	EW	8
23	Gilbert	Eastern Canal Trail & E Williams Field Rd	EW	8
100	Queen Creek	Chandler Heights Rd & Sonoqui Wash Path	Off-Street	8

MARICOPA ASSOCIATION OF GOVERNMENTS

INFORMATION SUMMARY... for your review

DATE:

September 30, 2014

SUBJECT:

Pedestrian and Bicycle Facilities Design Assistance Program

SUMMARY:

The FY 2015 MAG Unified Planning Work Program and Annual Budget, approved by the MAG Regional Council in May 2014, includes \$300,000 for the Design Assistance for Bicycle and Pedestrian Facilities. The Design Assistance Program allows MAG member agencies to apply for funding for up to 15% design plans of a bicycle or pedestrian project. Eleven applications from Avondale, Fort McDowell Yavapai Nation, Mesa, Phoenix, Surprise, and Tempe were received on June 26, 2014. These eleven projects requested a total of \$757,460 in funding. All projects, therefore, could not be funded because the amount of requests exceeded the amount available.

On July 15, 2014, the MAG Bicycle and Pedestrian Committee reviewed the applications, ranked the 11 projects, and unanimously recommended the 1st, 2nd, 3rd, and 4th ranked projects for approval:

- Avondale: Dysart Road, Van Buren St. to MC-85 Pedestrian and Bike Improvements (\$75,000)
- Tempe: Alameda Drive Bicycle and Pedestrian Facilities Improvements Project (\$75,000)
- Mesa: Dobson Road Complete Street - US60 to Broadway Road (\$75,000)
- Fort McDowell Yavapai Nation: Fort McDowell Multi-use Pathway Connector (\$75,000)

On July 22, 2014, Avondale: Dysart Road, Van Buren Street to MC-85 Pedestrian and Bike Improvements project (\$75,000) was deemed ineligible as the project is already under local contract for design.

With the removal of this project, \$75,000 was available to fund projects on the ranked list. The 5th ranked project, Surprise: Grand Avenue Sidewalk Gap Improvement project for \$36,000 was moved up the list to be funded. After funding the 5th ranked project, only \$39,000 of funding remained. The 6th ranked spot on the list was shared by two projects that had identical scores: Peoria: New River Multi-use Path Access at Deer Valley Road (\$65,000) and Scottsdale: McDowell Road Bike Lanes: Pima Road to 64th St. (\$78,960). MAG staff notified both the jurisdictions that local funding would be needed for the project, if they were approved.

On August 19, 2014, the MAG Bicycle and Pedestrian Committee deliberated between the Scottsdale and the Peoria project. The committee recommended the Peoria: New River Multi-use Path Access at Deer Valley Road (\$65,000). The committee unanimously recommended the following projects for approval for the 2015 Design Assistance program:

- Tempe: Alameda Drive Bicycle and Pedestrian Facilities Improvements Project (\$75,000)
- Mesa: Dobson Road Complete Street - US60 to Broadway Road (\$75,000)
- Fort McDowell Yavapai Nation: Fort McDowell Multi-use Pathway Connector (\$75,000)
- Surprise: Grand Avenue Sidewalk Gap Improvement Project (\$36,000)
- Peoria: New River Multi-use Path Access at Deer Valley Road (\$39,000)

PUBLIC INPUT:

None.

PROS & CONS:

PROS: This program assists MAG member agencies by offering professional design assistance to develop bicycle and pedestrian facilities that help reduce congestion and improve air quality.

CONS: According to federal law, any project which is not constructed after being designed with federal transportation funds could be required to return the funds used for design to the Federal Highway Administration.

TECHNICAL & POLICY IMPLICATIONS:

TECHNICAL: The Design Assistance Program encourages implementation of the adopted MAG Pedestrian Policies and Design Guidelines and nationally accepted bicycle facilities design practices.

POLICY: These programs encourage the development of facilities to encourage walking and bicycling.

ACTION NEEDED:

Recommend approval of the following projects for MAG Design Assistance for the Pedestrian and Bicycle Facilities Program: Tempe: Alameda Drive Bicycle and Pedestrian Facilities Improvements Project for \$75,000; Mesa: Dobson Road Complete Street - US-60 to Broadway Road for \$75,000; Fort McDowell Yavapai Nation: Fort McDowell Multi-use Pathway Connector for \$75,000; Surprise: Grand Avenue Sidewalk Gap Improvement Project for \$36,000; and Peoria: New River Multi-use Path Access at Deer Valley Road for \$39,000.

PRIOR COMMITTEE ACTIONS:

On September 25, 2014, the MAG Transportation Review Committee recommended to fund the five top ranked projects for the MAG Design Assistance Program: Tempe: Alameda Drive Bicycle and Pedestrian Facilities Improvements Project (\$75,000); Mesa: Dobson Road Complete Street - US60 to Broadway Road (\$75,000); Fort McDowell Yavapai Nation: Fort McDowell Multi-use Pathway Connector (\$75,000); Surprise: Grand Avenue Sidewalk Gap Improvement Project (\$36,000); Peoria: New River Multi-use Path Access at Deer Valley Road (\$39,000).

MEMBERS ATTENDING

- Avondale: David Fitzhugh, Chair
- Phoenix: Rick Naimark, Vice Chair
- ADOT: Brent Cain
- Buckeye: Scott Lowe
- * Cave Creek: Ian Cordwell
- Chandler: Dan Cook
- El Mirage: Jorge Gastelum
- Fountain Hills: Randy Harrel
- * Gila Bend: Ernie Rubi
- Gila River: Tim Oliver
- Gilbert: Leah Hubbard
- Glendale: Debbie Albert
- Goodyear: Cato Esquivel
- Litchfield Park: Woody Scoutten
- * Maricopa (City): Paul Jepson
- Maricopa County: John Hauskins
- # Mesa: Jeff Martin for Scott Butler
- * Paradise Valley: Jim Shano
- Peoria: Andrew Granger
- * Queen Creek: Mohamed Youssef
- Scottsdale: Paul Basha
- Surprise: Mike Gent
- Tempe: Shelly Seyler
- Valley Metro: John Farry
- # Wickenburg: Vince Lorefice
- Youngtown: Grant Anderson

EX-OFFICIO MEMBERS ATTENDING

- * Street Committee: Dana Owsiany, Phoenix
- * ITS Committee: Catherine Hollow, Tempe
- # FHWA: Ed Stillings
- * Bicycle/Pedestrian Committee: Denise Lacey, Maricopa County
- * Transportation Safety Committee: Renate Ehm, Mesa

* Members neither present nor represented by proxy.

+ - Attended by Videoconference
- Attended by Audioconference

On August 19, 2014, the MAG Bicycle and Pedestrian Committee reviewed the applications and unanimously recommended the following projects for approval:

- Tempe: Alameda Drive Bicycle and Pedestrian Facilities Improvements Project (\$75,000)
- Mesa: Dobson Road Complete Street - US60 to Broadway Road (\$75,000)
- Fort McDowell Yavapai Nation: Fort McDowell Multi-use Pathway Connector (\$75,000)
- Surprise: Grand Avenue Sidewalk Gap Improvement Project (\$36,000)
- Peoria: New River Multi-use Path Access at Deer Valley Road (\$39,000)

MEMBERS ATTENDING

- | | |
|--|--|
| Katherine Coles, Phoenix, Chair | David Gue for Thomas Chlebanowski, Litchfield Park |
| Christine Fanchi for Tracy Stevens, Avondale, Vice-Chair | # David Maestas, Maricopa |
| Michael Sanders, ADOT | # Denise Lacey, Maricopa County |
| Raquel Schatz, Apache Junction | Jim Hash, Mesa |
| * Robert Wisener, Buckeye | Brandon Forrey, Peoria |
| Stacy Bridge-Denzak for D.J. Stapley, Carefree | Keith Newman, Queen Creek |
| * Ian Cordwell, Cave Creek | Ben Limmer, Valley Metro |
| Jason Crampton, Chandler | Susan Conklu, Scottsdale |
| Jose Macias, El Mirage | Stephen Chang, Surprise |
| Kristin Myers, Gilbert | Eric Iwersen, Tempe |
| * Purab Adabala, Glendale | * Robert Carmona, Wickenburg |
| * Joe Schmitz, Goodyear | # Grant Anderson, Youngtown |

*Members neither present nor represented by proxy
#Attended via audio-conference

On July 15, 2014, the MAG Bicycle and Pedestrian Committee reviewed the applications and unanimously recommended the following projects for approval:

- Avondale: Dysart Road, Van Buren St. to MC85 Pedestrian and Bike Improvements (\$75,000)
- Tempe: Alameda Drive Bicycle and Pedestrian Facilities Improvements Project (\$75,000)
- Mesa: Dobson Road Complete Street - US60 to Broadway Road (\$75,000)
- Fort McDowell Yavapai Nation: Fort McDowell Multi-use Pathway Connector (\$75,000)

MEMBERS ATTENDING

- | | |
|-------------------------------------|--|
| Katherine Coles, Phoenix, Chair | # Thomas Chlebanowski, Litchfield Park |
| Tracy Stevens, Avondale, Vice-Chair | # David Maestas, Maricopa |
| Michael Sanders, ADOT | Denise Lacey, Maricopa County |
| Raquel Schatz, Apache Junction | Jim Hash, Mesa |
| * Robert Wisener, Buckeye | Brandon Forrey, Peoria |
| D.J. Stapley, Carefree | * Rich Purcell, Queen Creek |
| Ian Cordwell, Cave Creek | Amanda Leuker for Ben Limmer, Valley Metro |
| Jason Crampton, Chandler | Susan Conklu, Scottsdale |
| * Jose Macias, El Mirage | Stephen Chang, Surprise |
| Kristin Myers, Gilbert | Eric Iwersen, Tempe |
| Purab Adabala, Glendale | * Robert Carmona, Wickenburg |
| Joe Schmitz, Goodyear | Grant Anderson, Youngtown |

* Members neither present nor represented by proxy.
Attended via audio-conference

CONTACT PERSON:

Alex Oreschak, MAG, (602) 254-6300

MARICOPA ASSOCIATION OF GOVERNMENTS

INFORMATION SUMMARY... for your review

DATE:

September 30, 2014

SUBJECT:

Project Changes - Amendment and Administrative Modification to the FY 2014 MAG Transportation Improvement Program, FY 2015 Arterial Life Cycle Program, and to the 2035 Regional Transportation Plan

SUMMARY:

The Fiscal Year (FY) 2014-2018 MAG Transportation Improvement Program (TIP) and 2035 Regional Transportation Plan (RTP) were approved by the MAG Regional Council on January 29, 2014, and have been modified five times. The FY 2015 Arterial Life Cycle Program, approved by the MAG Regional Council on June 25, 2014, has been modified one time. Additional changes are needed.

The project changes in Table A (modifications to the TIP) and Table B (non-TIP modifications) contain modifications to the FY 2015 Arterial Life Cycle Program (ALCP). These changes represent updates to work schedules, adjustments to project costs, reallocation of project savings, and corrections to administrative errors. None of the changes impact the fiscal balance of the program.

Table C includes changes to the transit program. These changes incorporate Job Access and Reverse Commute projects based on the priority ranking that was approved by the MAG Regional Council on August 27, 2014. The FY 2014 Transportation Investment Generating Economic Recovery (TIGER) discretionary grant program awards were announced on September 12, 2014, by the Federal Transit Administration. The City of Phoenix Central Avenue Multimodal Transportation Improvement Plan was awarded TIGER funding, and is included in the listings.

Table D contains changes to the freeway program requested by the Arizona Department of Transportation (ADOT) as well as non-ALCP project changes requested by member agencies. General clerical corrections are also included. The I-10 Right-of-Way Phase 2 work element from 32nd Street to SR-202L (Santan Freeway), requires a material cost change increasing the work phase costs by 10.53 percent. The detail of the project listings for Department of Public Safety (DPS) Officers to co-locate in the ADOT Traffic Operations Center for the pilot years of FY2015, 2016, and 2017 is included in this table. The cost of the DPS Officers project is shared fifty/fifty by ADOT and MAG as approved by Regional Council on August 27, 2014.

All of the projects to be amended may be categorized as exempt from conformity determinations.

PUBLIC INPUT:

None has been received.

PROS & CONS:

PROS: Approval of this TIP amendment and administrative modification will allow the projects to proceed in a timely manner.

CONS: None.

TECHNICAL & POLICY IMPLICATIONS:

TECHNICAL: Projects that wish to utilize transportation federal funds need to be shown in the TIP in the year that they expect to commence and may need to undergo an air quality conformity analysis or consultation.

POLICY: This amendment and administrative modification request is in accord with MAG guidelines.

ACTION NEEDED:

Recommend approval of amendments and administrative modifications to the FY 2014-2018 MAG Transportation Improvement Program, FY 2015 Arterial Life Cycle Program, and as appropriate, to the 2035 Regional Transportation Plan.

PRIOR COMMITTEE ACTIONS:

On September 25, 2014, the Transportation Review Committee recommended approval of amendments and administrative modifications to the FY 2014-2018 MAG Transportation Improvement Program, FY 2015 Arterial Life Cycle Program, and as appropriate, to the 2035 Regional Transportation Plan.

MEMBERS ATTENDING

- Avondale: David Fitzhugh, Chair
- Phoenix: Rick Naimark, Vice Chair
- ADOT: Brent Cain
- Buckeye: Scott Lowe
- * Cave Creek: Ian Cordwell
- Chandler: Dan Cook
- El Mirage: Jorge Gastelum
- Fountain Hills: Randy Harrel
- * Gila Bend: Ernie Rubi
- Gila River: Tim Oliver
- Gilbert: Leah Hubbard
- Glendale: Debbie Albert
- Goodyear: Cato Esquivel
- Litchfield Park: Woody Scoutten
- * Maricopa (City): Paul Jepson
- Maricopa County: John Hauskins
- # Mesa: Jeff Martin for Scott Butler
- * Paradise Valley: Jim Shano
- Peoria: Andrew Granger
- * Queen Creek: Mohamed Youssef
- Scottsdale: Paul Basha
- Surprise: Mike Gent
- Tempe: Shelly Seyler
- Valley Metro: John Farry
- # Wickenburg: Vince Lorefice
- Youngtown: Grant Anderson

EX-OFFICIO MEMBERS ATTENDING

- * Street Committee: Dana Owsiany, Phoenix
- * ITS Committee: Catherine Hollow, Tempe
- # FHWA: Ed Stillings
- * Bicycle/Pedestrian Committee: Denise Lacey, Maricopa County
- * Transportation Safety Committee: Renate Ehm, Mesa

* Members neither present nor represented by proxy.

+ - Attended by Videoconference
- Attended by Audioconference

On September 11, 2014, the MAG Transit Committee recommended approval to amend the FY 2014-2018 MAG Transportation Improvement Program and 2035 Regional Transportation Plan with the Job Access and Reverse Committee (JARC) project listings.

MEMBERS ATTENDING

- # ADOT: Nicole Patrick
Avondale: Kristen Sexton
- # Buckeye: Andrea Marquez
Chandler: Jason Crampton for RJ Zeder
- * El Mirage: Jorge Gastelum
Gilbert: Kristin Myers
Glendale: Debbie Albert
Goodyear: Cato Esquivel
- # Maricopa: David Maestas
Maricopa County DOT: Suparna Dasgupta
Mesa: Jodi Sorrell

- * Paradise Valley: Jeremy Knapp
Peoria: Stuart Kent as Proxy
Phoenix: Maria Hyatt, Vice Chair
Queen Creek: Mohamed Youssef
Scottsdale: Madeline Clemann, Chair
Surprise: Martin Lucero for David Kohlbeck
- # Tempe: Robert Yabes
- * Tolleson: Chris Hagen
Valley Metro: John Farry for Wulf Grote
Youngtown: Grant Anderson

*Members neither present nor represented by proxy.

+ - Attended by Videoconference

- Attended by Audioconference

On August 27, 2014, the MAG Regional Council unanimously approved a priority ranking of Job Access and Reverse Commute (JARC) projects.

On August 27, 2014, the MAG Regional Council approved funding a three-year pilot project, with an evaluation component, to co-locate three Department of Public Safety (DPS) officers and one DPS supervisor in the Arizona Department of Transportation (ADOT) Traffic Operations Center. The vote passed with one voting no (*italics*).

MEMBERS ATTENDING

- Mayor Michael LeVault, Youngtown, Chair
Mayor W. J. "Jim" Lane, Scottsdale,
Vice Chair
Vice Mayor Robin Barker, Apache Junction
Mayor Kenneth Weise, Avondale
Mayor Jackie Meck, Buckeye
Councilmember Mike Farrar, Carefree
*Councilmember Reginald Monachino,
Cave Creek*
- # Mayor Jay Tibshraeny, Chandler
Mayor Lana Mook, El Mirage
- * Mayor Tom Rankin, Florence
- * President Ruben Balderas, Fort
McDowell Yavapai Nation
Mayor Linda Kavanagh, Fountain Hills
Mayor Steven Holt, Gila Bend
- * Governor Gregory Mendoza, Gila River
Indian Community
Mayor John Lewis, Gilbert
Mayor Jerry Weiers, Glendale
Mayor Georgia Lord, Goodyear
Mayor Rebecca Jimenez, Guadalupe

- Mayor Thomas Schoaf, Litchfield Park
Mayor Christian Price, City of Maricopa
- * Supervisor Steve Chucuri, Maricopa County
- * Mayor Alex Finter, Mesa
Mayor Scott LeMarr, Paradise Valley
- * Mayor Bob Barrett, Peoria
Mayor Greg Stanton, Phoenix
Supervisor Todd House, Pinal County
Mayor Gail Barney, Queen Creek
- * President Diane Enos, Salt River
Pima-Maricopa Indian Community
Mayor Sharon Wolcott, Surprise
Mayor Mark Mitchell, Tempe
- * Mayor Adolfo Gamez, Tolleson
- * Mayor John Cook, Wickenburg
Mr. Roc Arnett, Citizens Transportation
Oversight Committee
Mr. Joseph La Rue, State Transportation
Board
Mr. Jack Sellers, State Transportation
Board

* Those members neither present nor represented by proxy.

Attended by telephone conference call.

+ Attended by videoconference

CONTACT PERSON:

Teri Kennedy, Transportation Improvement Program Manager, (602) 254-6300.

Table A. ALCP Project Changes to the Fiscal Year 2014-2018 MAG Transportation Improvement Program and the FY 2015 Arterial Life Cycle Program

ALCP - IN TIP																			
TIP #	Agency	Project Location	Project Description	Fiscal Year	Est. Date Open	Length (miles)	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	TRACS	Notes:	RTP ID
CHN14-112CZ	Chandler	Old Price Rd at Queen Creek Rd	Construct Intersection Improvement	2015	Jun-15	0.8	6	6	Local	1,854,750	-	-	1,854,750	--	--	--		Amend: Change project construction year from 2014 to 2015. Reduce project construction phase costs from \$1,923,400 to \$1,854,750. Project open year remains unchanged.	ACI-PRC-10-03-G
GLB15-108DZ	Gilbert	Elliot Rd at Cooper Dr	Design intersection improvement	2015	Dec-16	0.5	4	6	Local	564,000			564,000	--	--	--		Amend: Delete TIP listing. Project design phase deferred to 2016/2017.	AII-ELT-30-03
GLB16-108DZ	Gilbert	Elliot Rd at Cooper Dr	Design intersection improvement	2016	May-17	0.5	4	6	Local	1,114,000	-	-	1,114,000	--	--	--		Amend: Increase project design phase costs in 2016. Defer project open date from 12/2016 to 5/2017.	AII-ELT-30-03
GLB15-108DRB	Gilbert	Elliot Rd at Cooper Dr	Design intersection improvement	2016	May-17	0.5	4	6	RARF	(492,100)	-	492,100	-	2016	RARF	492,100		Amend: Defer project open date from 12/2016 to 5/2017.	AII-ELT-30-03
GLB17-108DZ2	Gilbert	Elliot Rd at Cooper Dr	Design intersection improvement	2017	May-17	0.5	4	6	Local	127,000	-	-	127,000	--	--	--		Amend: Defer project open date from 12/2016 to 5/2017.	AII-ELT-30-03
GLB15-108RWZ	Gilbert	Elliot Rd at Cooper Dr	Acquisition of right-of-way for intersection improvement	2015	Dec-16	0.5	4	6	Local	800,000			800,000	--	--	--		Amend: Delete TIP listing. Project right-of-way phase to occur in 2016.	AII-ELT-30-03
GLB16-108RWZ	Gilbert	Elliot Rd at Cooper Dr	Acquisition of right-of-way for intersection improvement	2016	May-17	0.5	4	6	Local	1,200,000	-	-	1,200,000	--	--	--		Amend: Increase project right-of-way phase costs in 2016. Defer project open date from 12/2016 to 5/2017.	AII-ELT-30-03
GLB16-108RRB	Gilbert	Elliot Rd at Cooper Dr	Acquisition of right-of-way for intersection improvement	2016	May-17	0.5	4	6	RARF	(840,000)	-	840,000	-	2016	RARF	840,000		Amend: Defer project open date from 12/2016 to 5/2017.	AII-ELT-30-03
GLB16-108CZ	Gilbert	Elliot Rd at Cooper Dr	Construct Intersection Improvement	2016	May-17	0.5	4	6	Local	4,170,000	-	-	4,170,000	--	--	--		Amend: Defer project open date from 12/2016 to 5/2017.	AII-ELT-30-03
GLB17-108CZ	Gilbert	Elliot Rd at Cooper Dr	Construct Intersection Improvement	2017	May-17	0.5	4	6	Local	1,004,000	-	-	1,004,000	--	--	--		Amend: Defer project open date from 12/2016 to 5/2017.	AII-ELT-30-03
GLB18-108CRB	Gilbert	Elliot Rd at Cooper Dr	Construct Intersection Improvement	2017	May-17	0.5	4	6	RARF	(2,808,166)	-	2,808,166	-	2014	RARF	2,808,166		Amend: Change TIP ID from GLB17-102CRB to GLB18-108CRB. Defer project open date from 12/2016 to 5/2017.	AII-ELT-30-03
MMA12-118RWZ	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (AC)	2012	Jun-16	2.5	2	4	Local	8,610,641	-	-	8,610,641	--	--	--	SZ046 01R	Amend: New TIP listing. Change the way ALCP Advance Construct projects are showing in the TIP. Show original cost commitment to ROW phase in 2012. Project open year remains unchanged.	ACI-NOR-10-03-B

Table A. ALCP Project Changes to the Fiscal Year 2014-2018 MAG Transportation Improvement Program and the FY 2015 Arterial Life Cycle Program

9/22/2014

ALCP - IN TIP																			
TIP #	Agency	Project Location	Project Description	Fiscal Year	Est. Date Open	Length (miles)	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	TRACS	Notes:	RTP ID
MMA11-922	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (reimb)	2012	Jun-16	2.5	2	4	STP-MAG	(686,731)	686,731	-	-	2012	STP-MAG	686,731	SZ046 01R	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2012 ROW phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-B
MMA13-118RW3Z	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (reimb)	2013	Jun-16	2.5	2	4	STP-MAG	(1,995,077)	1,995,077	-	-	2013	STP-MAG	1,995,077	SZ046 01R	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2013 ROW phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-B
MMA13-118RWZ	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (reimb)	2014	Jun-16	2.5	2	4	STP-MAG	(1,412,066)	1,412,066	-	-	2014	STP-MAG	1,412,066	SZ046 01R	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2014 ROW phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-B
MMA13-118RW2Z	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (reimb)	2014	Jun-16	2.5	2	4	STP-MAG	(1,933,575)	1,933,575	-	-	2014	STP-MAG	1,933,575	SZ046 01R	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2014 ROW phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-B
MMA15-118RWZ	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (AC)	2015	Jun-16	2.5	2	4	Local	7,089,359	-	-	7,089,359	--	--	--	SZ046 01R	Amend: New TIP listing. Increase ACI-NOR-10-03-B project right-of-way phase costs. Change the way ALCP Advance Construct projects are showing in the TIP. Show local commitment to additional ROW phase costs in 2015. Project open year remains unchanged.	ACI-NOR-10-03-B.

Table A. ALCP Project Changes to the Fiscal Year 2014-2018 MAG Transportation Improvement Program and the FY 2015 Arterial Life Cycle Program

ALCP - IN TIP																			
TIP #	Agency	Project Location	Project Description	Fiscal Year	Est. Date Open	Length (miles)	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	TRACS	Notes:	RTP ID
MMA18-118RWZ	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (reimb)	2018	Jun-16	2.5	2	4	STP-MAG	(5,000,000)	5,000,000	-	-	2018	STP-MAG	5,000,000	SZ046 01R	Amend: New TIP listing. Change the way ALCP Advance Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. Increase total right-of-way phase costs and reimbursement on ACI-NOR-10-03-B. Transfer reimbursement from ACI-NOR-10-03-G. Project open year remains unchanged.	ACI-NOR-10-03-B
MMA12-118CZ	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening	2016	Jun-16	2.5	2	4	Local	8,062,611			8,062,611	-	-	-	SZ046 01C	Amend: Delete TIP listing. All construction phase local costs shown in TIP ID MMA15-113CZ. Project open year remains unchanged.	ACI-NOR-10-03-B
MMA17-113CZ	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening	2017	Jun-16	2.5	2	4	STP-MAG	10,017,876			10,017,876	-	-	-	SZ046 01C	Amend: Delete TIP listing. All construction phase local costs shown in TIP ID MMA15-113CZ. Project open year remains unchanged.	ACI-NOR-10-03-B
MMA19-113CZ	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening (AC)	2015	Jun-16	2.5	2	4	Local	29,600,000	-	-	29,600,000	--	--	--	SZ046 01C	Amend: New TIP listing. Change the way ALCP Advancement Construct projects are shown in the TIP. Construction costs committed in 2015. Project open year remains unchanged.	ACI-NOR-10-03-B
MMA14-113CX	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening (Reimb)	2015	Jun-16	2.5	2	4	STP-MAG	(5,063,048)	5,063,048	-	-	2015	STP-MAG	5,063,048	SZ046 01C	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2015 construction phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-B
MMA15-113CX	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening (Reimb)	2016	Jun-16	2.5	2	4	STP-MAG	(4,939,987)	4,939,987	-	-	2016	STP-MAG	4,939,987	SZ046 01C	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2016 construction phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-B

Table A. ALCP Project Changes to the Fiscal Year 2014-2018 MAG Transportation Improvement Program and the FY 2015 Arterial Life Cycle Program

9/22/2014

ALCP - IN TIP																			
TIP #	Agency	Project Location	Project Description	Fiscal Year	Est. Date Open	Length (miles)	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	TRACS	Notes:	RTP ID
MMA15-113C2X	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening (Reimb)	2017	Jun-16	2.5	2	4	STP-MAG	(7,827,638)	7,827,638	-	-	2017	STP-MAG	7,827,638	SZ046 01C	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2017 construction phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-B
MMA18-118CZ	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening (reimb)	2018	Jun-16	2.5	2	4	STP-MAG	(4,081,161)	4,081,161	-	-	2018	STP-MAG	4,081,161	SZ046 01C	Amend: New TIP listing. Change the way ALCP Advance Construct projects are showing in the TIP. Listing reflects reimbursement for advance construct phase. Increase project construction phase reimbursement from ACI-NOR-10-03-G. Project open year remains unchanged.	ACI-NOR-10-03-B
MMA15-112DZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Design roadway widening	2015	Jun-16	0.5	4	6	Local	527,466	527,466	527,466	527,466	2016	STP-MAG	300,000	SZ091 03D	Amend: Delete TIP listing. Change the way ALCP Advancement Construct projects are shown in the TIP. Design phase reimbursements consolidated in TIP ID MMA16-112DZ. No change in design phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-D
MMA14-112DZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Design roadway widening (AC)	2015	Jun-16	0.5	4	6	Local	1,902,438	-	-	1,902,438	--	--	--	SZ091 03D	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Project design phase to begin in FY 2015. Design phase costs committed in 2015. Design phase reimbursements consolidated in TIP ID MMA16-112DZ. No change in design phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-D
MMA16-112DZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Design roadway widening (Reimb)	2016	Jun-16	0.5	4	6	STP-MAG	(1,100,660)	1,100,660	-	-	2016	STP-MAG	1,100,660	SZ091 03D	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in design phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-D

Table A. ALCP Project Changes to the Fiscal Year 2014-2018 MAG Transportation Improvement Program and the FY 2015 Arterial Life Cycle Program

ALCP - IN TIP																			
TIP #	Agency	Project Location	Project Description	Fiscal Year	Est. Date Open	Length (miles)	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	TRACS	Notes:	RTP ID
MMA15-112RWZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Acquisition of right-of-way for roadway widening (AC)	2015	Jun-16	0.5	4	6	Local	3,350,000	-	-	3,350,000	--	--	--	SZ091 01R	Amend: New TIP listing. Change the way ALCP Advancement Construct projects are shown in the TIP. ROW costs committed in 2015. No change in ROW phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-D
MMA14-112RWZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Acquisition of right-of-way for roadway widening (Reimb)	2015	Jun-16	0.5	4	6	STP-MAG	(2,339,638)	2,339,638	-	-	2016	STP-MAG	2,339,638	SZ091 01R	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in ROW phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-D
MMA14-112CZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Construct Roadway Widening (AC)	2016	Jun-16	0.5	4	6	Local	8,054,463	-	-	8,054,463	--	--	--	SZ091 01C	Amend: Change the way ALCP Advance Construct projects are showing in the TIP. Construction phase costs are committed in 2016. No change in construction phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-D
MMA16-112CZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Construct Roadway Widening (Reimb)	2016	Jun-16	0.5	4	6	STP-MAG	(2,008,124)	2,008,124	-	-	2016	STP-MAG	2,008,124	SZ091 01C	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in construction phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-D
MMA15-112CZ2	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Construct Roadway Widening (Reimb)	2017	Jun-16	0.5	4	6	STP-MAG	(3,000,000)	3,000,000	-	-	2017	STP-MAG	3,000,000	SZ091 01C	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in construction phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-D

Table A. ALCP Project Changes to the Fiscal Year 2014-2018 MAG Transportation Improvement Program and the FY 2015 Arterial Life Cycle Program

ALCP - IN TIP																			
TIP #	Agency	Project Location	Project Description	Fiscal Year	Est. Date Open	Length (miles)	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	TRACS	Notes:	RTP ID
MMA15-113DZ	Maricopa County	Northern Parkway: Dysart Overpass	Design Roadway Widening (AC)	2015	Jun-19	0.1	0	4	Local	3,784,855	-	-	3,784,855	--	--	--	SZ092 03D	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Project design phase to begin in FY 2015. Design phase costs committed in 2015. Design phase reimbursements are in separate TIP listings. No change in design phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-E
MMA16-113DZ	Maricopa County	Northern Parkway: Dysart Overpass	Design Roadway Widening (reimb)	2016	Jun-19	0.1	0	4	STP-MAG	(200,000)	200,000	-	-	2016	STP-MAG	200,000	SZ092 03D	Amend: New TIP listing. Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in design phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-E
MMA18-113DZ	Maricopa County	Northern Parkway: Dysart Overpass	Design Roadway Widening (reimb)	2017	Jun-19	0.1	0	4	STP-MAG	(2,449,399)	2,449,399	-	-	2017	STP-MAG	2,449,399	SZ092 03D	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in design phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-E
MMA18-113CZ	Maricopa County	Northern Parkway: Dysart Overpass	Construct Roadway Widening and Overpass (AC)	2017	Jun-19	0.1	0	4	Local	30,086,849	-	-	30,086,849	--	--	--	SZ092 01C	Amend: New TIP listing. Amend Change the way ALCP Advance Construct projects are showing in the TIP. Construction phase costs are committed in 2017. No change in construction phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-E
MMA16-113CZ	Maricopa County	Northern Parkway: Dysart Overpass	Construct Roadway Widening and Overpass (reimb)	2017	Jun-19	0.1	0	4	STP-MAG	(10,000,000)	10,000,000	-	-	2017	STP-MAG	10,000,000	SZ092 01C	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in construction phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-E

Table A. ALCP Project Changes to the Fiscal Year 2014-2018 MAG Transportation Improvement Program and the FY 2015 Arterial Life Cycle Program

ALCP - IN TIP																			
TIP #	Agency	Project Location	Project Description	Fiscal Year	Est. Date Open	Length (miles)	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	TRACS	Notes:	RTP ID
MMA16-113CZ2	Maricopa County	Northern Parkway: Dysart Overpass	Construct Roadway Widening and Overpass (reimb)	2018	Jun-19	0.1	0	4	STP-MAG	(10,707,494)	10,707,494	-	-	2018	STP-MAG	10,707,494	SZ092 01C	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in construction phase reimbursements. Project open year remains unchanged.	ACI-NOR-10-03-E
MMA14-119RWZ	Maricopa County	Northern Parkway: 111th Ave to Grand	Acquisition of right-of-way for roadway widening (AC)	2016	Jun-20	5.5	--	--	Local	12,600,000	-	-	12,600,000	--	--	--	:	Amend: New TIP listing. Define project limits from "Northern Parkway: ROW Protection" to "Northern Parkway: 111th Ave to Grand." Defer project completion year from 2017 to 2020. Segment right-of-way costs committed in 2016. Increase segment costs from \$2 million to \$12.6 million.	ACI-NOR-10-03-F
MMA15-119RWZ	Maricopa County	Northern Parkway: 111th Ave to Grand	Acquisition of right-of-way for roadway widening (reimb)	2016	Jun-20	5.5	--	--	STP-MAG	(350,000)	350,000	-	-	2016	STP-MAG	350,000	:	Amend: Define project limits from "Northern Parkway: ROW Protection" to "Northern Parkway: 111th Ave to Grand." Defer project completion year from 2017 to 2020. Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase.	ACI-NOR-10-03-F
MMA16-119RWZ	Maricopa County	Northern Parkway: 111th Ave to Grand	Acquisition of right-of-way for roadway widening (reimb)	2017	Jun-20	5.5	--	--	STP-MAG	(1,050,000)	1,050,000	-	-	2017	STP-MAG	1,050,000	:	Amend: Define project limits from "Northern Parkway: ROW Protection" to "Northern Parkway: 111th Ave to Grand." Defer project completion year from 2017 to 2020. Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase.	ACI-NOR-10-03-F

Table A. ALCP Project Changes to the Fiscal Year 2014-2018 MAG Transportation Improvement Program and the FY 2015 Arterial Life Cycle Program

9/22/2014

ALCP - IN TIP																			
TIP #	Agency	Project Location	Project Description	Fiscal Year	Est. Date Open	Length (miles)	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	TRACS	Notes:	RTP ID
MMA18-119WZ	Maricopa County	Northern Parkway: 111th Ave to Grand	Acquisition of right-of-way for roadway widening (reimb)	2018	Jun-20	5.5	--	--	STP-MAG	(4,000,000)	4,000,000	-	-	2018	STP-MAG	4,000,000		Amend: New TIP listing. Define project limits from "Northern Parkway: ROW Protection" to "Northern Parkway: 111th Ave to Grand." Defer project completion year from 2017 to 2020. Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. Transfer reimbursement from ACI-NOR-10-03-G.	ACI-NOR-10-03-F
MMA19-119RWZ	Maricopa County	Northern Parkway: 111th Ave to Grand	Acquisition of right-of-way for roadway widening (reimb)	2019	Jun-20	5.5	--	--	STP-MAG	(2,078,747)	2,078,747	-	-	2019	STP-MAG	2,078,747		Amend: New listing. Define project limits from "Northern Parkway: ROW Protection" to "Northern Parkway: 111th Ave to Grand." Defer project completion year from 2017 to 2020. Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. Transfer reimbursement from ACI-NOR-10-03-G.	ACI-NOR-10-03-F
MMA20-119RWZ	Maricopa County	Northern Parkway: 111th Ave to Grand	Acquisition of right-of-way for roadway widening (reimb)	2020	Jun-20	5.5	--	--	STP-MAG	(2,719,635)	2,719,635	-	-	2020	STP-MAG	2,719,635		Amend: New listing. Define project limits from "Northern Parkway: ROW Protection" to "Northern Parkway: 111th Ave to Grand." Defer project completion year from 2017 to 2020. Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. Transfer reimbursement from ACI-NOR-10-03-G.	ACI-NOR-10-03-F

Table A. ALCP Project Changes to the Fiscal Year 2014-2018 MAG Transportation Improvement Program and the FY 2015 Arterial Life Cycle Program

ALCP - IN TIP																		TRACS	Notes:	RTP ID
TIP #	Agency	Project Location	Project Description	Fiscal Year	Est. Date Open	Length (miles)	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.				
MMA18-122CZ	Maricopa County	Northern Parkway- Interim Construction	Construct Roadway Widening	2018	Jun 23	0	0	0	STP-MAG	-2,893,892	-13,081,161	-	-15,975,053	2018	STP-MAG	-13,081,161		Amend: Delete TIP listing. Delete project segment (ACI-NOR-10-03-G). Segment served as a funding placeholder. Transfer \$5.0 million of reimbursement to ACI-NOR-10-03-B right-of-way phase. Transfer \$4,081,161 of reimbursement to ACI-NOR-10-03-B construction phase. Transfer remaining \$4.0 million of reimbursement to Northern Parkway: 111th to Grand Right-of-Way project (ACI-NOR-10-03-F)	ACI-NOR-10-03-G	
-	Maricopa County	Northern Parkway- Interim Construction	Construct Roadway Widening	2019	Jun 23	0	0	0	STP-MAG	-20,891,253	-2,078,747	-	-22,970,000	2019	STP-MAG	-2,078,747		Amend: Delete listing. Transfer reimbursement to Northern Parkway: 111th to Grand Right-of-Way project (ACI-NOR-10-03-F)	ACI-NOR-10-03-G	
-	Maricopa County	Northern Parkway- Interim Construction	Construct Roadway Widening	2020	Jun 23	0	0	0	STP-MAG	-1,165,165	-2,719,635	-	-3,884,800	2020	STP-MAG	-2,719,635		Amend: Delete listing. Transfer reimbursement to Northern Parkway: 111th to Grand Right-of-Way project (ACI-NOR-10-03-F)	ACI-NOR-10-03-G	
-	Maricopa County	Northern Parkway- Interim Construction	Construct Roadway Widening	2021	Jun 23	0	0	0	Local	-800,393	-	-	-800,393	-	-	-		Amend: Delete listing. Segment served as a funding placeholder.	ACI-NOR-10-03-G	
MES15-125CRB	Mesa	Mesa Dr: US-60 (Superstition Fwy) to Southern	Construct Roadway Widening	2015	May-14	1	4	6	RARF	(4,276,960)	-	4,276,960	-	2015	RARF	4,276,960		Amend: Increase FY 2015 construction reimbursement by \$46,397.40. Funding to come from All-DOB-10-03 FY 2011 construction reimbursement to reflect actual reimbursement that came from the program.	ACI-MES-10-03-A	
MES14-131RWZ	Mesa	Ray Rd- Ellsworth Rd to Signal Butte	Acquisition of right-of-way for intersection improvement	2014	Mar 15	2	0	6	Local	-1,000,000	-	-	-1,000,000	-	-	-		Amend: Delete project right-of-way phase. Project constructed by developer.	ACI-RAY-20-03-B	

Table A. ALCP Project Changes to the Fiscal Year 2014-2018 MAG Transportation Improvement Program and the FY 2015 Arterial Life Cycle Program

9/22/2014

ALCP - IN TIP																			
TIP #	Agency	Project Location	Project Description	Fiscal Year	Est. Date Open	Length (miles)	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	TRACS	Notes:	RTP ID
MES14-131CZ	Mesa	Ray Rd: Ellsworth Rd to Signal Butte (Phase I)	Construct Intersection Improvement	2013	Jun-13	1	0	6	Private	5,393,444	-	-	5,393,444	--	--	--		Amend: Project was completed in two phases: Phase I (North Half) and Phase II (South Half). Change construction year for Phase I from 2014 to 2013. Change open year from 2015 to 2013. Change funding source from local to private. Change funding amount from \$5,300,000 to \$5,393,444.	ACI-RAY-20-03-B
MES15-131CZ	Mesa	Ray Rd: Ellsworth Rd to Signal Butte (Phase II)	Construct Intersection Improvement	2015	Aug-15	1	0	6	Private	2,667,243	-	-	2,667,243	--	--	--		Amend: Project was completed in two phases: Phase I (North Half) and Phase II (South Half). Change Phase II open year from 3/2015 to 8/2015. Change funding source from local to private. Change funding amount from \$5,300,000 to \$2,667,243.	ACI-RAY-20-03-B
MES14-131CRB	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Construct Roadway Widening	2025	Mar-15	2	4	6	RARF	(5,102,811)	-	-	5,102,811	2025	RARF	-	5,102,811	Amend: Delete listing. Transfer \$900,000 of reimbursement to ACI-MES-10-03-A, \$3,500,000 to ACI-MES-10-03-B, and move remaining balance of \$702,811 into project savings line. Savings will be reprogrammed to a different segment at a later date.	ACI-RAY-20-03-B
MES15-131CRB	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Construct Roadway Widening	2026	Mar-15	2	4	6	RARF	(2,317,189)	-	-	2,317,189	2026	RARF	-	2,317,189	Amend: Delete listing. Transfer reimbursement to project savings line item. Savings will be reprogrammed to a different segment at a later date.	ACI-RAY-20-03-B
MES14-131DZ	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Design intersection improvement	2014	Mar-15	2	0	6	Local	500,000	-	-	500,000	-	-	-	-	Amend: Delete project design phase. Project constructed by developer.	ACI-RAY-20-03-B
MES25-131SAV	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Project Savings for Roadway Widening	2025	Mar-15	2	4	6	RARF	(702,811)	-	702,811	-	2025	RARF	702,811		Amend: New listing. Reimbursement from project construction phase.	ACI-RAY-20-03-B

Table A. ALCP Project Changes to the Fiscal Year 2014-2018 MAG Transportation Improvement Program and the FY 2015 Arterial Life Cycle Program

9/22/2014

ALCP - IN TIP																			
TIP #	Agency	Project Location	Project Description	Fiscal Year	Est. Date Open	Length (miles)	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	TRACS	Notes:	RTP ID
MES26-131SAV	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Project Savings for Roadway Widening	2025	Mar-15	2	4	6	RARF	(2,317,189)	-	2,317,189	-	2025	RARF	2,317,189	1	Amend: New listing. Reimbursement from project construction phase.	ACI-RAY-20-03-B
MES14-132RWZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Acquisition of right-of-way for roadway widening	2014	Mar-15	2	4	6	Local	450,000	-	-	450,000	--	--	--	1	Amend: Decrease project right-of-way phase costs from \$1,000,000 to \$450,000.	ACI-SGB-10-03-B
MES14-132CZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2014	Mar-15	2	4	6	Local	1,046,615	-	-	1,046,615	--	--	--	1	Amend: Decrease project construction costs in 2014. Split between city funding and developer funding.	ACI-SGB-10-03-B
MES14-132CZ2	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2014	Mar-15	2	4	6	Private	1,933,873	-	-	1,933,873	--	--	--	1	Amend: New TIP listing. Decrease project construction costs in 2014. Split between city funding and developer funding.	ACI-SGB-10-03-B
MES15-132CZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2015	Mar-15	2	4	6	Local	2,300,000	---	---	2,300,000	--	--	---	1	Amend: Delete TIP listing. Project construction phase costs were committed in 2014.	ACI-SGB-10-03-B
MES14-132DZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Design roadway widening	2014	Mar-15	2	4	6	Local	500,000	---	---	500,000	-	-	---	1	Amend: Delete TIP listing. Project design phase occurred in previous years.	ACI-SGB-10-03-B

Table B. ALCP Project Changes to the Fiscal Year 2015 ALCP (Non-TIP Changes)

ALCP - OUT OF TIP																		Notes:	RTP ID
TIP #	Agency	Project Location	Project Description	Fiscal Year	Est. Date Open	Length (miles)	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	TRACS		
MES25-125CRB	Mesa	Mesa Dr: US-60 (Superstition Fwy) to Southern	Construct Roadway Widening	2025	May-14	1	4	6	RARF	(900,000)	-	900,000	-	2025	RARF	900,000	↓	Amend: New listing. Add 2025 project construction phase reimbursement from ACI-RAY-20-03-B project savings.	ACI-MES-10-03-A
MES25-130CRB	Mesa	Mesa Dr: 8th Avenue to Main Street	Construct Roadway Widening	2025	Dec-16	1	4	4	RARF	(3,500,000)	-	3,500,000	-	2025	RARF	3,500,000	↓	Amend: New listing. Add 2025 project construction phase reimbursement from ACI-RAY-20-03-B project savings.	ACI-MES-10-03-B
MES14-131CRB	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Construct Roadway Widening	2025	Mar-15	2	4	6	RARF	(5,102,811)	-	5,102,811	-	2025	RARF	5,102,811	↓	Amend: Delete listing. Transfer \$900,000 of reimbursement to ACI-MES-10-03-A, \$3,500,000 to ACI-MES-10-03-B, and move remaining balance of \$702,811 into project savings line. Savings will be reprogrammed to a different segment at a later date.	ACI-RAY-20-03-B
MES15-131CRB	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Construct Roadway Widening	2026	Mar-15	2	4	6	RARF	(2,317,189)	-	2,317,189	-	2026	RARF	2,317,189	↓	Amend: Delete listing. Transfer reimbursement to project savings line item. Savings will be reprogrammed to a different segment at a later date.	ACI-RAY-20-03-B
MES25-131SAV	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Project Savings for Roadway Widening	2025	Mar-15	2	4	6	RARF	(702,811)	-	702,811	-	2025	RARF	702,811	↓	Amend: New listing. Reimbursement from project construction phase.	ACI-RAY-20-03-B
MES26-131SAV	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Project Savings for Roadway Widening	2026	Mar-15	2	4	6	RARF	(2,317,189)	-	2,317,189	-	2026	RARF	2,317,189	↓	Amend: New listing. Reimbursement from project construction phase.	ACI-RAY-20-03-B
--	Mesa	Signal Butte Rd: Broadway to Pecos Rd	Construct Roadway Widening	2024	Mar-15	2	4	6	RARF	(4,940,119)	-	4,940,119	-	2024	RARF	4,940,119	↓	Amend: Decrease FY 2024 reimbursement from \$7,232,401.04 to \$4,940,118.76 and transfer to ACI-SGB-10-03-B. Transfer \$941,473.54 to project design phase, \$315,000 to project ROW phase, and \$1,035,808.74 to project construction phase.	ACI-SGB-10-03-A
---	Mesa	Signal Butte Rd: Broadway to Pecos Rd	Construct Roadway Widening	2025	Mar-15	2	4	6	RARF	(3,232,301)	-	3,232,301	-	2025	RARF	3,232,301	↓	Amend: Delete listing. Transfer reimbursement to ACI-SGB-10-03-B project construction phase.	ACI-SGB-10-03-A
MES09-132DZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Design roadway widening	2009	Mar-15	2	4	6	Local	509,270	-	-	509,270	--	--	--	↓	Amend: New TIP listing. Add project design phase to TIP.	ACI-SGB-10-03-B
MES11-132DZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Design roadway widening	2011	Mar-15	2	4	6	Local	335,692	-	-	335,692	--	--	--	↓	Amend: New TIP listing. Add project design phase to TIP.	ACI-SGB-10-03-B
MES11-132DZ2	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Design roadway widening	2011	Mar-15	2	4	6	Private	250,000	-	-	250,000	--	--	--	↓	Amend: New TIP listing. Add project design phase to TIP funded by developer.	ACI-SGB-10-03-B

Table B. ALCP Project Changes to the Fiscal Year 2015 ALCP (Non-TIP Changes)

ALCP - OUT OF TIP																		Notes:	RTP ID
TIP #	Agency	Project Location	Project Description	Fiscal Year	Est. Date Open	Length (miles)	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	TRACS		
MES12-132DZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Design roadway widening	2012	Mar-15	2	4	6	Private	250,000	-	-	250,000	--	--	--	↑	Amend: New TIP listing. Add project design phase to TIP funded by developer.	ACI-SGB-10-03-B
MES15-132DRB	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Design roadway widening	2024	Mar-15	2	4	6	RARF	(941,474)	-	941,474	-	2025	RARF	941,474	↑	Amend: New listing. Add project design phase reimbursement. Transfer funding from ACI-SGB-10-03-A construction phase reimbursement.	ACI-SGB-10-03-B
MES15-132RRB	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Acquisition of right-of-way for roadway widening	2024	Mar-15	2	4	6	RARF	(315,000)	-	315,000	-	2025	RARF	315,000	↑	Amend: New listing. Add project right-of-way phase reimbursement. Transfer funding from ACI-SGB-10-03-A construction phase reimbursement.	ACI-SGB-10-03-B
MES12-132CZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2012	Mar-15	2	4	6	Local	2,188,853	-	-	2,188,853	--	--	--	↑	Amend: New TIP listing. Add project construction phase in 2012.	ACI-SGB-10-03-B
MES13-132CZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2013	Mar-15	2	4	6	Local	3,749,753	-	-	3,749,753	--	--	--	↑	Amend: New TIP listing. Add city-share of project construction phase in 2013.	ACI-SGB-10-03-B
MES13-132CZ2	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2013	Mar-15	2	4	6	Local	556,830	-	-	556,830	--	--	--	↑	Amend: New TIP listing. Add city-share of project construction phase in 2013.	ACI-SGB-10-03-B
MES13-132CZ3	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2013	Mar-15	2	4	6	Private	2,209,300	-	-	2,209,300	--	--	--	↑	Amend: New TIP listing. Add developer-share of project construction phase in 2013.	ACI-SGB-10-03-B
MES16-132CRB	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2024	Mar-15	2	4	6	RARF	(1,035,809)	-	1,035,809	-	2024	RARF	1,035,809	↑	Amend: New TIP listing. Add project construction phase in 2024 from ACI-SGB-10-03-A.	ACI-SGB-10-03-B
MES15-132CRB	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2025	Mar-15	2	4	6	RARF	(7,143,847)	-	7,143,847	-	2025	RARF	7,143,847	↑	Amend: Increase total project construction phase reimbursement from \$3,911,546.45 to \$8,179,656.23. Additional funding from ACI-SGB-10-03-A project construction phase reimbursement. Split between FY 2024 and FY 2025.	ACI-SGB-10-03-B
MES11-106CZ	Mesa	Dobson Rd at Guadalupe Rd	Construct Roadway Widening	2011	Oct-10	0.5	4	6	RARF	557,438	-	1,416,398	1,973,836	2011	RARF	1,416,398	↑	Amend: Decrease FY 2011 RARF reimbursement by \$46,397.40 to reflect actual reimbursement that came from the program. Transfer the \$46,397.40 of RARF savings to ACI-MES-10-03-A in FY 2015.	ACI-DOB-10-03
MMA12-117DZ	Maricopa County	Northern Parkway: Reems and Litchfield Overpasses	Design roadway widening	2012	Dec-14	0.2	2	4	STP-MAG	13,787	228,092	-	241,879	2012	STP-MAG	228,092	SZ04703D	Amend: Decrease project design funding and transfer balance (\$119,514) to project construction phase. Project open year remains unchanged.	ACI-NOR-10-03-C
MMA12-117CZ	Maricopa County	Northern Parkway: Reems and Litchfield Overpasses	Construct Roadway Widening	2012	Dec-14	0.2	2	4	STP-MAG	7,224	119,514	-	126,738	2012	STP-MAG	119,514	SZ04703C	Amend: New listing. Create project construction phase in 2012 from project design phase savings.	ACI-NOR-10-03-C

**TABLE C: Requested amendments and administrative modifications to the
FY 2014-2018 MAG Transportation Improvement Program (TIP), and the 2035 Long Range Plan¹, TIP AMENDMENT #6**

Sort: Section, Agency, Location, Work Year

TIP Amendment #6																			Reviewed By ²					
Agency	Section	Work Year ⁴	TIP ID	MAG ID	Location	Work	Miles	Lanes Before	Lanes After	ALI	In ALCP	TRACS	MAG Mode	Funding	Apport. Year ³	Federal	Regional	Local	Total	TIP Change Request	T R C	M C	T P C	R C
Glendale	Transit	2014	GLN14-401T	1944	Citywide: Glendale	Route 59	0	0	0	30.09.01	No	----	Transit Bus	5307-JARC	2014	200,000	-	220,000	420,000	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓			
Glendale	Transit	2015	GLN15-403T	1944	Citywide: Glendale	Route 59	0	0	0	30.09.01	No	----	Transit Bus	5307-JARC	2015	200,000	-	220,000	420,000	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓			
Glendale	Transit	2014	GLN14-402T	8708	Citywide: Phoenix and Glendale	Route 60	0	0	0	30.09.01	No	----	Transit Bus	5307-JARC	2014	146,657	-	360,000	506,657	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓			
Glendale	Transit	2015	GLN15-404T	8708	Citywide: Phoenix and Glendale	Route 60	0	0	0	30.09.01	No	----	Transit Bus	5307-JARC	2015	146,657	-	360,000	506,657	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓			
Phoenix	Transit	2014	PHX14-420T	16380	Citywide: Phoenix	Route 17 with increased frequencies	0	0	0	30.09.01	No	----	Transit Bus	5307-JARC	2014	400,000	-	3,790,545	4,190,545	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓			
Phoenix	Transit	2014	PHX14-421T	16380	Citywide: Phoenix	Extension of Route 10	0	0	0	30.09.01	No	----	Transit Bus	5307-JARC	2014	200,000	-	1,782,513	1,982,513	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓			
Phoenix	Transit	2015	PHX15-428T	16380	Citywide: Phoenix	Route 17 with increased frequencies	0	0	0	30.09.01	No	----	Transit Bus	5307-JARC	2015	400,000	-	3,790,545	4,190,545	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓			
Phoenix	Transit	2015	PHX15-429T	16380	Citywide: Phoenix	Extension of Route 10	0	0	0	30.09.01	No	----	Transit Bus	5307-JARC	2015	200,000	-	1,782,513	1,982,513	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓			
Phoenix	Transit	2014	PHX14-422T	31355	Citywide: Phoenix and Scottsdale	Route 29 with increased frequencies	0	0	0	30.09.01	No	----	Transit Bus	5307-JARC	2014	400,000	-	3,770,899	4,170,899	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓			
Phoenix	Transit	2015	PHX15-430T	31355	Citywide: Phoenix and Scottsdale	Route 29 with increased frequencies	0	0	0	30.09.01	No	----	Transit Bus	5307-JARC	2015	400,000	-	3,770,899	4,170,899	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓			
Phoenix	Transit	2014	PHX14-423T	16167	Citywide: Phoenix and Tolleson	Route 3 with increased frequencies	0	0	0	30.09.01	No	----	Transit Bus	5307-JARC	2014	400,000	-	2,752,070	3,152,070	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓			
Phoenix	Transit	2015	PHX15-432T	16167	Citywide: Phoenix and Tolleson	Route 3 with increased frequencies	0	0	0	30.09.01	No	----	Transit Bus	5307-JARC	2015	400,000	-	2,752,070	3,152,070	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓			

**TABLE C: Requested amendments and administrative modifications to the
FY 2014-2018 MAG Transportation Improvement Program (TIP), and the 2035 Long Range Plan¹, TIP AMENDMENT #6**

Sort: Section, Agency, Location, Work Year

TIP Amendment #6																			Reviewed By ²						
Agency	Section	Work Year ⁴	TIP ID	MAG ID	Location	Work	Miles	Lanes	Before	Lanes After	ALI	In ALCP	TRACS	MAG Mode	Funding	Apport. Year ³	Federal	Regional	Local	Total	TIP Change Request	T R C	M C	T P C	R C
Phoenix	Transit	2015	PHX14-420T	NEW	South Central Avenue, Phoenix	Central Phoenix Multimodal Transportation Improvement Plan	0	0	0	44.27.00	No	-----	Transit Rail	TIGER	2014	1,600,000	-	1,600,000	3,200,000	Amend: Add new project based on awarded FY14 TIGER grant. This grant was awarded as part of TIGER VI.	✓				
Tolleson	Transit	2014	TOL14-401T	31482	Citywide: Tolleson	Zoom	0	0	0	30.09.01	No	-----	Transit Bus	5307-JARC	2014	128,870	-	128,870	257,740	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓				
Tolleson	Transit	2015	TOL15-401T	31482	Citywide: Tolleson	Zoom	0	0	0	30.09.01	No	-----	Transit Bus	5307-JARC	2015	128,870	-	128,870	257,740	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	✓				

Notes

1. Rows in the report are sorted in order by the following columns: Section, Agency, Year and TIP ID. Changes are in red font. Deletions are show in strike through font.
2. The following are used to indicate MAG Committees reviewing these TIP listings for amendment: TRC = Transportation Committee, MC = Management Committee, TPC = Transportation Review Committee, RC = Regional Council
3. The year the funds were apportioned by Congress. This item is included only for informational purposes.
4. For federal projects this is the year the project will authorize. For transit this is the year the project will appear in a grant.

**TABLE D: Requested amendments and administrative modifications to the
FY 2014-2018 MAG Transportation Improvement Program (TIP), and the 2035 Long Range Plan¹, TIP AMENDMENT #6**

Sort: Section, Agency, Location, Work Year

TIP Amendment #6																			Reviewed By ²					
Agency	Section	Work Year ⁴	TIP ID	MAG ID	Location	Work	Miles	Lanes Before	Lanes After	ALI	In ALCP	TRACS	MAG Mode	Funding	Apport. Year ³	Federal	Regional	Local	Total	TIP Change Request	T R C	M C	T P C	R C
ADOT	Highway	2011	DOT11-101	41541	10: 32nd St - SR202L, Santan, Phase 1	R/W Acquisition	11	0	0	----	No	----	Freeway	RARF	2011	-	71,000,000	-	71,000,000	For information only: <u>Material Cost Change</u> . See DOT12-117RW2.	✓			
ADOT	Highway	2012	DOT12-117	20988	10: 32nd St - SR202L, Santan, Phase 2	R/W Acquisition	11	10	10	----	No	----	Freeway	IM	2012	23,480,700	1,419,300	-	24,900,000	For information only: <u>Material Cost Change</u> . See DOT12-117RW2.	✓			
ADOT	Highway	2015	DOT12-117RW2	20988	10: 32nd St - SR202L, Santan, Phase 2	R/W Acquisition	11	10	10	----	No	----	Freeway	NHPP	2015	7,100,000	3,000,000	-	10,100,000	Amendment: <u>Material Cost Change</u> . Add separate workphase to reflect total project budget increase of \$10,100,000. Use \$3,000,000 of RARF-HURF from DOT15-179 and \$7,100,000 of NHPP funding from RTP cash flow.	✓			
ADOT	Highway	2015	DOT15-462	1888	10: Cotton Lane - Litchfield Rd	Design FMS	4	10	10	----	No	----	Freeway	CMAQ	2015	471,500	28,500	-	500,000	Amendment: Change project location from "Cotton Lane - Dysart Rd" to "Cotton Lane - Litchfield Rd". MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2018	DOT18-460	1888	10: Cotton Lane - Litchfield Rd	Construct FMS	4	10	10	----	No	----	Freeway	CMAQ	2018	3,922,880	237,120	-	4,160,000	Amendment: Change project location from "Cotton Lane - Dysart Rd" to "Cotton Lane - Litchfield Rd". MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2013	DOT13-110D	43116	10: Litchfield Rd - 83rd Ave	Design FMS	7	10	10	----	No	----	Freeway	NHS	2013	565,800	-	34,200	600,000	Amendment: Change project location from "Dysart Rd - 83rd Ave" to "Litchfield Rd - 83rd Ave".	✓			
ADOT	Highway	2015	DOT16-420	43116	10: Litchfield Rd - 83rd Ave	Construct FMS	7	10	10	----	No	----	Freeway	CMAQ	2015	5,186,500	313,500	-	5,500,000	Amendment: Change project location from "Dysart Rd - 83rd Ave" to "Litchfield Rd - 83rd Ave".	✓			
ADOT	Highway	2014	DOT14-460	10011	10: Ray Rd - Wild Horse Pass	Construct FMS	3	8	8	----	No	----	Freeway	NHPP	2014	754,400	45,600	-	800,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2015	DOT15-422	16391	17: Cactus Rd, Thunderbird Rd and Greenway Rd	Design Pump Station Rehabilitation	0.3	8	8	----	No	----	Freeway	NHPP	2015	204,631	-	12,369	217,000	Amendment: Add a new pump station rehabilitation design project in fiscal year 2015 for \$217,000.	✓			
ADOT	Highway	2014	DOT14-181	16850	202 (Red Mountain Fwy): Loop 101 (Pima Fwy) to Gilbert Rd	R/W acquisition	6	8	10	----	No	----	Freeway	NHPP	2014	4,243,500	256,500	-	4,500,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2016	DOT16-460	2170	202 (Santan Fwy): Dobson Rd - Ray Rd	Construct FMS	5.5	6	6	----	No	----	Freeway	CMAQ	2016	5,940,900	359,100	-	6,300,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			

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FY 2014-2018 MAG Transportation Improvement Program (TIP), and the 2035 Long Range Plan¹, TIP AMENDMENT #6**

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TIP Amendment #6																			Reviewed By ²					
Agency	Section	Work Year ⁴	TIP ID	MAG ID	Location	Work	Miles	Lanes Before	Lanes After	ALI	In ALCP	TRACS	MAG Mode	Funding	Apport. Year ³	Federal	Regional	Local	Total	TIP Change Request	T R C	M C	T P C	R C
ADOT	Highway	2015	DOT15-463	12318	202 (Santan Fwy): Ray Rd - Broadway Rd	Design FMS	5.5	6	6	----	No	----	Freeway	CMAQ	2015	471,500	28,500	-	500,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2017	DOT17-460	12318	202 (Santan Fwy): Ray Rd - Broadway Rd	Construct FMS	5.5	6	6	----	No	----	Freeway	CMAQ	2017	4,828,160	291,840	-	5,120,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2015	DOT15-464	34669	303: I-10 - Northern Ave	Design FMS	5	6	6	----	No	----	Freeway	CMAQ	2015	471,500	28,500	-	500,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2018	DOT18-461	34669	303: I-10 - Northern Ave	Construct FMS	5	6	6	----	No	----	Freeway	CMAQ	2018	3,922,880	237,120	-	4,160,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2016	DOT16-462	25845	303: Lake Pleasant Rd - I-17	Design FMS	5	4	4	----	No	----	Freeway	CMAQ	2016	518,650	31,350	-	550,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2016	DOT16-461	27800	303: Northern Ave - Clearview Blvd	Design FMS	6	6	6	----	No	----	Freeway	CMAQ	2016	518,650	31,350	-	550,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2016	DOT15-156C	36542	60 (Grand Ave): Thompson Ranch (Thunderbird)	Construct Traffic Interchange	0	6	6	----	No	----	Freeway Interchange	RARF-HURF	2016	-	7,000,000	-	7,000,000	Amendment: Defer project from 2015 to 2016.	✓			
ADOT	Highway	2015	DOT15-423	14419	60 (Superstition Fwy): Stapley Dr, Gilbert Rd, Val Vista Dr & 48th St	Design Pump Station Rehabilitation	0.4	10	10	----	No	----	Freeway	NHPP	2015	337,594	-	20,406	358,000	Amendment: Add a new pump station rehabilitation design project in fiscal year 2015 for \$358,000.	✓			
ADOT	Highway	2015	DOT15-418	11184	60(Grand Ave): New River WB #314	Design bridge rehabilitation	0.2	6	6	----	No	----	Street	NHPP	2015	248,009	-	14,991	263,000	Amendment: Increase federal/local costs from \$235,750/\$14,250 to \$248,009/\$14,991.	✓			
ADOT	Highway	2015	DOT15-838	20512	60--Sossaman Rd to Meridian Rd	Construct Drainage Improvements	5	8	8	----	No	----	Freeway	STP-AZ	2015	893,964	-----	54,036	948,000	Amendment: Delete project from TIP.	✓			
ADOT	Highway	2015	DOT15-461C	24954	Interstate 10: Avondale Blvd to Dysart Road	Construct and install fiber	2	0	0	----	No	----	Freeway	CMAQ	2015	51,045	-	3,086	54,131	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			

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Agency	Section	Work Year ⁴	TIP ID	MAG ID	Location	Work	Miles	Lanes Before	Lanes After	ALI	In ALCP	TRACS	MAG Mode	Funding	Apport. Year ³	Federal	Regional	Local	Total	TIP Change Request	T R C	M C	T P C	R C
ADOT	Highway	2015	DOT15-460	18902	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center. Administration and procure small equipment.	0	0	0	----	No	----	Freeway	STP-AZ	2015	47,150	-	2,850	50,000	For information only: Added a new partially funded administrative project in State FY 2015 for \$50,000. Partial programming to cover approximately 7-8 months for one FTE and small equipment procurement.	✓			
ADOT	Highway	2015	DOT15-460A2	18902	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center. Administration and small equipment.	0	0	0	----	No	----	Freeway	STP-AZ	2015	165,025	-	9,975	175,000	Amendment: Add a new administrative project, and small equipment procurement in State FY 2015 for 2 of 3 listings for project. Balance of FY2015 one half share ADOT and MAG. Total project cost first year \$450,000. Pilot program for three years only (2015, 16, 17).	✓			
ADOT	Highway	2015	DOT15-460A3	18902	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center. Administration and small equipment.	0	0	0	----	No	----	Freeway	RARF	2015	-	225,000	-	225,000	Amendment: Add a new administrative project in State FY 2015 for 3 of 3 listings for project. Balance of FY2015, one half share ADOT and MAG. Total project cost first year \$450,000. Pilot program for three years only (2015, 16, 17).	✓			
ADOT	Highway	2016	DOT16-464A	18902	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center	0	0	0	----	No	----	Freeway	STP-AZ	2016	200,388	-	12,113	212,500	Amendment: Add a new administrative project in State FY 2016 for 1 of 2 listings. Total project cost second and third year \$425,000. Pilot program for three years only (2015, 16, 17).	✓			
ADOT	Highway	2016	DOT16-464A2	18902	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center	0	0	0	----	No	----	Freeway	RARF	2016	-	212,500	-	212,500	Amendment: Add a new administrative project in State FY 2016 for 2 of 2 listings. Total project cost second and third year \$425,000. Pilot program for three years only (2015, 16, 17).	✓			
ADOT	Highway	2017	DOT17-462A	18902	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center	0	0	0	----	No	----	Freeway	STP-AZ	2017	200,388	-	12,113	212,500	Amendment: Add a new administrative project in State FY 2017 for 1 of 2 listings. Total project cost second and third year \$425,000. Pilot program for three years only (2015, 16, 17).	✓			
ADOT	Highway	2017	DOT17-462A2	18902	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center	0	0	0	----	No	----	Freeway	RARF	2017	-	212,500	-	212,500	Amendment: Add a new administrative project in State FY 2017 for 2 of 2 listings. Total project cost second and third year \$425,000. Pilot program for three years only (2015, 16, 17).	✓			
ADOT	Highway	2014	DOT13-946	16909	MAG regionwide	Freeway Service Patrols	0	0	0	----	No	----	Freeway	State	2014	-	-	900,000	900,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2014	DOT14-160	16909	MAG regionwide	Freeway Service Patrols	0	0	0	----	No	----	Freeway	State	2014	-	-	900,000	900,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2014	DOT14-439	16954	MAG Regionwide	Upgrade Dynamic Message Signs (DMS)	0	0	0	----	No	----	Freeway	NHPP	2014	754,400	-	45,600	800,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			

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Agency	Section	Work Year ⁴	TIP ID	MAG ID	Location	Work	Miles	Lanes Before	Lanes After	ALI	In ALCP	TRACS	MAG Mode	Funding	Apport. Year ³	Federal	Regional	Local	Total	TIP Change Request	T R C	M C	T P C	R C
ADOT	Highway	2015	DOT15-179	30990	MAG regionwide	Advance Acquire Right Of Way	0	0	0	----	No	----	Freeway	RARE-HURE	2015	-----	-----3,000,000	-----	-----3,000,000	Amendment: Delete project. Funding transferred to DOT12-117RW2.	✓			
ADOT	Highway	2015	DOT15-182	16909	MAG regionwide	Freeway Service Patrols	0	0	0	----	No	----	Freeway	State	2015	-	-	1,000,000	1,000,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2016	DOT16-409	16909	MAG regionwide	Freeway Service Patrols	0	0	0	----	No	----	Freeway	State	2016	-	-	1,000,000	1,000,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2016	DOT16-463	13227	MAG regionwide	Design/Construct FMS Rehabilitation	0	0	0	----	No	----	Freeway	CMAQ	2016	1,244,760	-	75,240	1,320,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2017	DOT17-404	16909	MAG regionwide	Freeway Service Patrols	0	0	0	----	No	----	Freeway	State	2017	-	-	1,000,000	1,000,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2017	DOT17-461	13227	MAG regionwide	Construct FMS Rehabilitation, Phase 2	0	0	0	----	No	----	Freeway	CMAQ	2017	3,394,800	-	205,200	3,600,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2018	DOT18-406	16909	MAG regionwide	Freeway Service Patrols	0	0	0	----	No	----	Freeway	State	2018	-	-	1,000,000	1,000,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2018	DOT18-462	13227	MAG regionwide	Design FMS Rehabilitation, Phase 3	0	0	0	----	No	----	Freeway	CMAQ	2018	377,200	-	22,800	400,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	✓			
ADOT	Highway	2015	DOT15-198	218	SR24 (Gateway Freeway): L202 to Ellsworth.	Repayment of advanced construction.	0	0	0	----	No	----	Freeway	NHPP	2015	500,000	77,335,000	-	77,835,000	Admin: Change funding source from STP-MAG to NHPP. SR-24 was designated part of the NHS on October 1, 2012.	✓			
Goodyear	Highway	2015	GDY14-101	27007	Van Buren Street - Estrella Parkway to Cotton Lane	Install Signal Communications and ITS Components	2	0	0	----	No	SZ118 01C/01 D	ITS	CMAQ	2015	749,164	-	45,284	794,448	Admin: Reduce local funding by \$205,579 due to updated cost estimates. No change to federal funding.	✓			
Phoenix	Highway	2015	PHX14-141	46556	Various locations	Federal-aid Highway System Bridge Inspections	0	0	0	----	No	SB460 01C	Street	STP-AZ	2015	176,624	-	10,676	187,300	Amend: ADOT awarded Federal funding. Change project description to reflect work. Change total funding to reflect actual inspection costs.	✓			
Phoenix	Highway	2015	PHX14-110	33174	Various locations	Off Federal-aid Highway System Bridge Inspections	0	0	0	----	No	SB461 01C	Street	STP-AZ	2015	63,700	-	3,850	67,550	Amend: ADOT awarded Federal funding. Change project description to reflect work. Change total funding to reflect actual inspection costs.	✓			

**TABLE D: Requested amendments and administrative modifications to the
FY 2014-2018 MAG Transportation Improvement Program (TIP), and the 2035 Long Range Plan¹, TIP AMENDMENT #6**

Sort: Section, Agency, Location, Work Year

TIP Amendment #6																			Reviewed By ²					
Agency	Section	Work Year ⁴	TIP ID	MAG ID	Location	Work	Miles	Lanes Before	Lanes After	ALI	In ALCP	TRACS	MAG Mode	Funding	Apport. Year ³	Federal	Regional	Local	Total	TIP Change Request	T R C	M C	T P C	R C
Phoenix	Highway	2015	PHX15-107	33107	Various Locations	Pontis / Virtis Software for bridge inspections	0	0	0	---	No	---	Bridge	Local	2015	---	---	102,184	102,184	Amend: Delete project. No longer using software for bridge inspections.	✓			
Youngtown	Highway	2013	YTN12-101D2	29762	Grand Avenue and 111th Avenue to Olive Avenue and Agua Fria Parkway (Approximately 117th Avenue).	Multiuse Path and Peoria Ave straightening to accomodate multiuse path: design	5	2	2	----	No	----	Bike/Ped	STP-TEA	2013	94,300	-	5,700	100,000	Amend: Add separate workphase for STP-TEA funding allocated to design phase.	✓			
Youngtown	Highway	2014	YTN13-101	29762	Grand Avenue and 111th Avenue to Olive Avenue and Agua Fria Parkway (Approximately 117th Avenue).	Multiuse Path and Peoria Ave straightening to accomodate multiuse path: ROW acquisition.	5	2	2	----	No	----	Bike/Ped	STP-TEA	2014	42,845	-	57,155	100,000	Amend: Add \$42,845 of STP-TEA funding to workphase and increase local cost by \$7,155.	✓			
Youngtown	Highway	2015	YTN14-101	29762	Grand Avenue and 111th Avenue to Olive Avenue and Agua Fria Parkway (Approximately 117th Avenue).	Multiuse Path and Peoria Ave straightening to accomodate multiuse path: Construction phase	5	2	2	----	No	SS940 01C	Bike/Ped	CMAQ	2015	292,800	-	357,200	650,000	Amend: Add \$200,000 of local funding to reflect cost estimates for road straightening and path construction.	✓			

Notes

1. Rows in the report are sorted in order by the following columns: Section, Agency, Year and TIP ID. Changes are in red font. Deletions are show in strike through font.
2. The following are used to indicate MAG Committees reviewing these TIP listings for amendment: TRC = Transportation Committee, MC = Management Committee, TPC = Transportation Review Committee, RC = Regional Council
3. The year the funds were apportioned by Congress. This item is included only for informational purposes.
4. For federal projects this is the year the project will authorize. For transit this is the year the project will appear in a grant.

MARICOPA ASSOCIATION OF GOVERNMENTS

INFORMATION SUMMARY... for your review

DATE:

September 30, 2014

SUBJECT:

MAG FY 2016 PSAP Annual Element/Funding Request and FY 2016-2020 Equipment Program

SUMMARY:

Each year, the Public Safety Answering Point (PSAP) Managers submit inventory and upgrade requests that are used to develop a five-year equipment program that forecasts future 9-1-1 equipment needs of the region and will enable MAG to provide estimates of future funding needs to the Arizona Department of Administration (ADOA). The funding request for FY 2016 is required to be submitted to the ADOA by December 15, 2014.

The ADOA Order of Adoption stipulates allowable funding under the Emergency Telecommunications Services Revolving Fund. The Emergency Telecommunications Services Revolving Fund is funded by the monthly 9-1-1 excise tax on wireline and wireless telephones. The 9-1-1 excise tax is currently 20 cents per month, which is the lowest monthly 9-1-1 collection in the United States. The State 9-1-1 Office has determined that sufficient revenue will be collected to allow for continued network and equipment maintenance services, but no capital expenditures to replace aging 9-1-1 will be funded until near the end of the fiscal year when budget overages are determined. The State 9-1-1 Office has indicated the 9-1-1 funds will not cover reimbursements for logging recorders, additional 9-1-1 call taking positions, and funding new PSAPs.

PUBLIC INPUT:

None.

PROS & CONS:

PROS: The five-year equipment program assists the MAG 9-1-1 Oversight Team to forecast future equipment needs of the region and will enable MAG to provide estimates regarding future funding needs to ADOA.

CONS: None.

TECHNICAL & POLICY IMPLICATIONS:

TECHNICAL: None.

POLICY: The process for approval of the PSAP funding request and five-year equipment program, which includes recommendations from the MAG 9-1-1 Oversight Team and Management Committee and approval by the Regional Council, demonstrates greater participation by management.

ACTION NEEDED:

Recommend approval of the MAG FY 2016 PSAP Annual Element/Funding Request and FY 2016-2020 Equipment Program.

MAG FY 2016 PSAP ANNUAL ELEMENT/FUNDING REQUEST

SYSTEM IDENTIFICATION: Maricopa Region 9-1-1
 AGENCY SUBMITTING: Phoenix Fire Department
 ADDRESS: 150 S. 12th St., Phoenix, AZ 85034

CONTACT: Liz Graeber
 TELEPHONE #: (602) 534-9775
 DATE: 24-Jun-14

Calendar Year	2015						2016					
TOTAL	Jul	Aug	Sept	Oct	Nov	Dec	Jan	Feb	Mar	Apr	May	June

Wireline												
Maintenance:												
\$1,340,100	\$111,675	\$111,675	\$111,675	\$111,675	\$111,675	\$111,675	\$111,675	\$111,675	\$111,675	\$111,675	\$111,675	\$111,675

911 Monthly Service:												
\$3,180,000	\$265,000	\$265,000	\$265,000	\$265,000	\$265,000	\$265,000	\$265,000	\$265,000	\$265,000	\$265,000	\$265,000	\$265,000

Customer Premise Equipment												
\$4,225,000	\$50,000	\$50,000	\$50,000	\$4,000,000	\$75,000							

Special Projects/Misc maintenance												
\$201,666	\$65,415	\$65,415	\$65,415	\$65,415	\$65,415	\$65,415	\$65,415	\$65,415	\$65,415	\$65,415	\$65,415	\$65,415

Wireless												
Maintenance:												
\$0												

911 Monthly Service:												
\$2,419,992	\$201,666	\$201,666	\$201,666	\$201,666	\$201,666	\$201,666	\$201,666	\$201,666	\$201,666	\$201,666	\$201,666	\$201,666

Addressing/Mapping/GIS												
\$44,000	\$11,000			\$11,000			\$11,000			\$11,000		

Customer Premise Equipment												
\$0												

Special Projects												
\$3,000,000	\$3,000,000											

FY TOTALS												
\$14,410,758	\$3,704,756	\$693,756	\$693,756	\$4,654,756	\$718,756	\$643,756	\$654,756	\$643,756	\$643,756	\$654,756	\$643,756	\$643,756

Equipment:												
Upgrade Peripherals							50,000					
Chandler	2 positions						50,000					
Mesa Fire	2 positions, logging recorder						50,000					
Phoenix PD	911 System Upgrade						\$4,000,000					
Wickenburg PD	3 positions						\$75,000					

Equipment figures are only estimates - will have preliminary quotes before submitting to ADOA

\$4,225,000 Total

MAG FY2016-2020 PSAP Equipment Program

	FY2016	FY2017	FY2018	FY2019	FY2020
Apache Junction PD					
ASU PD					
Avondale PD					
Buckeye PD					
Chandler PD	2 additional positions	1 additional position	1 additional position	No pending projects	No pending projects
DPS					
Ft. McDowell	No pending projects	No pending projects	No pending projects	No pending projects	No pending projects
Gilbert PD	No pending projects	No pending projects	No pending projects	No pending projects	No pending projects
Glendale PD	No pending projects	No pending projects	No pending projects	No pending projects	No pending projects
Goodyear PD					
Luke AFB	No pending projects	PSAP move	No pending projects	No pending projects	No pending projects
MCSO	No pending projects	No pending projects	4 additional positions	No pending projects	No pending projects
Mesa Fire	Logging recorder, 2 additional positions	2 additional positions	No pending projects	No pending projects	No pending projects
Mesa PD	No pending projects	5 additional positions	No pending projects	No pending projects	No pending projects
Paradise Valley PD	No pending projects	No pending projects	No pending projects	No pending projects	No pending projects
Peoria PD	No pending projects	No pending projects	No pending projects	No pending projects	No pending projects
Phoenix Fire					
Phoenix PD	No pending projects	No pending projects	No pending projects	No pending projects	No pending projects
Rural Metro PD					
Salt River PD	No pending projects	No pending projects	No pending projects	No pending projects	No pending projects
Scottsdale PD	No pending projects	No pending projects	No pending projects	No pending projects	No pending projects
Surprise PD	No pending projects	No pending projects	1 additional position	No pending projects	No pending projects
Tempe PD					
Tolleson PD	No pending projects	Logging recorder	No pending projects	No pending projects	No pending projects
Wickenburg PD	3 additional positions	No pending projects	No pending projects	No pending projects	No pending projects

MARICOPA ASSOCIATION OF GOVERNMENTS

INFORMATION SUMMARY... for your review

DATE:

September 30, 2014

SUBJECT:

Conformity Consultation

SUMMARY:

The Maricopa Association of Governments is conducting consultation on a conformity assessment for an amendment and administrative modification to the FY 2014-2018 MAG Transportation Improvement Program (TIP) and 2035 Regional Transportation Plan. The amendment and administrative modification involve several projects, including Arterial Life Cycle Program and Job Access and Reverse Commute projects. The amendment includes projects that may be categorized as exempt from conformity determinations. The administrative modification includes minor project revisions that do not require a conformity determination. A description of the projects is provided in the attached interagency consultation memorandum. Comments on the conformity assessment are requested by October 17, 2014.

PUBLIC INPUT:

Copies of the conformity assessment have been distributed for consultation to the Federal Transit Administration, Federal Highway Administration, Arizona Department of Transportation, Arizona Department of Environmental Quality, City of Phoenix Public Transit Department, Valley Metro/RPTA, Maricopa County Air Quality Department, Central Arizona Governments, Pinal County Air Quality Control District, Sun Corridor Metropolitan Planning Organization, U.S. Environmental Protection Agency and other interested parties including members of the public.

PROS & CONS:

PROS: Interagency consultation for the amendment and administrative modification notifies the planning agencies of project modifications to the TIP and 2035 Regional Transportation Plan.

CONS: The review of the conformity assessment requires additional time in the project approval process.

TECHNICAL & POLICY IMPLICATIONS:

TECHNICAL: The amendment and administrative modification may not be considered until the consultation process for the conformity assessment is completed.

POLICY: Federal transportation conformity regulations require interagency consultation on development of the transportation plan, TIP, and associated conformity determinations to include a process involving the Metropolitan Planning Organization, State and local air quality planning agencies, State and local transportation agencies, Environmental Protection Agency, Federal Highway Administration, and the Federal Transit Administration. Consultation on the conformity assessment has been conducted in accordance with federal regulations, MAG Conformity Consultation Processes adopted by the Regional Council in February 1996 and MAG Transportation

Conformity Guidance and Procedures adopted by the Regional Council in March 1996. In addition, federal guidance is followed in response to court rulings regarding transportation conformity.

ACTION NEEDED:

Consultation.

PRIOR COMMITTEE ACTIONS:

None.

CONTACT PERSON:

Dean Giles, Air Quality Planning Program Specialist, (602) 254-6300.

September 30, 2014

TO: Leslie Rogers, Federal Transit Administration
Karla Petty, Federal Highway Administration
John Halikowski, Arizona Department of Transportation
Henry Darwin, Arizona Department of Environmental Quality
Maria Hyatt, City of Phoenix Public Transit Department
Stephen Banta, Valley Metro/RPTA
Dennis Dickerson, Maricopa County Air Quality Department
Kenneth Hall, Central Arizona Governments
Michael Sundblom, Pinal County Air Quality Control District
Sharon Mitchell, Sun Corridor Metropolitan Planning Organization
Jerry Wamsley, U.S. Environmental Protection Agency, Region IX
Other Interested Parties

FROM: Dean Giles, Air Quality Planning Program Specialist

SUBJECT: CONSULTATION ON A CONFORMITY ASSESSMENT FOR A PROPOSED AMENDMENT
AND ADMINISTRATIVE MODIFICATION TO THE FY 2014-2018 MAG TRANSPORTATION
IMPROVEMENT PROGRAM AND 2035 REGIONAL TRANSPORTATION PLAN

The Maricopa Association of Governments is conducting consultation on a conformity assessment for an amendment and administrative modification to the FY 2014-2018 MAG Transportation Improvement Program (TIP) and 2035 Regional Transportation Plan. The amendment and administrative modification involve several projects, including Arterial Life Cycle Program and Job Access and Reverse Commute projects. Comments on the conformity assessment are requested by October 17, 2014.

MAG has reviewed the projects for compliance with the federal conformity rule and has found that consultation is required on the conformity assessment. The amendment includes projects that may be categorized as exempt from conformity determinations. The administrative modification includes minor project revisions that do not require a conformity determination. The conformity finding of the TIP and the associated 2035 Regional Transportation Plan that was made by the Federal Highway Administration and Federal Transit Administration on August 7, 2014 remains unchanged by this action. The conformity assessment is being transmitted for consultation to the agencies listed above and other interested parties. If you have any questions or comments, please contact me at (602) 254-6300.

Attachment

cc: Eric Massey, Arizona Department of Environmental Quality
Scott Omer, Arizona Department of Transportation

ATTACHMENT

CONFORMITY ASSESSMENT FOR A PROPOSED AMENDMENT AND ADMINISTRATIVE MODIFICATION TO THE FY 2014-2018 MAG TRANSPORTATION IMPROVEMENT PROGRAM AND 2035 REGIONAL TRANSPORTATION PLAN

The federal transportation conformity rule (40 CFR 93.105) requires interagency consultation when making changes to a Transportation Improvement Program (TIP) and Transportation Plan. The consultation processes are also provided in the Arizona Conformity Rule (R18-2-1405). This information is provided for consultation as outlined in the MAG Conformity Consultation Processes document adopted by the MAG Regional Council on February 28, 1996. In addition, federal guidance is followed in response to court rulings regarding transportation conformity.

The amendment includes projects that may be categorized as exempt from conformity determinations. Types of projects considered exempt are defined in the federal transportation conformity rule at 40 CFR 93.126. The administrative modification includes minor project revisions that do not require a conformity determination. Examples of minor project revisions include schedule, funding source, and funding amount changes. The proposed amendment and administrative modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 Regional Transportation Plan includes the projects on the attached table. The project number, agency, and description is provided, followed by the conformity assessment.

MAG has reviewed the projects for compliance with the federal conformity rule and consultation is required on the conformity assessment. The projects are not expected to create adverse emission impacts or interfere with Transportation Control Measure implementation. The conformity finding of the TIP and the associated 2035 Regional Transportation Plan that was made by the Federal Highway Administration and Federal Transit Administration on August 7, 2014 remains unchanged by this action.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
CHN14-112CZ	Chandler	Old Price Rd at Queen Creek Rd	Construct Intersection Improvement	2015	Local	1,854,750	-	-	1,854,750	--	--	--	Amend: Change project construction year from 2014 to 2015. Reduce project construction phase costs from \$1,923,400 to \$1,854,750. Project open year remains unchanged.	A minor project revision is needed to change year and programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
GLB15-108DZ	Gilbert	Elliot Rd at Cooper Dr	Design intersection improvement	2015	Local	564,000	-	-	564,000	--	--	--	Amend: Delete TIP listing. Project design phase deferred to 2016/2017.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
GLB16-108DZ	Gilbert	Elliot Rd at Cooper Dr	Design intersection improvement	2016	Local	1,114,000	-	-	1,114,000	--	--	--	Amend: Increase project design phase costs in 2016. Defer project open date from 12/2016 to 5/2017.	A minor project revision is needed to change programmed amount and open date. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
GLB15-108DRB	Gilbert	Elliot Rd at Cooper Dr	Design intersection improvement	2016	RARF	(492,100)	-	492,100	-	2016	RARF	492,100	Amend: Defer project open date from 12/2016 to 5/2017.	A minor project revision is needed to defer open date. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
GLB17-108DZ2	Gilbert	Elliot Rd at Cooper Dr	Design intersection improvement	2017	Local	127,000	-	-	127,000	--	--	--	Amend: Defer project open date from 12/2016 to 5/2017.	A minor project revision is needed to defer open date. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
GLB15-108RWZ	Gilbert	Elliot Rd at Cooper Dr	Acquisition of right-of-way for intersection improvement	2015	Local	800,000	-	-	800,000	--	--	--	Amend: Delete TIP listing. Project right-of-way phase to occur in 2016.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
GLB16-108RWZ	Gilbert	Elliot Rd at Cooper Dr	Acquisition of right-of-way for intersection improvement	2016	Local	1,200,000	-	-	1,200,000	--	--	--	Amend: Increase project right-of-way phase costs in 2016. Defer project open date from 12/2016 to 5/2017.	A minor project revision is needed to change programmed amount and open date. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
GLB16-108RRB	Gilbert	Elliot Rd at Cooper Dr	Acquisition of right-of-way for intersection improvement	2016	RARF	(840,000)	-	840,000	-	2016	RARF	840,000	Amend: Defer project open date from 12/2016 to 5/2017.	A minor project revision is needed to defer open date. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
GLB16-108CZ	Gilbert	Elliot Rd at Cooper Dr	Construct Intersection Improvement	2016	Local	4,170,000	-	-	4,170,000	--	--	--	Amend: Defer project open date from 12/2016 to 5/2017.	A minor project revision is needed to defer open date. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
GLB17-108CZ	Gilbert	Elliot Rd at Cooper Dr	Construct Intersection Improvement	2017	Local	1,004,000	-	-	1,004,000	--	--	--	Amend: Defer project open date from 12/2016 to 5/2017.	A minor project revision is needed to defer open date. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
GLB18-108CRB	Gilbert	Elliot Rd at Cooper Dr	Construct Intersection Improvement	2017	RARF	(2,808,166)	-	2,808,166	-	2014	RARF	2,808,166	Amend: Change TIP ID from GLB17-102CRB to GLB18-108CRB. Defer project open date from 12/2016 to 5/2017.	A minor project revision is needed to change TIP ID and defer open date. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA12-118RWZ	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (AC)	2012	Local	8,610,641	-	-	8,610,641	--	--	--	Amend: New TIP listing. Change the way ALCP Advance Construct projects are showing in the TIP. Show original cost commitment to ROW phase in 2012. Project open year remains unchanged.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MMA11-922	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (reimb)	2012	STP-MAG	(686,731)	686,731	-	-	2012	STP-MAG	686,731	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2012 ROW phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA13-118RW3Z	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (reimb)	2013	STP-MAG	(1,995,077)	1,995,077	-	-	2013	STP-MAG	1,995,077	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2013 ROW phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA13-118RWZ	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (reimb)	2014	STP-MAG	(1,412,066)	1,412,066	-	-	2014	STP-MAG	1,412,066	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2014 ROW phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA13-118RW2Z	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (reimb)	2014	STP-MAG	(1,933,575)	1,933,575	-	-	2014	STP-MAG	1,933,575	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2014 ROW phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA15-118RWZ	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (AC)	2015	Local	7,089,359	-	-	7,089,359	--	--	--	Amend: New TIP listing. Increase ACI-NOR-10-03-B project right-of-way phase costs. Change the way ALCP Advance Construct projects are showing in the TIP. Show local commitment to additional ROW phase costs in 2015. Project open year remains unchanged.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MMA18-118RWZ	Maricopa County	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for roadway widening (reimb)	2018	STP-MAG	(5,000,000)	5,000,000	-	-	2018	STP-MAG	5,000,000	Amend: New TIP listing. Change the way ALCP Advance Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. Increase total right-of-way phase costs and reimbursement on ACI-NOR-10-03-B. Transfer reimbursement from ACI-NOR-10-03-G. Project open year remains unchanged.	A minor project revision is needed to add new TIP listing with changes to the programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA13-118CZ	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening	2016	Local	8,062,611	-	-	8,062,611	--	--	--	Amend: Delete TIP listing. All construction phase local costs shown in TIP ID MMA15-113CZ. Project open year remains unchanged.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA17-113CZ	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening	2017	STP-MAG	10,017,876	-	-	10,017,876	--	--	--	Amend: Delete TIP listing. All construction phase local costs shown in TIP ID MMA15-113CZ. Project open year remains unchanged.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA19-113CZ	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening (AC)	2015	Local	29,600,000	-	-	29,600,000	--	--	--	Amend: New TIP listing. Change the way ALCP Advancement Construct projects are shown in the TIP. Construction costs committed in 2015. Project open year remains unchanged.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA14-113CX	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening (Reimb)	2015	STP-MAG	(5,063,048)	5,063,048	-	-	2015	STP-MAG	5,063,048	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2015 construction phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MMA15-113CX	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening (Reimb)	2016	STP-MAG	(4,939,987)	4,939,987	-	-	2016	STP-MAG	4,939,987	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2016 construction phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA15-113C2X	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening (Reimb)	2017	STP-MAG	(7,827,638)	7,827,638	-	-	2017	STP-MAG	7,827,638	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in 2017 construction phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA18-118CZ	Maricopa County	Northern Parkway: Dysart to 111th	Construct Roadway Widening (reimb)	2018	STP-MAG	(4,081,161)	4,081,161	-	-	2018	STP-MAG	4,081,161	Amend: New TIP listing. Change the way ALCP Advance Construct projects are showing in the TIP. Listing reflects reimbursement for advance construct phase. Increase project construction phase reimbursement from ACI-NOR-10-03-G. Project open year remains unchanged.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA15-112DZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Design roadway widening	2015	Local	527,466	-	-	527,466	2016	STP-MAG	300,000	Amend: Delete TIP listing. Change the way ALCP Advancement Construct projects are shown in the TIP. Design phase reimbursements consolidated in TIP ID MMA16-112DZ. No change in design phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MMA14-112DZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Design roadway widening (AC)	2015	Local	1,902,438	-	-	1,902,438	--	--	--	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Project design phase to begin in FY 2015. Design phase costs committed in 2015. Design phase reimbursements consolidated in TIP ID MMA16-112DZ. No change in design phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA16-112DZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Design roadway widening (Reimb)	2016	STP-MAG	(1,100,660)	1,100,660	-	-	2016	STP-MAG	1,100,660	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in design phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA15-112RWZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Acquisition of right-of-way for roadway widening (AC)	2015	Local	3,350,000	-	-	3,350,000	--	--	--	Amend: New TIP listing. Change the way ALCP Advancement Construct projects are shown in the TIP. ROW costs committed in 2015. No change in ROW phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA14-112RWZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Acquisition of right-of-way for roadway widening (Reimb)	2015	STP-MAG	(2,339,638)	2,339,638	-	-	2016	STP-MAG	2,339,638	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in ROW phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MMA14-112CZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Construct Roadway Widening (AC)	2016	Local	8,054,463	-	-	8,054,463	--	--	--	Amend: Change the way ALCP Advance Construct projects are showing in the TIP. Construction phase costs are committed in 2016. No change in construction phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA16-112CZ	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Construct Roadway Widening (Reimb)	2016	STP-MAG	(2,008,124)	2,008,124	-	-	2016	STP-MAG	2,008,124	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in construction phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA15-112CZ2	Maricopa County	Northern Parkway: Northern Avenue at Loop 101	Construct Roadway Widening (Reimb)	2017	STP-MAG	(3,000,000)	3,000,000	-	-	2017	STP-MAG	3,000,000	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in construction phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA15-113DZ	Maricopa County	Northern Parkway: Dysart Overpass	Design Roadway Widening (AC)	2015	Local	3,784,855	-	-	3,784,855	--	--	--	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Project design phase to begin in FY 2015. Design phase costs committed in 2015. Design phase reimbursements are in separate TIP listings. No change in design phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MMA16-113DZ	Maricopa County	Northern Parkway: Dysart Overpass	Design Roadway Widening (reimb)	2016	STP-MAG	(200,000)	200,000	-	-	2016	STP-MAG	200,000	Amend: New TIP listing. Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in design phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA18-113DZ	Maricopa County	Northern Parkway: Dysart Overpass	Design Roadway Widening (reimb)	2017	STP-MAG	(2,449,399)	2,449,399	-	-	2017	STP-MAG	2,449,399	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in design phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA18-113CZ	Maricopa County	Northern Parkway: Dysart Overpass	Construct Roadway Widening and Overpass (AC)	2017	Local	30,086,849	-	-	30,086,849	--	--	--	Amend: New TIP listing. Amend Change the way ALCP Advance Construct projects are showing in the TIP. Construction phase costs are committed in 2017. No change in construction phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA16-113CZ	Maricopa County	Northern Parkway: Dysart Overpass	Construct Roadway Widening and Overpass (reimb)	2017	STP-MAG	(10,000,000)	10,000,000	-	-	2017	STP-MAG	10,000,000	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in construction phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA16-113CZ2	Maricopa County	Northern Parkway: Dysart Overpass	Construct Roadway Widening and Overpass (reimb)	2018	STP-MAG	(10,707,494)	10,707,494	-	-	2018	STP-MAG	10,707,494	Amend: Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. No change in construction phase reimbursements. Project open year remains unchanged.	A minor project revision is needed to change TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MMA14-119RWZ	Maricopa County	Northern Parkway: 111th Ave to Grand	Acquisition of right-of-way for roadway widening (AC)	2016	Local	12,600,000	-	-	12,600,000	--	--	--	Amend: New TIP listing. Define project limits from "Northern Parkway: ROW Protection" to "Northern Parkway: 111th Ave to Grand." Defer project completion year from 2017 to 2020. Segment right-of-way costs committed in 2016. Increase segment costs from \$2 million to \$12.6 million.	A minor project revision is needed to add new TIP listing, revise project location, defer project, and change programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA15-119RWZ	Maricopa County	Northern Parkway: 111th Ave to Grand	Acquisition of right-of-way for roadway widening (reimb)	2016	STP-MAG	(350,000)	350,000	-	-	2016	STP-MAG	350,000	Amend: Define project limits from "Northern Parkway: ROW Protection" to "Northern Parkway: 111th Ave to Grand." Defer project completion year from 2017 to 2020. Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase.	A minor project revision is needed to revise project location and defer project. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA16-119RWZ	Maricopa County	Northern Parkway: 111th Ave to Grand	Acquisition of right-of-way for roadway widening (reimb)	2017	STP-MAG	(1,050,000)	1,050,000	-	-	2017	STP-MAG	1,050,000	Amend: Define project limits from "Northern Parkway: ROW Protection" to "Northern Parkway: 111th Ave to Grand." Defer project completion year from 2017 to 2020. Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase.	A minor project revision is needed to revise project location and defer project. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MMA18-119WZ	Maricopa County	Northern Parkway: 111th Ave to Grand	Acquisition of right-of-way for roadway widening (reimb)	2018	STP-MAG	(4,000,000)	4,000,000	-	-	2018	STP-MAG	4,000,000	Amend: New TIP listing. Define project limits from "Northern Parkway: ROW Protection" to "Northern Parkway: 111th Ave to Grand." Defer project completion year from 2017 to 2020. Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. Transfer reimbursement from ACI-NOR-10-03-G.	A minor project revision is needed to add new TIP listing, revise project location, and defer project. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA19-119RWZ	Maricopa County	Northern Parkway: 111th Ave to Grand	Acquisition of right-of-way for roadway widening (reimb)	2019	STP-MAG	(2,078,747)	2,078,747	-	-	2019	STP-MAG	2,078,747	Amend: New listing. Define project limits from "Northern Parkway: ROW Protection" to "Northern Parkway: 111th Ave to Grand." Defer project completion year from 2017 to 2020. Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. Transfer reimbursement from ACI-NOR-10-03-G.	A minor project revision is needed to add new TIP listing, revise project location, and defer project. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA20-119RWZ	Maricopa County	Northern Parkway: 111th Ave to Grand	Acquisition of right-of-way for roadway widening (reimb)	2020	STP-MAG	(2,719,635)	2,719,635	-	-	2020	STP-MAG	2,719,635	Amend: New listing. Define project limits from "Northern Parkway: ROW Protection" to "Northern Parkway: 111th Ave to Grand." Defer project completion year from 2017 to 2020. Change the way ALCP Advancement Construct projects are shown in the TIP. Listing reflects reimbursement for advance construct phase. Transfer reimbursement from ACI-NOR-10-03-G.	A minor project revision is needed to add new TIP listing, revise project location, and defer project. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MMA18-122CZ	Maricopa County	Northern Parkway: Interim Construction	Construct Roadway Widening	2018	STP-MAG	2,893,892	13,081,161	-	15,975,053	2018	STP-MAG	13,081,161	Amend: Delete TIP listing. Delete project segment (ACI-NOR-10-03-G). Segment served as a funding placeholder. Transfer \$5.0 million of reimbursement to ACI-NOR-10-03-B right-of-way phase. Transfer \$4,081,161 of reimbursement to ACI-NOR-10-03-B construction phase. Transfer remaining \$4.0 million of reimbursement to Northern Parkway: 111th to Grand Right-of-Way project (ACI-NOR-10-03-F)	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
--	Maricopa County	Northern Parkway: Interim Construction	Construct Roadway Widening	2019	STP-MAG	20,891,253	2,078,747		22,970,000	2019	STP-MAG	2,078,747	Amend: Delete listing. Transfer reimbursement to Northern Parkway: 111th to Grand Right-of-Way project (ACI-NOR-10-03-F)	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
--	Maricopa County	Northern Parkway: Interim Construction	Construct Roadway Widening	2020	STP-MAG	1,165,165	2,719,635		3,884,800	2020	STP-MAG	2,719,635	Amend: Delete listing. Transfer reimbursement to Northern Parkway: 111th to Grand Right-of-Way project (ACI-NOR-10-03-F)	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
--	Maricopa County	Northern Parkway: Interim Construction	Construct Roadway Widening	2021	Local	800,393	-	-	800,393	--	--	--	Amend: Delete listing. Segment served as a funding placeholder.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES15-125CRB	Mesa	Mesa Dr: US-60 (Superstition Fwy) to Southern	Construct Roadway Widening	2015	RARF	(4,276,960)	-	4,276,960	-	2015	RARF	4,276,960	Amend: Increase FY 2015 construction reimbursement by \$46,397.40. Funding to come from All-DOB-10-03 FY 2011 construction reimbursement to reflect actual reimbursement that came from the program.	A minor project revision is needed to change programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MES14-131RWZ	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Acquisition of right-of-way for intersection improvement	2014	Local	1,000,000	-	-	1,000,000	--	--	--	Amend: Delete project right-of-way phase. Project constructed by developer.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES14-131CZ	Mesa	Ray Rd: Ellsworth Rd to Signal Butte (Phase I)	Construct Intersection Improvement	2013	Private	5,393,444	-	-	5,393,444	--	--	--	Amend: Project was completed in two phases: Phase I (North Half) and Phase II (South Half). Change construction year for Phase I from 2014 to 2013. Change open year from 2015 to 2013. Change funding source from local to private. Change funding amount from \$5,300,000 to \$5,393,444.	A minor project revision is needed to change years and programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES15-131CZ	Mesa	Ray Rd: Ellsworth Rd to Signal Butte (Phase II)	Construct Intersection Improvement	2015	Private	2,667,243	-	-	2,667,243	--	--	--	Amend: Project was completed in two phases: Phase I(North Half) and Phase II (South Half). Change Phase II open year from 3/2015 to 8/2015. Change funding source from local to private. Change funding amount from \$5,300,000 to \$2,667,243.	A minor project revision is needed to change open year programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES14-131CRB	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Construct Roadway Widening	2025	RARF	(5,102,811)	-	5,102,811	-	2025	RARF	5,102,811	Amend: Delete listing. Transfer \$900,000 of reimbursement to ACI-MES-10-03-A, \$3,500,000 to ACI-MES-10-03-B, and move remaining balance of \$702,811 into project savings line. Savings will be reprogrammed to a different segment at a later date.	A minor project revision is needed to delete TIP listing and change programmed amounts. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES15-131CRB	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Construct Roadway Widening	2026	RARF	(2,317,189)	-	2,317,189	-	2026	RARF	2,317,189	Amend: Delete listing. Transfer reimbursement to project savings line item. Savings will be reprogrammed to a different segment at a later date.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MES14-131DZ	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Design intersection improvement	2014	Local	500,000	-	-	500,000	--	--	--	Amend: Delete project design phase. Project constructed by developer.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES25-131SAV	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Project Savings for Roadway Widening	2025	RARF	(702,811)	-	702,811	-	2025	RARF	702,811	Amend: New listing. Reimbursement from project construction phase.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES26-131SAV	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Project Savings for Roadway Widening	2025	RARF	(2,317,189)	-	2,317,189	-	2025	RARF	2,317,189	Amend: New listing. Reimbursement from project construction phase.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES14-132RWZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Acquisition of right-of-way for roadway widening	2014	Local	450,000	-	-	450,000	--	--	--	Amend: Decrease project right-of-way phase costs from \$1,000,000 to \$450,000.	A minor project revision is needed to change programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES14-132CZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2014	Local	1,046,615	-	-	1,046,615	--	--	--	Amend: Decrease project construction costs in 2014. Split between city funding and developer funding.	A minor project revision is needed to change programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES14-132CZ2	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2014	Private	1,933,873	-	-	1,933,873	--	--	--	Amend: New TIP listing. Decrease project construction costs in 2014. Split between city funding and developer funding.	A minor project revision is needed to add new TIP listing and change programmed amounts. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES15-132CZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2015	Local	2,300,000	-	-	2,300,000	--	--	--	Amend: Delete TIP listing. Project construction phase costs were committed in 2014.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Amendment and Administrative Modification to the FY 2014-2018 MAG Transportation Improvement Program and 2035 MAG Regional Transportation Plan

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MES14-132DZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Design roadway widening	2014	Local	500,000	-	-	500,000	--	--	--	Amend: Delete TIP listing. Project design phase occurred in previous years.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MES25-125CRB	Mesa	Mesa Dr: US-60 (Superstition Fwy) to Southern	Construct Roadway Widening	2025	RARF	(900,000)	-	900,000	-	2025	RARF	900,000	Amend: New listing. Add 2025 project construction phase reimbursement from ACI-RAY-20-03-B project savings.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES25-130CRB	Mesa	Mesa Dr: 8th Avenue to Main Street	Construct Roadway Widening	2025	RARF	(3,500,000)	-	3,500,000	-	2025	RARF	3,500,000	Amend: New listing. Add 2025 project construction phase reimbursement from ACI-RAY-20-03-B project savings.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES14-131CRB	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Construct Roadway Widening	2025	RARF	(5,102,811)	-	5,102,811	-	2025	RARF	5,102,811	Amend: Delete listing. Transfer \$900,000 of reimbursement to ACI-MES-10-03-A, \$3,500,000 to ACI-MES-10-03-B, and move remaining balance of \$702,811 into project savings line. Savings will be reprogrammed to a different segment at a later date.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES15-131CRB	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Construct Roadway Widening	2026	RARF	(2,317,189)	-	2,317,189	-	2026	RARF	2,317,189	Amend: Delete listing. Transfer reimbursement to project savings line item. Savings will be reprogrammed to a different segment at a later date.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES25-131SAV	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Project Savings for Roadway Widening	2025	RARF	(702,811)	-	702,811	-	2025	RARF	702,811	Amend: New listing. Reimbursement from project construction phase.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES26-131SAV	Mesa	Ray Rd: Ellsworth Rd to Signal Butte	Project Savings for Roadway Widening	2026	RARF	(2,317,189)	-	2,317,189	-	2026	RARF	2,317,189	Amend: New listing. Reimbursement from project construction phase.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
--	Mesa	Signal Butte Rd: Broadway to Pecos Rd	Construct Roadway Widening	2024	RARF	(4,940,119)	-	4,940,119	-	2024	RARF	4,940,119	Amend: Decrease FY 2024 reimbursement from \$7,232,401.04 to \$4,940,118.76 and transfer to ACI-SGB-10-03-B. Transfer \$941,473.54 to project design phase, \$315,000 to project ROW phase, and \$1,035,808.74 to project construction phase.	A minor project revision is needed to change programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
---	Mesa	Signal Butte Rd: Broadway to Pecos Rd	Construct Roadway Widening	2025	RARF	(3,232,301)	-	3,232,301	-	2025	RARF	3,232,301	Amend: Delete listing. Transfer reimbursement to ACI-SGB-10-03-B project construction phase.	A minor project revision is needed to delete TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MES25-125CRB	Mesa	Mesa Dr: US-60 (Superstition Fwy) to Southern	Construct Roadway Widening	2025	RARF	(900,000)	-	900,000	-	2025	RARF	900,000	Amend: New listing. Add 2025 project construction phase reimbursement from ACI-RAY-20-03-B project savings.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES25-130CRB	Mesa	Mesa Dr: 8th Avenue to Main Street	Construct Roadway Widening	2025	RARF	(3,500,000)	-	3,500,000	-	2025	RARF	3,500,000	Amend: New listing. Add 2025 project construction phase reimbursement from ACI-RAY-20-03-B project savings.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES09-132DZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Design roadway widening	2009	Local	509,270	-	-	509,270	--	--	--	Amend: New TIP listing. Add project design phase to TIP.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES11-132DZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Design roadway widening	2011	Local	335,692	-	-	335,692	--	--	--	Amend: New TIP listing. Add project design phase to TIP.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES11-132DZ2	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Design roadway widening	2011	Private	250,000	-	-	250,000	--	--	--	Amend: New TIP listing. Add project design phase to TIP funded by developer.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES12-132DZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Design roadway widening	2012	Private	250,000	-	-	250,000	--	--	--	Amend: New TIP listing. Add project design phase to TIP funded by developer.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES15-132DRB	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Design roadway widening	2024	RARF	(941,474)	-	941,474	-	2025	RARF	941,474	Amend: New listing. Add project design phase reimbursement. Transfer funding from ACI-SGB-10-03-A construction phase reimbursement.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES15-132RRB	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Acquisition of right-of-way for roadway widening	2024	RARF	(315,000)	-	315,000	-	2025	RARF	315,000	Amend: New listing. Add project right-of-way phase reimbursement. Transfer funding from ACI-SGB-10-03-A construction phase reimbursement.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES12-132CZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2012	Local	2,188,853	-	-	2,188,853	--	--	--	Amend: New TIP listing. Add project construction phase in 2012.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MES25-125CRB	Mesa	Mesa Dr: US-60 (Superstition Fwy) to Southern	Construct Roadway Widening	2025	RARF	(900,000)	-	900,000	-	2025	RARF	900,000	Amend: New listing. Add 2025 project construction phase reimbursement from ACI-RAY-20-03-B project savings.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES25-130CRB	Mesa	Mesa Dr: 8th Avenue to Main Street	Construct Roadway Widening	2025	RARF	(3,500,000)	-	3,500,000	-	2025	RARF	3,500,000	Amend: New listing. Add 2025 project construction phase reimbursement from ACI-RAY-20-03-B project savings.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES13-132CZ	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2013	Local	3,749,753	-	-	3,749,753	--	--	--	Amend: New TIP listing. Add city-share of project construction phase in 2013.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES13-132CZ2	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2013	Local	556,830	-	-	556,830	--	--	--	Amend: New TIP listing. Add city-share of project construction phase in 2013.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES13-132CZ3	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2013	Private	2,209,300	-	-	2,209,300	--	--	--	Amend: New TIP listing. Add developer-share of project construction phase in 2013.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES16-132CRB	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2024	RARF	(1,035,809)	-	1,035,809	-	2024	RARF	1,035,809	Amend: New TIP listing. Add project construction phase in 2024 from ACI-SGB-10-03-A.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES15-132CRB	Mesa	Signal Butte Road: Elliot Rd to Ray Rd	Construct Roadway Widening	2025	RARF	(7,143,847)	-	7,143,847	-	2025	RARF	7,143,847	Amend: Increase total project construction phase reimbursement from \$3,911,546.45 to \$8,179,656.23. Additional funding from ACI-SGB-10-03-A project construction phase reimbursement. Split between FY 2024 and FY 2025.	A minor project revision is needed to change programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES11-106CZ	Mesa	Dobson Rd at Guadalupe Rd	Construct Roadway Widening	2011	RARF	557,438	-	1,416,398	1,973,836	2011	RARF	1,416,398	Amend: Decrease FY 2011 RARF reimbursement by \$46,397.40 to reflect actual reimbursement that came from the program. Transfer the \$46,397.40 of RARF savings to ACI-MES-10-03-A in FY 2015.	A minor project revision is needed to change programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

TIP #	Agency	Project Location	Project Description	Fiscal Year	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Reimb. Fiscal Year	Fund Type	Regional Reimb.	Notes:	Conformity Assessment
MES25-125CRB	Mesa	Mesa Dr: US-60 (Superstition Fwy) to Southern	Construct Roadway Widening	2025	RARF	(900,000)	-	900,000	-	2025	RARF	900,000	Amend: New listing. Add 2025 project construction phase reimbursement from ACI-RAY-20-03-B project savings.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MES25-130CRB	Mesa	Mesa Dr: 8th Avenue to Main Street	Construct Roadway Widening	2025	RARF	(3,500,000)		3,500,000	-	2025	RARF	3,500,000	Amend: New listing. Add 2025 project construction phase reimbursement from ACI-RAY-20-03-B project savings.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA12-117DZ	Maricopa County	Northern Parkway: Reems and Litchfield Overpasses	Design roadway widening	2012	STP-MAG	13,787	228,092	-	241,879	2012	STP-MAG	228,092	Amend: Decrease project design funding and transfer balance (\$119,514) to project construction phase. Project open year remains unchanged.	A minor project revision is needed to change programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
MMA12-117CZ	Maricopa County	Northern Parkway: Reems and Litchfield Overpasses	Construct Roadway Widening	2012	STP-MAG	7,224	119,514	-	126,738	2012	STP-MAG	119,514	Amend: New listing. Create project construction phase in 2012 from project design phase savings.	A minor project revision is needed to add new TIP listing. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Agency	Section	Work Year	TIP ID	Location	Work	ALI	Funding	Apport. Year	Federal	Regional	Local	Total	TIP Change Request	Conformity Assessment
Glendale	Transit	2014	GLN14-401T	Citywide: Glendale	Route 59	30.09.01	5307-JARC	2014	200,000	-	220,000	420,000	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Glendale	Transit	2015	GLN15-403T	Citywide: Glendale	Route 59	30.09.01	5307-JARC	2015	200,000	-	220,000	420,000	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Glendale	Transit	2014	GLN14-402T	Citywide: Phoenix and Glendale	Route 60	30.09.01	5307-JARC	2014	146,657	-	360,000	506,657	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Glendale	Transit	2015	GLN15-404T	Citywide: Phoenix and Glendale	Route 60	30.09.01	5307-JARC	2015	146,657	-	360,000	506,657	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Phoenix	Transit	2014	PHX14-420T	Citywide: Phoenix	Route 17 with increased frequencies	30.09.01	5307-JARC	2014	400,000	-	3,790,545	4,190,545	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Phoenix	Transit	2014	PHX14-421T	Citywide: Phoenix	Extension of Route 10	30.09.01	5307-JARC	2014	200,000	-	1,782,513	1,982,513	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Phoenix	Transit	2015	PHX15-428T	Citywide: Phoenix	Route 17 with increased frequencies	30.09.01	5307-JARC	2015	400,000	-	3,790,545	4,190,545	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Phoenix	Transit	2015	PHX15-429T	Citywide: Phoenix	Extension of Route 10	30.09.01	5307-JARC	2015	200,000	-	1,782,513	1,982,513	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Agency	Section	Work Year	TIP ID	Location	Work	ALI	Funding	Apport. Year	Federal	Regional	Local	Total	TIP Change Request	Conformity Assessment
Phoenix	Transit	2014	PHX14-422T	Citywide: Phoenix and Scottsdale	Route 29 with increased frequencies	30.09.01	5307-JARC	2014	400,000	-	3,770,899	4,170,899	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Phoenix	Transit	2015	PHX15-430T	Citywide: Phoenix and Scottsdale	Route 29 with increased frequencies	30.09.01	5307-JARC	2015	400,000	-	3,770,899	4,170,899	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Phoenix	Transit	2014	PHX14-423T	Citywide: Phoenix and Tolleson	Route 3 with increased frequencies	30.09.01	5307-JARC	2014	400,000	-	2,752,070	3,152,070	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Phoenix	Transit	2015	PHX15-432T	Citywide: Phoenix and Tolleson	Route 3 with increased frequencies	30.09.01	5307-JARC	2015	400,000	-	2,752,070	3,152,070	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Phoenix	Transit	2015	PHX14-420T	South Central Avenue, Phoenix	Central Phoenix Multimodal Transportation Improvement Plan	44.27.00	TIGER	2014	1,600,000	-	1,600,000	3,200,000	Amend: Add new project based on awarded FY14 TIGER grant. This grant was awarded as part of TIGER VI.	The new project is considered exempt under the category "Specific activities which do not involve or lead directly to construction, such as: Planning activities conducted pursuant to titles 23 and 49 U.S.C." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Tolleson	Transit	2014	TOL14-401T	Citywide: Tolleson	Zoom	30.09.01	5307-JARC	2014	128,870	-	128,870	257,740	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Tolleson	Transit	2015	TOL15-401T	Citywide: Tolleson	Zoom	30.09.01	5307-JARC	2015	128,870	-	128,870	257,740	Amend: Add new project based on FY 2014-2015 allocations of 5307-JARC funding.	The new project is considered exempt under the category "Operating assistance to transit agencies." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Agency	Work Year	TIP ID	Location	Work	Funding	Federal	Regional	Local	Total	TIP Change Request	Conformity Assessment
ADOT	2011	DOT11-101	10: 32nd St - SR202L, Santan, Phase 1	R/W Acquisition	RARF	-	71,000,000	-	71,000,000	For information only: <u>Material Cost Change</u> . See DOT12-117RW2.	A minor project revision is needed to change the programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2012	DOT12-117	10: 32nd St - SR202L, Santan, Phase 2	R/W Acquisition	IM	23,480,700	1,419,300	-	24,900,000	For information only: <u>Material Cost Change</u> . See DOT12-117RW2.	A minor project revision is needed to change the programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT12-117RW2	10: 32nd St - SR202L, Santan, Phase 2	R/W Acquisition	NHPP	7,100,000	3,000,000	-	10,100,000	Amendment: <u>Material Cost Change</u> . Add separate workphase to reflect total project budget increase of \$10,100,000. Use \$3,000,000 of RARF-HURF from DOT15-179 and \$7,100,000 of NHPP funding from RTP cash flow.	A minor project revision is needed to change the programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT15-462	10: Cotton Lane - Litchfield Rd	Design FMS	CMAQ	471,500	28,500	-	500,000	Amendment: Change project location from "Cotton Lane - Dysart Rd" to "Cotton Lane - Litchfield Rd". MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change the project location. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2018	DOT18-460	10: Cotton Lane - Litchfield Rd	Construct FMS	CMAQ	3,922,880	237,120	-	4,160,000	Amendment: Change project location from "Cotton Lane - Dysart Rd" to "Cotton Lane - Litchfield Rd". MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change the project location. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2013	DOT13-110D	10: Litchfield Rd - 83rd Ave	Design FMS	NHS	565,800	-	34,200	600,000	Amendment: Change project location from "Dysart Rd - 83rd Ave" to "Litchfield Rd - 83rd Ave".	A minor project revision is needed to change the project location. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT16-420	10: Litchfield Rd - 83rd Ave	Construct FMS	CMAQ	5,186,500	313,500	-	5,500,000	Amendment: Change project location from "Dysart Rd - 83rd Ave" to "Litchfield Rd - 83rd Ave".	A minor project revision is needed to change the project location. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2014	DOT14-460	10: Ray Rd - Wild Horse Pass	Construct FMS	NHPP	754,400	45,600	-	800,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT15-422	17: Cactus Rd, Thunderbird Rd and Greenway Rd	Design Pump Station Rehabilitation	NHPP	204,631	-	12,369	217,000	Amendment: Add a new pump station rehabilitation design project in fiscal year 2015 for \$217,000.	The new project is considered exempt under the category "Projects that correct, improve, or eliminate a hazardous location or feature." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Agency	Work Year	TIP ID	Location	Work	Funding	Federal	Regional	Local	Total	TIP Change Request	Conformity Assessment
ADOT	2014	DOT14-181	202 (Red Mountain Fwy): Loop 101 (Pima Fwy) to Gilbert Rd	R/W acquisition	NHPP	4,243,500	256,500	-	4,500,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2016	DOT16-460	202 (Santan Fwy): Dobson Rd - Ray Rd	Construct FMS	CMAQ	5,940,900	359,100	-	6,300,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT15-463	202 (Santan Fwy): Ray Rd - Broadway Rd	Design FMS	CMAQ	471,500	28,500	-	500,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2017	DOT17-460	202 (Santan Fwy): Ray Rd - Broadway Rd	Construct FMS	CMAQ	4,828,160	291,840	-	5,120,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT15-464	303: I-10 - Northern Ave	Design FMS	CMAQ	471,500	28,500	-	500,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2018	DOT18-461	303: I-10 - Northern Ave	Construct FMS	CMAQ	3,922,880	237,120	-	4,160,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2016	DOT16-462	303: Lake Pleasant Rd - I- 17	Design FMS	CMAQ	518,650	31,350	-	550,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2016	DOT16-461	303: Northern Ave - Clearview Blvd	Design FMS	CMAQ	518,650	31,350	-	550,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2016	DOT15-156C	60 (Grand Ave): Thompson Ranch (Thunderbird)	Construct Traffic Interchange	RARF- HURF	-	7,000,000	-	7,000,000	Amendment: Defer project from 2015 to 2016.	A minor project revision is needed to defer the project. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Agency	Work Year	TIP ID	Location	Work	Funding	Federal	Regional	Local	Total	TIP Change Request	Conformity Assessment
ADOT	2015	DOT15-423	60 (Superstition Fwy): Stapley Dr, Gilbert Rd, Val Vista Dr & 48th St	Design Pump Station Rehabilitation	NHPP	337,594	-	20,406	358,000	Amendment: Add a new pump station rehabilitation design project in fiscal year 2015 for \$358,000.	The new project is considered exempt under the category "Projects that correct, improve, or eliminate a hazardous location or feature." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT15-418	60(Grand Ave): New River WB #314	Design bridge rehabilitation	NHPP	248,009	-	14,991	263,000	Amendment: Increase federal/local costs from \$235,750/\$14,250 to \$248,009/\$14,991.	A minor project revision is needed to change the programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT15-838	60: Sossaman Rd to Meridian Rd	Construct Drainage Improvements	STP-AZ	893,964	-	54,036	948,000	Amendment: Delete project from TIP.	The deleted project is considered exempt under the category "Projects that correct, improve, or eliminate a hazardous location or feature." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT15-461C	Interstate 10: Avondale Blvd to Dysart Road	Construct and install fiber	CMAQ	51,045	-	3,086	54,131	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT15-460	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center. Administration and procure small equipment.	STP-AZ	47,150	-	2,850	50,000	For information only: Added a new partially funded administrative project in State FY 2015 for \$50,000. Partial programming to cover approximately 7-8 months for one FTE and small equipment procurement.	The new project is considered exempt under the category "Specific activities which do not involve or lead directly to construction, such as: Planning activities conducted pursuant to titles 23 and 49 U.S.C." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT15-460A2	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center. Administration and small equipment.	STP-AZ	165,025	-	9,975	175,000	Amendment: Add a new administrative project, and small equipment procurement in State FY 2015 for 2 of 3 listings for project. Balance of FY2015 one half share ADOT and MAG. Total project cost first year \$450,000. Pilot program for three years only (2015, 16, 17).	The new project is considered exempt under the category "Specific activities which do not involve or lead directly to construction, such as: Planning activities conducted pursuant to titles 23 and 49 U.S.C." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT15-460A3	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center. Administration and small equipment.	RARF	-	225,000	-	225,000	Amendment: Add a new administrative project in State FY 2015 for 3 of 3 listings for project. Balance of FY2015, one half share ADOT and MAG. Total project cost first year \$450,000. Pilot program for three years only (2015, 16, 17).	The new project is considered exempt under the category "Specific activities which do not involve or lead directly to construction, such as: Planning activities conducted pursuant to titles 23 and 49 U.S.C." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Agency	Work Year	TIP ID	Location	Work	Funding	Federal	Regional	Local	Total	TIP Change Request	Conformity Assessment
ADOT	2016	DOT16-464A	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center	STP-AZ	200,388	-	12,113	212,500	Amendment: Add a new administrative project in State FY 2016 for 1 of 2 listings. Total project cost second and third year \$425,000. Pilot program for three years only (2015, 16, 17).	The new project is considered exempt under the category "Specific activities which do not involve or lead directly to construction, such as: Planning activities conducted pursuant to titles 23 and 49 U.S.C." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2016	DOT16-464A2	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center	RARF	-	212,500	-	212,500	Amendment: Add a new administrative project in State FY 2016 for 2 of 2 listings. Total project cost second and third year \$425,000. Pilot program for three years only (2015, 16, 17).	The new project is considered exempt under the category "Specific activities which do not involve or lead directly to construction, such as: Planning activities conducted pursuant to titles 23 and 49 U.S.C." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2017	DOT17-462A	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center	STP-AZ	200,388	-	12,113	212,500	Amendment: Add a new administrative project in State FY 2017 for 1 of 2 listings. Total project cost second and third year \$425,000. Pilot program for three years only (2015, 16, 17).	The new project is considered exempt under the category "Specific activities which do not involve or lead directly to construction, such as: Planning activities conducted pursuant to titles 23 and 49 U.S.C." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2017	DOT17-462A2	MAG Region wide	DPS Officers to Co-Locate in the ADOT Traffic Operations Center	RARF	-	212,500	-	212,500	Amendment: Add a new administrative project in State FY 2017 for 2 of 2 listings. Total project cost second and third year \$425,000. Pilot program for three years only (2015, 16, 17).	The new project is considered exempt under the category "Specific activities which do not involve or lead directly to construction, such as: Planning activities conducted pursuant to titles 23 and 49 U.S.C." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2014	DOT13-946	MAG regionwide	Freeway Service Patrols	State	-	-	900,000	900,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2014	DOT14-160	MAG regionwide	Freeway Service Patrols	State	-	-	900,000	900,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2014	DOT14-439	MAG Regionwide	Upgrade Dynamic Message Signs (DMS)	NHPP	754,400	-	45,600	800,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT15-179	MAG regionwide	Advance Acquire Right Of Way	RARF-HURF	-	3,000,000	-	3,000,000	Amendment: Delete project. Funding transferred to DOT12-117RW2.	A minor project revision is needed to delete project. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Agency	Work Year	TIP ID	Location	Work	Funding	Federal	Regional	Local	Total	TIP Change Request	Conformity Assessment
ADOT	2015	DOT15-182	MAG regionwide	Freeway Service Patrols	State	-	-	1,000,000	1,000,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2016	DOT16-409	MAG regionwide	Freeway Service Patrols	State	-	-	1,000,000	1,000,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2016	DOT16-463	MAG regionwide	Design/Construct FMS Rehabilitation	CMAQ	1,244,760	-	75,240	1,320,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2017	DOT17-404	MAG regionwide	Freeway Service Patrols	State	-	-	1,000,000	1,000,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2017	DOT17-461	MAG regionwide	Construct FMS Rehabilitation, Phase 2	CMAQ	3,394,800	-	205,200	3,600,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2018	DOT18-406	MAG regionwide	Freeway Service Patrols	State	-	-	1,000,000	1,000,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2018	DOT18-462	MAG regionwide	Design FMS Rehabilitation, Phase 3	CMAQ	377,200	-	22,800	400,000	Clerical: MAG Mode incorrectly listed as ITS. Change to Freeway.	A minor project revision is needed to change project mode. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
ADOT	2015	DOT15-198	SR24 (Gateway Freeway): L202 to Ellsworth.	Repayment of advanced construction.	NHPP	500,000	77,335,000	-	77,835,000	Admin: Change funding source from STP-MAG to NHPP. SR-24 was designated part of the NHS on October 1, 2012.	A minor project revision is needed to change the funding source. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Goodyear	2015	GDY14-101	Van Buren Street - Estrella Parkway to Cotton Lane	Install Signal Communications and ITS Components	CMAQ	749,164	-	45,284	794,448	Admin: Reduce local funding by \$205,579 due to updated cost estimates. No change to federal funding.	A minor project revision is needed to change the programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Phoenix	2015	PHX14-141	Various locations	Federal-aid Highway System Bridge Inspections	STP-AZ	176,624	-	10,676	187,300	Amend: ADOT awarded Federal funding. Change project description to reflect work. Change total funding to reflect actual inspection costs.	A minor project revision is needed to change the description and programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Phoenix	2015	PHX14-110	Various locations	Off Federal-aid Highway System Bridge Inspections	STP-AZ	63,700	-	3,850	67,550	Amend: ADOT awarded Federal funding. Change project description to reflect work. Change total funding to reflect actual inspection costs.	A minor project revision is needed to change the description and programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.

Agency	Work Year	TIP ID	Location	Work	Funding	Federal	Regional	Local	Total	TIP Change Request	Conformity Assessment
Phoenix	2015	PHX15-107	Various Locations	Pontis / Virtis Software for bridge inspections	Local	-	-	102,184	102,184	Amend: Delete project. No longer using software for bridge inspections.	The deleted project is considered exempt under the category "Specific activities which do not involve or lead directly to construction, such as: Planning and technical studies" The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Youngtown	2013	YTN12-101D2	Grand Avenue and 111th Avenue to Olive Avenue and Agua Fria Parkway (Approximately 117th Avenue).	Multiuse Path and Peoria Ave straightening to accommodate multiuse path: design	STP-TEA	94,300	-	5,700	100,000	Amend: Add separate workphase for STP-TEA funding allocated to design phase.	The new project is considered exempt under the category "Bicycle and pedestrian facilities." The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Youngtown	2014	YTN13-101	Grand Avenue and 111th Avenue to Olive Avenue and Agua Fria Parkway (Approximately 117th Avenue).	Multiuse Path and Peoria Ave straightening to accommodate multiuse path: ROW acquisition.	STP-TEA	42,845	-	57,155	100,000	Amend: Add \$42,845 of STP-TEA funding to workphase and increase local cost by \$7,155.	A minor project revision is needed to change the programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.
Youngtown	2015	YTN14-101	Grand Avenue and 111th Avenue to Olive Avenue and Agua Fria Parkway (Approximately 117th Avenue).	Multiuse Path and Peoria Ave straightening to accommodate multiuse path: Construction phase	CMAQ	292,800	-	357,200	650,000	Amend: Add \$200,000 of local funding to reflect cost estimates for road straightening and path construction.	A minor project revision is needed to change the programmed amount. The conformity status of the TIP and 2035 Regional Transportation Plan would remain unchanged.



9-1-1 Managed Services Technical Review

FINAL REPORT

**SUBMITTED JUNE 2014 TO:
STATE OF ARIZONA 9-1-1 PROGRAM**



MissionCriticalPartners

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TABLE OF CONTENTS

EXECUTIVE SUMMARY	1
1. BACKGROUND	3
2. REQUIREMENTS CHECKLIST	4
3. SOLUTION DESIGN	5
4. PROGRAM MANAGEMENT	33
5. CONCLUSION	51



EXECUTIVE SUMMARY

Mission Critical Partners, Inc. (MCP) is pleased to provide the State of Arizona 9-1-1 Program (Program) with a Managed Services Technical Review report. The Program contracted with MCP to review all of the technical documentation associated with the Arizona solution and provide a written report outlining its strengths and vulnerabilities.

The 9-1-1 industry is experiencing significant change driven by advances in technology and our public safety professionals' steadfast dedication to serving their communities. Today's 9-1-1 network is outdated and is unable to keep up with the technology that is in the hands of end users. Additionally, 9-1-1 funding models are slow and difficult to change, which compounds the challenges that face public safety answering points (PSAPs) across the United States. As a result, the legacy 9-1-1 network and its operating model must change.

The State of Arizona (State) is taking a proactive approach to addressing the funding and technology challenges by considering a Managed 9-1-1 Services model. The Managed Services model offering is presented by CenturyLink, the long-time 9-1-1 service provider in the state. CenturyLink has partnered with the industry's leading solutions providers, Cassidian and Intrado, to offer a bundled services offering that will enable PSAPs across the state to upgrade their legacy call handling systems and migrate to an Emergency Services Internet Protocol (IP) Network (ESInet).

The proposed solution includes all of the major Next Generation 9-1-1 (NG9-1-1) services available to PSAPs today, including a redundant IP network, call routing, location data management, call handling equipment, text to 9-1-1, geographic information system (GIS) data management tools, and supplemental data. All of these services will be maintained to National Emergency Number Association (NENA) i3 standards and at the most recent software releases for the duration of the contract. The Managed Services offering provides PSAPs with the option to choose between two industry-leading customer premise equipment (CPE) systems; either the Intrado VIPER or the Cassidian VESTA. The majority of the hardware for the solution will be located in CenturyLink data centers and the maintenance of all hardware, including that which is located at the PSAPs will be the responsibility of CenturyLink. All of the services are provided by CenturyLink as the single point of contact for the solution, so that the Arizona 9-1-1 Program and the Arizona PSAPs will have only a single vendor to manage and a single bill to pay for 9-1-1 service.

As this is a bundled, service-based model, PSAPs will have a monthly recurring fee covering all NG9-1-1 services. Today, 9-1-1 call routing and data management services are monthly recurring fees, while the CPE requires the outlay of significant capital expenditures, typically on a five-year cycle. Ownership costs for CPE can vary with spikes in capital expenditures, as servers and other hardware require replacement due to obsolescence, normal wear and tear, or failure. In the procurement of the Managed Services, PSAPs will migrate to an operating expense model that is predictable and enables the PSAP to always have the latest technology. Meanwhile, the service will be provided by a solution



provider that leads the industry in NG9-1-1 call volume and has the longest track record in migrating PSAPs to a NG9-1-1 call-processing environment.

The vulnerabilities of the solution may be summarized as “the unknown.” A review of the CenturyLink/Intrado April 2014 outage in the state of Washington indicated that the source of the issue resided in a process that was unknown to the State and its PSAPs. MCP recommends that the Program complete a review of Intrado’s corrective actions and CenturyLink/Intrado joint follow-up actions stated in CenturyLink’s April 24, 2014, Major Outage Report to the Washington Utilities & Transportation Commission. Such prudence should serve Arizona with assurances that risk has been mitigated for the State as it and its PSAPs consider the procurement of NG9-1-1 services from CenturyLink in the future.

The CenturyLink documentation did not raise major concerns with the solution design and service offering. However, there are several areas where MCP recommends that additional documentation be detailed in a consolidated Services Agreement that is supported by significant service level agreements (SLAs). This will provide the State with definitive services and assurances that CenturyLink is committed to maintaining the services. Ultimately, as proposed, the solution appears feasible and would provide many beneficial services to the State’s PSAPs and its constituents in a service-based model that enables an efficient and predictable operating expense model.



1. BACKGROUND

The Program initially provided nine documents for MCP to review for the Managed Services Technical Review. MCP's task assignment was to review all of the technical documentation associated with the Managed 9-1-1 Services offering and provide a written report outlining the solution's strengths and vulnerabilities, as well as recommendations on how the vulnerabilities may be overcome. The review was to consider the requirements checklist and add additional requirements to ensure a thorough review of the Managed Services solution.

During the review period, MCP requested additional documentation be provided by the Program to address several Project Checklist Requirements. The Program did not have the documentation and requested that CenturyLink provide the information. CenturyLink delivered a set of documents in response to the Program's request within four business days. Table 1 provides a listing of the documents received and reviewed by MCP.

Table 1 – Technical Documents Reviewed

Document Name	Description	Date Received
A9-1-1 Great Migration Plan for AZ	June 2012 proposal for bundled, managed NG9-1-1 services offering	Monday, May 5, 2014
AZ NG9-1-1 Technical Review 4-14-14	CenturyLink Next Gen 9-1-1 and Managed 9-1-1 CPE Technical Overview for Arizona Solution	Monday, May 5, 2014
Clearview reports - A911	Guide for using Clearview reporting tool	Monday, May 5, 2014
Managed 911 - Service Level Goals - 6-11-2013	Description of CenturyLink Service Level Goals for 9-1-1 Routing and ALI Management Services	Monday, May 5, 2014
MapSAG	Intrado marketing sheet for MapSAG product	Monday, May 5, 2014
MPLS SLAs 6-11-2013	CenturyLink MPLS VPN Service Level Agreement	Monday, May 5, 2014
NG911 Managed Services - Arizona Network	Detailed network diagram	Monday, May 5, 2014
PAD MOP CenturyLink Work and Testing Instructions 102313CH Final	Work instructions document for PSAP Abandonment Device (PAD)	Monday, May 5, 2014
PowerProbe6000AndPowerProbe500_CCW-20472-0_DS_NM_0	PowerProbe marketing booklet for PowerProbe 6000 and PowerProbe 500 devices	Monday, May 5, 2014
Denver dn1	CenturyLink marketing sheet for Denver 1 data center	Tuesday, May 20, 2014
Denver dn2	CenturyLink marketing sheet for Denver 2 data center	Tuesday, May 20, 2014
Denver dn3	CenturyLink marketing sheet for Denver 3 data center	Tuesday, May 20, 2014



Document Name	Description	Date Received
MCP Responses Set 1 sed	CenturyLink responses to MCP's request for additional documentation	Tuesday, May 20, 2014
PBN-2013-Third Party IP-Recording Kit	Intrado's IP recording product bulletin	Tuesday, May 20, 2014

2. REQUIREMENTS CHECKLIST

The following requirements checklist was provided by the Arizona 9-1-1 Program. MCP added two additional requirements that may be viewed at the bottom of the checklist. The checklist was used to review the documentation provided against the system requirements.

Table 2 – Requirements Checklist

Status	Requirement	Reference
<input checked="" type="checkbox"/>	Feasibility of proposed technical solution	Page 33
<input checked="" type="checkbox"/>	Single Point of Contact Solution	Page 34
<input checked="" type="checkbox"/>	Ubiquitous (eliminates or has the ability to eliminate communication boundaries such as but not limited to service provider, LATA and state boundaries)	Page 6
<input checked="" type="checkbox"/>	NENA i3 compliant (current and future requirements)	Pages 7-10
<input checked="" type="checkbox"/>	End-to-end IP signaling from VoIP endpoint to IP-enabled PSAP	Pages 10-11
<input checked="" type="checkbox"/>	Geo-diverse	Pages 11-12
<input checked="" type="checkbox"/>	Redundant (Identify any single points of failure)	Pages 12-13
<input checked="" type="checkbox"/>	The agreement ensures the use of the latest technologies, versions and industry standards for CenturyLink Provided Equipment: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Software <input checked="" type="checkbox"/> Hardware <input checked="" type="checkbox"/> Firmware <input checked="" type="checkbox"/> Network <input checked="" type="checkbox"/> Maintenance 	Pages 34-39
<input checked="" type="checkbox"/>	Sufficient connectivity with legacy network to allow for transparent communication between networks: <ul style="list-style-type: none"> <input checked="" type="checkbox"/> Proper gateways for service providers <input checked="" type="checkbox"/> PSAP to PSAP communications 	Pages 13-14



Status	Requirement	Reference
☑	Meets or exceeds industry standards regarding: <ul style="list-style-type: none"> ☑ Network capabilities (to include last mile) ☑ NG911 Core Services ☑ Sufficiently handle call load without degrading quality of service 	Pages 14-15
☑	Emergency call routing to the correct PSAP based on caller location; callback number and caller location are delivered to the PSAP with the call	Page 15
☑	Supports call originations from legacy wireline/wireless originating networks, as well as from VoIP callers and text messaging applications	Page 16
☑	Supports call originations from many different devices and services (e.g. SMS, IM, video PDSs, telematics, TTY/TDD, etc.)	Page 17
☑	IP-Enabled Equipment	Page 18
☑	Support (network and PSAP)	Pages 48-49
☑	Logging capabilities	Page 19
☑	Review of metrics and data provided by the ClearView Reporting tool	Pages 49-50
☑	Review of overall metrics as being necessary and sufficient to support the State's objective	Page 50
☑	Administrative line demarcation (New Checklist Requirement)	Pages 18-19
☑	Security of Managed Services (New Checklist Requirement) – Physical, Administrative, and Network Security including but not limited to NENA 75-001 (NG-SEC)	Pages 20-23

3. SOLUTION DESIGN

The CenturyLink Managed Services offering provides the Program with a geo-diverse, nationally hosted NG9-1-1 call routing and call handling solution. It includes several applications and services that will enable Arizona PSAPs to migrate to new technology in an operating expense model. The following table addresses beneficial features, vulnerabilities and recommendations for improving the solution design or its associated documentation.



Table 3 – Solution Design Review

Topic Area	Commentary	Reference
Ubiquitous – (eliminates or has the ability to eliminate communication boundaries, such as but not limited to service provider, LATA and state boundaries)		
NENA Network-of-Networks Vision	<p>Meets requirements.</p> <p>The Managed Services offering may be viewed as a cloud-hosted, Software-as-a-Service (SaaS) model where the ESInet is a combination of hosted services in regional and national data centers, with interconnection of PSAPs over private, leased Multi-Protocol Label Switching (MPLS) networks. Participating PSAPs would be part of a nationwide CenturyLink/Intrado ESInet enabling ubiquitous call transfers of voice and data to any other PSAP on the CenturyLink/Intrado ESInet, regardless of local access and transport area (LATA) and state boundaries.</p> <p>Based on the referenced figure, it appears that the solution aligns with NENA’s “network-of-networks” vision by providing interconnection with other i3 networks via the CenturyLink/Intrado-provided Border Control Function (BCF).</p>	A9-1-1 Great Migration Plan for AZ, Appendix A, Figure 1, pg. 18
i3 Call Transfers	<p>Unable to determine whether the solution meets requirements.</p> <p>Figure 1 from the referenced document indicates interoperability with other i3 networks. However, CenturyLink’s documentation does not describe interconnection and interoperability with other networks.</p> <p>MCP recommends that the Program request additional documentation from CenturyLink that describes how the Managed Services solution will interconnect with other i3 networks, either in-state regional networks or neighboring state networks. The services description should identify transfer services that will be supported, which should include but are not limited to voice, text to 9-1-1, location data, supplemental data, call types, the i3 interface(s) and protocols that will be used, physical points of interconnect, and whether additional fees may apply for said interoperability.</p>	A9-1-1 Great Migration Plan for AZ, Appendix A, Figure 1, pg. 18
Legacy Selective Router Transfers	<p>Unable to determine whether the solution meets requirements.</p> <p>The referenced documentation states that the Managed Services offering should include legacy selective router call transfers and that CenturyLink will</p>	AZ NG9-1-1 Technical Review 4-14-14, Section 7.2 & 7.3



Topic Area	Commentary	Reference
	<p>work with alternative service providers to establish connectivity to other selective routers and automatic location identification (ALI) systems. However, the documentation does not definitively describe whether call transfers to/from PSAPs served by legacy selective routers (LSRs) will provide ALI data.</p> <p>MCP recommends that the Program request that CenturyLink provide additional language in Section 7.3 that describes the specific interfaces on calls, both in to and out of the system. The documentation should describe if ALI will be provided in call transfers to and from LSRs and switches, including those from alternative service providers. Any limitations to LSR call transfers, such as ALI only being available for certain call types, should be included in this section. The potential exists where alternative service providers may not be willing to connect to the LSRs or LNGs in Phoenix and Tucson, requiring CenturyLink to pick up their traffic at the alternative service provider’s switch(es). As such, the Program should request that CenturyLink describe whether there are any additional costs associated with the connectivity and services described in Section 7.3.</p>	
NENA i3 Compliant (current and future requirements)		
NENA i3 – General	<p>Meets requirements.</p> <p>The Managed Services offering describes migrating PSAPs to i3 services and references all of the i3 functional elements, including i3 protocols and interfaces.</p> <p>MCP recommends that the Program obtain additional documentation on the specific services and features of the i3 Managed Services offering. MCP recommends that the Program obtain more details on the PSAPs’ i3 migration process, the timing with making the move from legacy systems to i3, and any limitations of the service. Specific recommendations follow in the next six topic areas.</p>	<p>A9-1-1 Great Migration Plan for AZ – references throughout the document</p> <p>AZ NG9-1-1 Technical Review 4-14-14, Section 12</p> <p>MCP Responses Set 1 sed</p>
Emergency Call Routing Function (ECRF) and Location Validation Function (LVF)	<p>Meets requirements.</p> <p>The ECRF and LVF descriptions provide information on the functions they serve at a high level. Additional information would be helpful in understanding the</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 12.1.1</p> <p>A9-1-1 Great Migration Plan for AZ,</p>



Topic Area	Commentary	Reference
	<p>provisioning of these critical systems.</p> <p>MCP recommends that the Program obtain additional documentation from CenturyLink on what these components will provide to the PSAPs. At a minimum, the additional documentation should describe: the features that these systems will provide; how validations will be made; the interface to the Communication Service Providers (CSPs); how updates to the ECRF are performed; how the GIS data is managed/coalesced between all GIS data providers; how conflicts are managed between GIS data sources; what happens when a CSP's record cannot be validated; and the Internet Engineering Task Force (IETF) Request For Comments (RFC) for those functions that are in compliance.</p>	<p>Appendix A</p> <p>MCP Responses Set 1 sed</p>
<p>Emergency Services Routing Proxy (ESRP) and Policy Routing Function (PRF)</p>	<p>Meets requirements.</p> <p>The ESRP description provides insight to the general function of the element and its ability to route calls utilizing latitude/longitude, civic location or routing keys. The PRF description details the policies and processes that PSAPs will use for making updates to their routing policies. The description highlights features that exceed i3 functionality with alternative fallback routing methodologies that could be beneficial to the PSAPs.</p> <p>A topic that is not discussed in the referenced documentation, yet a key element of the ESRP, is queue management functionality. Basically, the ESRP and PRF work together to manage call queues from which terminating ESRPs (CPE in legacy terms) will pull calls from the queues to which PSAP(s) are subscribed.</p> <p>MCP recommends that the Program obtain additional documentation from CenturyLink on these components. At a minimum, the additional documentation should describe the interfaces that the ESRP will support, its queue management capabilities with the proposed call handling systems, and the IETF RFCs for those functions that are in compliance.</p>	<p>MCP Responses Set 1 sed</p>
<p>Location Information Server (LIS) and Call Information Database (CIDB)</p>	<p>Meets requirements.</p>	<p>MCP Responses Set 1 sed</p>



Topic Area	Commentary	Reference
	<p>The LIS and CIDB descriptions provide a logical solution to the issue of carriers not providing LIS and CIDB systems, which is an industry issue for the foreseeable future. The CenturyLink/Intrado solution solves a challenge that is not addressed in i3 and exceeds the requirements set forth in the standard.</p>	
Event Logging Service	<p>Meets requirements.</p> <p>The referenced documentation describes the i3 Event Logging Service at a high level.</p> <p>MCP recommends that the Program obtain additional documentation from CenturyLink on the event logging interface, call event log details, and the system's reporting capabilities.</p>	MCP Responses Set 1 sed
Forest Guide	<p>Unable to determine whether the solution meets requirements.</p> <p>The i3 Forest Guide service is not described in the CenturyLink documentation. The Forest Guide feature enables interoperability between i3 systems. MCP recommends that the Program obtain additional documentation from CenturyLink on the Managed Services' support for Forest Guide routing. At a minimum, the additional documentation should describe how the service will interface with a state-level and/or national Forest Guide and what IETF RFCs the system will support pertaining to Forest Guide.</p>	Not applicable
i3 Guarantee	<p>Meets requirements.</p> <p>The referenced documentation describes the Managed Services providing a guarantee to support "all functions and protocols specified in the NENA i3 reference architecture."</p> <p>The documentation speaks to a guarantee, but no remedies are described in the Intrado proposal. This provides two concerns: 1) the guarantee does not provide for remedies if the Managed Services do not support all i3 functions and protocols; and 2) the guarantee is made in Intrado's proposal document, not CenturyLink's.</p> <p>MCP recommends that the Program ask CenturyLink to define the remedies if</p>	A9-1-1 Great Migration Plan for AZ, page 1, 2 and 4



Topic Area	Commentary	Reference
	<p>the Managed Services do not support all i3 functions and protocols, i.e., what is the process for raising concerns regarding i3 compliance after Managed Services go live? MCP also recommends that the Program have the i3 Guarantee detailed in the appropriate CenturyLink document, such as the CenturyLink Services Agreement.</p> <p>Unable to determine whether the solution meets requirements.</p> <p>The Great Migration Plan describes the i3 Guarantee in the context of Advanced 9-1-1 (A9-1-1) VIPER services, but it does not mention whether it applies to the Cassidian VESTA call handling solution.</p> <p>MCP recommends that the Program seek clarification from CenturyLink on whether the i3 Guarantee applies to the Cassidian VESTA call handling solution and its associated applications, such as Aurora, Data Sync, and Vela.</p>	<p>A9-1-1 Great Migration Plan for AZ, page 1 and 7</p>
End-to-end IP signaling from VoIP endpoint to IP-enabled PSAP		
<p>PSAP Gateway Manager (PGM) Terminal Server</p>	<p>Does not meet requirements.</p> <p>The referenced documentation indicates that the Managed Services will not provide for end-to-end IP signaling from VoIP endpoint to IP-enabled PSAP, at least initially. It states that PSAP gateway managers (PGMs) will convert IP traffic to centralized automatic message accounting (CAMA) signaling before delivering the call to the host call handling equipment.</p> <p>PGMs are required when interfacing with legacy CPE that is not IP capable. Both the VESTA and VIPER call handling systems are IP capable and have been deployed with the Request For Assistance Interface (RFAI), which provides IP call delivery in an Emergency Services Number (ESN)-based routing solution. Additionally, both systems have the ability to provide a NENA i3-compliant, IP interface.</p> <p>Other reasons to eliminate PGMs in the call flow include:</p> <ul style="list-style-type: none"> • IP-to-Time Division Multiplexing (TDM) conversions increase the risk of echo • The use of PGMs adds latency to call setup 	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 5.0, third bullet</p> <p>NG911 Managed Services - Arizona Network Diagram</p>



Topic Area	Commentary	Reference
	<ul style="list-style-type: none"> • PGMs represent another potential point of failure in the call path • A system process for accommodating PGMs was the critical factor in the CenturyLink outage in Washington State on April 9-10, 2014 <p>Based on the information above, MCP recommends that the Program require that CenturyLink remove PGMs from the hosted CPE solution design. This recommendation is made on the assumption that all PSAPs on the CenturyLink ESInet will have purchased the complete Great Migration solution. PGMs may be required for interfacing to other CPE systems on the ESInet and exceptions may be appropriate for PSAPs that do not use the bundled VIPER or VESTA solutions.</p>	
Network Design		
Geo-diverse	<p>Meets requirements.</p> <p>One of the strengths of the Managed Services offering is that it provides for geo-diversity throughout the solution design. Originating 9-1-1 traffic is delivered to two geographically diverse legacy network gateways (LNG) located in Phoenix and Tucson, Arizona.</p> <p>Meanwhile, the core intelligence and database elements of the solution are hosted in geographically diverse data centers in Englewood, Colorado, and Miami, Florida. This extreme geo-diversity provides improved survivability of the solution by assuring that a localized catastrophic weather or man-made event cannot take down both nodes.</p> <p>The geo-diverse design includes the host call handling systems. The VIPER hosts are located in the same Englewood and Miami data centers, while the VESTA hosts are located in Highlands Ranch, Colorado and Phoenix, Arizona.</p> <p>CenturyLink’s solution design incorporates geo-diversity into the design of the local access for each of the aforementioned critical network elements, with each element having diverse local points of presence (POP) for accessing CenturyLink’s nationwide MPLS network. Once the packets are “on net” the inherent quality of MPLS is that there are dozens of route combinations</p>	NG911 Managed Services - Arizona Network Diagram



Topic Area	Commentary	Reference
	available to deliver each packet from point A to point Z.	
Redundant	<p>Unable to determine whether the solution meets requirements.</p> <p>The Managed Services solution design provides redundant call path components throughout the design.</p> <ul style="list-style-type: none"> • Originating traffic at each of the LSRs is redundantly connected to two LNGs • LNGs are redundant with locations in Phoenix and Tucson • Each LNG location has redundant IP routers connecting to redundant MPLS POPs • The MPLS network interconnects all network nodes with redundant virtual private networks (VPNs) • MPLS bandwidth is redundant to provide for 100 percent capacity in case of failure to one of the connections • Core databases and routing elements are redundant in Englewood and Miami • Redundant IP routers are provided at each core node • VIPER hosts are redundant in Englewood and Miami • VESTA hosts are redundant in Highlands Ranch and Phoenix • Redundant IP routers are provided at each VESTA host site • Redundant IP routers are provided at each PSAP location <p>The documentation does not provide details as to the redundancy of critical support components such as the network operations center (NOC), monitoring systems, provisioning systems, backup systems, and data archive systems. Additionally, the referenced network diagram does not show redundant Layer 2 connectivity between the VESTA cores.</p> <p>MCP recommends that the Program request that CenturyLink provide details regarding the redundancy of support systems and the VESTA Layer 2 connectivity.</p>	<p>NG911 Managed Services - Arizona Network Diagram</p>
	<p>Unable to determine whether the solution meets requirements.</p> <p>The referenced document states “CenturyLink will provide dual, redundant, and</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 6.1</p>



Topic Area	Commentary	Reference
	<p>diverse IP connectivity via the CenturyLink provided iQ MPLS private port from the ECMC to the PSAP as available.”</p> <p>MCP recommends that the Program request that CenturyLink provide details where redundant and diverse IP is not available to the PSAP.</p> <p>MCP recommends that the Program request detailed network mapping down to the card level to ensure that there is no single point of failure.</p>	
<p>Sufficient connectivity with legacy network to allow for transparent communication between networks - Proper gateways for service providers</p>	<p>Meets requirements.</p> <p>Similar to today’s LSRs, the Managed Services offering provides for two redundant, geographically diverse LNGs located in Phoenix and Tucson. These gateways provide proper interconnection to the ESInet for legacy TDM traffic. CenturyLink’s recommendation for the ingress network to the gateways calls for a ratio of 1.3 trunks for every LSR-to-PSAP trunk, with the caveat that they will monitor traffic volumes and adjust the ratio up/down accordingly. This recommendation is the industry norm and appropriate for the Arizona deployment.</p> <p>A topic that was not addressed in the CenturyLink documentation is the ability for the solution to accept calls from CSPs via native Session Initiation Protocol (SIP). The standard for the SIP call delivery to an ESInet is under development, which is likely the reason that this topic was not discussed. However, during the course of the next five years, it is anticipated that the standard will be ratified and carriers will be ready to deliver their calls via SIP. Therefore, MCP recommends that the Program request that CenturyLink provide a service description in the consolidated Services Agreement detailing the points of interconnect (POI) for SIP call delivery and the process for migrating carrier traffic from the gateways to the SIP POI.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 11.0</p> <p>“As a PSAP is migrated to a NG PSAP, CenturyLink will replace the existing EM trunks from the Legacy Selective Router (LSR) to the PSAP with SR trunks from the LSR to the LNG Gateways. CenturyLink’s recommended design will be a ratio of (1.3) ES trunks for every (1) legacy EM trunk. During the migration of PSAPs from the legacy network to the ESInet, CenturyLink will monitor the traffic volumes and may adjust this ratio up or down as needed. Additionally, trunks from the LNG to the LSR are needed to support call transfers from NG PSAPs to Legacy PSAPs or vice versa, which may also impact the required ratio.”</p>
<p>Sufficient connectivity with legacy network to allow for transparent communication between networks – PSAP-to-PSAP communications</p>	<p>Meets requirements.</p> <p>The referenced documentation describes the requirement for LNG-to-LSR trunks for the purposes of call transfers between legacy and NG9-1-1 PSAPs. As one-directional TDM trunks, the minimum capacity that could be installed is</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 11.0</p> <p>“Additionally, trunks from the LNG to the LSR are needed to support call</p>



Topic Area	Commentary	Reference
	<p>a Digital Signal 1 (DS1) circuit, which would provide for up to 24 simultaneous call transfers, i.e., 24 calls may be transferred via a DS1 from the LSR to the LNG and 24 calls may be transferred via a DS1 from the LNG to the LSR at any single given point in time. Similar to the commitment to monitoring CenturyLink’s ingress network trunk capacity, MCP recommends that the Program request that CenturyLink add a commitment to the consolidated Services Agreement for monitoring the call transfer volumes and adjusting capacity accordingly.</p>	<p>transfers from NG PSAPs to Legacy PSAPs or vice versa, which may also impact the required ratio.”</p>
<p>Meets or exceeds industry standards - Network capabilities (to include last mile)</p>	<p>Unable to determine whether the solution meets requirements.</p> <p>The Managed Services offering meets industry standards for network capabilities by providing redundant and diverse MPLS connectivity to each network element, including PSAPs where feasible. Each network node has redundant edge routers terminating the IP connectivity. The network is advertised as using leading network protocols for management of IP traffic and providing fast convergence of the networks should an issue be experienced with one of the network paths. Redundant and diverse VPNs provide for isolation of traffic. The network is proactively monitored and alarms are sent to the CenturyLink NOC for investigation and troubleshooting. The network supports Quality of Service (QoS) for packet prioritization and security is implemented on the network.</p> <p>However, in response to MCP’s request for last mile diagrams, CenturyLink stated that “CenturyLink network maps are proprietary and due to competitive and security issues, CenturyLink will not provide last mile diagrams of the last mile facilities. However, upon request, CenturyLink will allow MCP to view these maps at a CenturyLink facility. No photos, notes, or drawings will be allowed.” The Task Order timeline did not provide for the opportunity for MCP to travel to a CenturyLink facility to review their available maps. As such, MCP recommends that the Program take CenturyLink up on the offer to view last mile network maps and take note of which POPs, data centers, and PSAPs have last mile network diversity challenges. This information will be valuable in understanding limitations of the network. With this information, the Program will be enabled to work with vendors to develop network diversity to locations, as feasible and appropriate.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Sections 5.0, 6.0, 8.0, 13.6, 13.7</p> <p>MCP Responses Set 1 sed, Answer 3</p>



Topic Area	Commentary	Reference
<p>Meets or exceeds industry standards - NG911 core services</p>	<p>Meets requirements.</p> <p>The referenced documentation describes all of the core i3 functional elements, their feature functionality, and the protocols/interfaces required of those systems. The referenced materials describe these functions for the core services and for the VIPER solution. These descriptions, as well as the i3 Guarantee (if backed up with significant remedies), provide the Program with assurance that the Managed Services offering will meet industry standards for NG9-1-1 core services.</p> <p>MCP recommends that the Program request that CenturyLink consolidate all of the NG9-1-1 service descriptions into a single section within the consolidated Services Agreement. Additionally, MCP recommends that the Program request documentation and commitment from CenturyLink regarding the Cassidian VESTA's support for NENA i3 protocols and interfaces. This should be addressed in the updated i3 Guarantee SLA.</p>	<p>A9-1-1 Great Migration Plan for AZ, pg. 4 and Appendix A</p> <p>MCP Responses Set 1 sed, Answer 1</p>
<p>Meets or exceeds industry standards - Sufficiently handle call load without degrading quality of service</p>	<p>Meets requirements.</p> <p>The referenced sentence commits to the MPLS network providing the industry standard P.01 grade of service, which correlates to no more than one blocked call out of 100 in busy hour traffic. This commitment, combined with the use of the <i>de facto</i> industry standard 1.3 ratio for ingress trunks to the ESInet and the monitoring of ingress traffic, leaves MCP to believe that the network meets industry standards and that it is designed to sufficiently handle call load without degrading quality of service.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 6.2</p> <p>“The CenturyLink provided iQ MPLS private port will meet the industry standard P.01 grade of service. P.01 will be applied from CenturyLink sites to the PSAP over the CenturyLink supplied network.”</p>
<p>Emergency call routing to the correct PSAP based on caller location; callback number and caller location are delivered to the PSAP with the call</p>	<p>Unable to determine whether the solution meets requirement.</p> <p>The Managed Services offering provides for emergency calls to be routed to the correct PSAP based on the caller's location, either through a legacy selective routing feature or through an i3 geospatial routing feature. However, not all situations will provide for the call back number and caller location to be delivered with the call. This is not due to a limitation of the solution design, but rather a reality of today's limitations in the delivery of location with the call from the originating networks, limitations in the wireless location acquisition technology, and standards-based call processing models.</p>	<p>Not Applicable</p>



Topic Area	Commentary	Reference
	<p>i3 call delivery includes the callback number in the SIP INVITE and provides for the ability to deliver caller location with the call. However, in Location-by-Reference (LbR) scenarios such as wireless calls, the call may be dereferenced prior to call delivery, but in most cases, the location may be that of the cell site and call routing will have to be performed on the cell site or cell sector's centroid location. In some cases, a location universal resource identifier (URI) may be provided to the CPE and it may have to be dereferenced after the call is delivered. In both cases, a "rebid" by the CPE will send a Hypertext Transfer Protocol (HTTP)-Enabled Location Determination (HELD) dereference query to attempt to obtain a more accurate Phase II location for the caller. In some cases, Phase I location may only be available. However, in these i3 LbR calls, the CPE may be able to automatically perform the HELD query to obtain location data in parallel to the call setup process with the remote PSAP workstation. It is anticipated that the callback number and caller location (minimum Phase I) will be delivered with the call to the workstation in a vast majority of calls.</p> <p>Calls delivered via RFAI will not provide caller location on call delivery to the host CPE, as the call setup is based on ESN-based routing with a subsequent ALI query to retrieve location information. However, in these RFAI calls, the CPE will query ALI and should obtain ALI data in parallel to the call setup process with the remote PSAP workstation. It is anticipated that the callback number and caller location (minimum Phase I) will be delivered with the call to the workstation in a vast majority of calls.</p> <p>MCP recommends that the Program confirm the standards-based assumptions above and how much of the location retrieval function will take place before the call is presented to the PSAP, as these details were not provided in the documentation for this assessment.</p>	
Supports call originations from legacy wireline/wireless originating networks, as well as from VoIP callers and text messaging applications	<p>Meets requirements.</p> <p>The Managed Services offering supports call originations from legacy wireline, wireless, voice over IP (VoIP) and text messaging applications; specifically short message service (SMS) text.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 7.1</p> <p>"Next Gen 9-1-1 Routing allows for specialized management of wireline,</p>



Topic Area	Commentary	Reference
	<p>In April 2013, the Alliance for Telecommunications Industry Solution (ATIS) and the Telecommunications Industry Association (TIA) released J-STD-110 Joint ATIS/TIA Native SMS to 9-1-1 Requirements and Architecture Specification. This industry standard “defines capabilities necessary to support SMS to 9-1-1, including standardized interfaces from the originating network to the PSAP, obtaining coarse location for routing, handling bounce-back messages, and managing the text message dialog between the originator and PSAP.”</p> <p>The Intrado solution advertises its abilities to provide an i3 interface with its call handling application, Power 911. Additionally, the solution provides a Web-browser for text delivery to the CPE that is not text enabled.</p> <p>Cassidian stated that it plans “to support text messaging when these standards are determined and approved by NENA. Once this is approved and offered by Cassidian, CenturyLink will make this optional feature available to the PSAP.”</p> <p>MCP understands that NENA views J-STD-110 as the industry standard defining emergency SMS delivery via Message Session Relay Protocol (MSRP) to PSAP CPE. The NENA i3 standard states that call handling equipment must support MSRP.</p> <p>MCP recommends that the Program require that the Cassidian solution provide text delivery directly to the call handling user interface (UI). This will enable call takers to process text messages in the call taking UI without the need for a separate window. This should also provide for consolidated voice and SMS management information systems (MIS) reporting.</p>	<p>wireless, and VoIP call types. Call types are determined based on the incoming call source facility (e.g. MSC, End office), as well as, the information provided within call signaling.”</p> <p>A9-1-1 Great Migration Plan for AZ, pg. 8</p> <ul style="list-style-type: none"> ▪ “Converts SMS messages incoming from the wireless carrier/SMS aggregator to the SIP dialogue” <p>MCP Responses Set 1 sed, Answer 4</p> <p>http://www.atis.org/PRESS/pressreleases2013/040213.asp</p>
<p>Supports call originations from many different devices and services (e.g., SMS, IM, video PDSs, telematics, TTY/TDD, etc.)</p>	<p>Meets requirements.</p> <p>The referenced documentation advertises the capability of the Managed Services offering for supporting many different sources of systems such as SMS, multimedia service (MMS), hazardous materials data, floor plan, and gunshot detection data; the system also supports legacy teletypewriter/telecommunications device for the deaf (TTY/TDD).</p>	<p>A9-1-1 Great Migration Plan for AZ, page 9 and 15</p>



Topic Area	Commentary	Reference
	<p>Additional Data is an area that is under standards development with NENA i3 v2, which is anticipated to be released sometime in 2014 with more standards development work that will carry into the standard's future versions.</p> <p>The Program should expect that call origination from sources other than the Great Migration bundled services of voice, SMS, MMS and TTY/TDD may incur additional fees for the services. However, the i3 Guarantee (with suggested remedy revisions) provides the Program with assurance that the system will comply with all current and future i3 systems, interfaces, and protocols for processing all i3 call/data types.</p>	
IP-Enabled Equipment	<p>Meets requirements.</p> <p>The VIPER and VESTA systems are industry leading IP-enabled call handling systems with the two platforms providing a majority of the call processing across the United States. These systems are able to process native SIP call delivery, eliminating TDM transport once the call reaches the ESInet.</p>	<p>http://www.cassidiancommunications.com/pdf/PB_Vesta_Sentinel4.pdf</p> <p>A9-1-1 Great Migration Plan for AZ, page 7</p>
Administrative Line Demarcation (New Checklist Requirement)	<p>Meets requirements.</p> <p>The referenced documentation is the first mention of the demarcation for administrative (admin) lines to the hosted call handling systems. In the industry, Foreign Exchange Office (FXO), Foreign Exchange Subscriber (FXS), and T1 gateways provide for the integration of admin lines with the PSAP CPE. Therefore, MCP deciphers the description of "Gateways (FXO, FXS, and T1)" to indicate that the PSAP's admin lines will be terminated locally at each PSAP.</p> <p>Termination of admin lines at the remote PSAP provides benefits and limitations to the features of a host/remote solution. As described with having admin lines terminating at the remote PSAP, the solution provides a secondary level of survivability in that if the MPLS network connectivity to the system is lost, then NG9-1-1 routing rules may be capable of being provisioned to send the 9-1-1 calls to a public switched telephone network (PSTN) number, e.g., the locally terminated PSAP admin lines.</p> <p>A potential limitation of the admin line design is that it may provide for the</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Sections 15.4 and 7.1</p>



Topic Area	Commentary	Reference
	<p>capability to send admin lines to multiple physical locations, which is a beneficial feature when a PSAP would like to spread its call takers over multiple locations. However, this feature would be enabled if the solution is designed to have the capability to backhaul the admin lines back to the core host sites and then deliver the calls to other destinations. MCP recommends, given this speculation of benefits and features, that the Program request a list of features and limitations of the admin line solution design.</p>	
Logging Capabilities	<p>Meets requirements.</p> <p>The referenced documentation describes analog output of position audio for recording of all position-based audio, e.g., 9-1-1 calls, administrative calls, and radio transmissions for both the VIPER and VESTA call handling solutions. The referenced documentation identifies an IP recording solution for the Intrado VIPER solution, which requires IP taps at each VIPER node. Based on the Third-Party IP-Recording Kit description, it appears that the logging device would have to be collocated with the VIPER nodes. This leaves questions about the ability to host third party loggers; to access log files; and to correlate them with admin line and radio traffic, as well as the maintenance and service of those systems. These questions may be offset with the option for having a cloud-hosted logging recorder solution that is briefly described in the referenced documentation. The documentation should also clearly delineate whether the Managed Services will also provide functionality for instant recall recording (IRR) of communications media. IRR provides limited instant playback of phone, radio and other media traffic, and is typically accessible at every PSAP operational position. Lastly, CenturyLink identifies that the NENA i3 specifications for logging are still under development and that the Intrado solution will support the future i3 specification. In summary, CenturyLink has presented the following logging capabilities:</p> <ol style="list-style-type: none"> 1. VIPER – Analog, position-side recording of radio, administrative line and 9-1-1 traffic 2. VIPER – IP packet recording at each VIPER node. Radio and admin lines would be recorded separate of the 9-1-1 calls by the logging recorder; as a result, correlation between 9-1-1 and radio transmissions would have to be performed independently. It is unclear whether the 	<p>MCP Responses Set 1 sed, Answer 6</p> <p>PBN-2013-Third Party IP-Recording Kit</p>



Topic Area	Commentary	Reference
	<p>Managed Services will support this solution due to the VIPER nodes being hosted at Intrado data centers</p> <ol style="list-style-type: none"> 3. VIPER – cloud-hosted, multi-vendor logging recorder options available 4. VIPER – future i3 logging interface <p>VESTA – Analog, position-side recording of radio, admin line and 9-1-1 traffic</p> <p>The position-side, analog recording option provides for a ubiquitous logging solution across both call handling solutions. With the NENA i3 logging specifications standing undefined, MCP recommends that Arizona PSAPs utilize the analog, position-side recording option until an i3 logging solution becomes available. Additionally, MCP recommends that the Program require CenturyLink to provide details on the cloud-hosted logging recorder options, the features that they provide, and the associated costs so that PSAPs may consider those options when considering the Managed Services offering. MCP recommends that the Program request that research be conducted prior to implementing a cloud-hosted logging solution, to assure continued compliance with all State and local laws regarding retention, access and storage of communications records.</p>	
<p>Security of Managed Services (New Checklist Requirement)</p>	<p>Meets requirements.</p> <p>As Arizona PSAPs make the move to NG9-1-1, the importance of security of the 9-1-1 system drastically increases. The legacy network is a closed system with controlled access through defined entry points. While much of this holds true for the ingress network, the ESInet is inherently an IP network consisting of a multitude of logical access points. With this in mind, NENA has developed the Security for Next-Generation 9-1-1 Standard (NG-SEC, NENA 75-001). While not all NG-SEC requirements may apply to the Managed Services offering, it provides a baseline set of requirements for consideration in defending the PSAP's 9-1-1 services from security threats.</p> <p>The referenced documentation provides great insight to the approach to the security of the Managed Services offering. The layering tactic of a defense-in-depth security strategy is used by the world's top information security offices and it appears that the CenturyLink solution provided by Intrado has a strategy</p>	<p>MCP Responses Set 1 sed, Answer 7</p>



Topic Area	Commentary	Reference
	<p>that is well built to defend the ESInet from malicious attacks. It is encouraging that the solutions provider is an active participant in Network Reliability and Interoperability Council (NRIC) 7 focus group 2B Cyber-Security and that its cybersecurity policies, standards, and guidelines are compliant with industry best practices as defined by International Organization for Standardization and Control Objectives for Information and related Technology (COBIT). Highlights of the security for the solution include:</p> <ul style="list-style-type: none">• Multi-layer Security Strategy• Physical Security<ul style="list-style-type: none">○ Logical access○ Physical access○ System power○ Geographic separation of core systems○ Background checks• Network Security<ul style="list-style-type: none">○ Intrusion prevention/detection systems○ Data/network segmentation○ Role-based access○ Access control lists○ Stateful packet inspection firewalls○ Session border controllers○ Encryption○ Two-factor authentication access○ Vulnerability scans○ Monitoring• Data security<ul style="list-style-type: none">○ Role-based access○ Separate provisioning/production datasets○ Two-factor authentication access○ Separate development environment from production○ Anti-virus/Anti-malware○ Patch management○ Server hardening	



Topic Area	Commentary	Reference
	<p>MCP recommends that the Program request that CenturyLink provide a report on the Managed Services offering’s compliance with NG-SEC NENA 75-001. As stated previously, there may be areas that are not applicable to the solution. MCP recommends that the report detail what alternative preventative measures are in place to address the intent of the NG-SEC requirement for any areas where the solution is not compliant with NENA 75-001. In many cases, the solution may exceed the requirements of NG-SEC.</p> <p>Operationally, industry best practices provide for separation of security and network operations. MCP recommends that the Program request that CenturyLink describe whether there is a Security Operations Center (SOC), or a functional equivalent, that carries out the tasks above. The description should detail the hours of operation of the SOC, the metrics and reports that are monitored, and whether those reports may be made available to the Program and PSAPs.</p>	
	<p>Unable to determine whether the solution meets requirements.</p> <p>MCP recommends that the Program request that CenturyLink provide details in the consolidated Services Agreement defining “appropriate levels of security,” “industry standard security procedures,” and “security measures.” This may be a reference to new content describing the security of the solution as provided in the follow-up documentation received on May 20, 2014.</p> <p>MCP recommends that the Program require that CenturyLink add security levels, with specific reporting and timeframes, to the SLA. Lastly, MCP recommends that the Program require that CenturyLink perform background checks on all staff that have access to the system, including sub-contractors.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 6.2</p> <p>Bold formatting applied by MCP to highlight the statements referenced:</p> <p>“The iQ MPLS private port will have the appropriate levels of security in place both at the physical and application layers.”</p> <p>“The CenturyLink provided iQ MPLS private port will have the appropriate levels of security in place both at the physical and application layers, as determined within IPP. CenturyLink will secure the CenturyLink-provided iQ MPLS private port using industry standard security procedures against security attacks from other</p>



Topic Area	Commentary	Reference
		<p>networks or the public Internet.</p> <p>“CenturyLink will employ security measures where a PSAP may have dual-homed CPE (connected to both the CenturyLink solution and another service provider’s network).”</p>
PAD	<p>Meets requirements.</p> <p>The referenced material discusses the installation and testing procedures for the PSAP abandonment device (PAD). The solution appears to add value and provide an important service to PSAPs, as it provides PSAP personnel with the ability to self-initiate the abandonment process without having to engage technical support. The device will provide a lamp indicator showing that the PSAP is abandoned, which provides the PSAP’s leadership with comfort in knowing their PSAP abandonment status without having to call the NOC.</p> <p>The Technical Review document does not discuss the PAD. MCP recommends that the Program request that the PAD be described in a consolidated Service Agreement (see Service Agreement Updates section below) stating that it will be installed at all PSAPs. MCP recommends that all PSAPs contracting for the Managed Service have the PAD installed to ensure uniform service across the state.</p>	<p>PAD MOP CenturyLink Work and Testing Instructions 102313CH Final</p>
PowerProbe Servers	<p>Unable to determine whether the solution meets requirements.</p> <p>The referenced material discusses the features and benefits of the PowerProbe network metrics devices. PowerProbe provides a solution for measuring call quality in an IP network such as that which is proposed by CenturyLink. The solution design calls for centralized PowerProbe servers that reach across the ESInet to the PowerProbe 30 Responder device, which provides network performance statistics. Based on our experience in other similar deployments, MCP recommends that the PowerProbe servers be located at the network core in order to produce the most reliable call quality metrics. This will enable mean opinion score (MOS) metrics to be taken from the point where the media is</p>	<p>PowerProbe6000AndPowerProbe500_CCW-20472-0_DS_NM_0</p>



Topic Area	Commentary	Reference
	<p>anchored through the MPLS networks to the PSAP edge.</p> <p>The Technical Review document does not discuss the PowerProbe. MCP recommends that the Program request that the PowerProbe metrics be described in a consolidated Service Agreement stating the services that will be provided in the Managed Services offering. Details should include what metrics (if any) will be made available to the Program and PSAPs. Will metrics be available on an ad hoc, per call basis or in consolidated daily/weekly/monthly reports?</p>	
System Backup	<p>Unable to determine whether the solution meets requirements.</p> <p>MCP was unable to find any information in the provided documentation on how each of the systems will be backed up.</p> <p>MCP recommends that the Program require that CenturyLink provide details for system backup. These details should be provided in the consolidated Services Agreement with information on what systems are backed up; the frequency of backups; and the process for change management, backup retrieval and restoration.</p>	All documentation
<p>Local GIS data management with each of the nineteen 9-1-1 systems.</p> <p>“Confirmation is needed that the Managed Services solution provides for:</p> <ol style="list-style-type: none"> 1) Each 9-1-1 community to load their GIS locally.” 	<p>Unable to determine whether the solution meets requirements.</p> <p>The referenced documentation states that the goal of the Managed Services is to “create and maintain the authoritative GIS database for 9-1-1 purposes.” The documentation speaks to the ability of agencies to maintain their GIS data with their existing tools and loading the GIS data in to an agreed upon mechanism. The solution description does not detail the options available and how the disparate GIS datasets will be integrated with the new system.</p> <p>MCP recommends that the Program require CenturyLink to provide additional detail in the consolidated Services Agreement regarding the tools, processes and limitations related to the sharing and coalescing of 19 GIS datasets into an enterprise GIS database.</p>	<p>NG9-1-1 Core Services and mapping solutions questions from email sent by Sandra Gilstad received on May 20, 2014</p> <p>A9-1-1 Great Migration Plan for AZ, pages 6-7</p>
Local GIS data management with each of the nineteen 9-1-1 systems.	Unable to determine whether the solution meets requirements.	NG9-1-1 Core Services and mapping solutions questions from email sent by



Topic Area	Commentary	Reference
<p>“Confirmation is needed that the Managed Services solution provides for:</p> <p>2) At the level of the SIF/ECRF/LVF, that the local GIS data can be field mapped to an NG GIS data schema so that mass overhauls of local GIS data isn’t required.”</p>	<p>The State will likely have a variety of GIS data schemas due to its nineteen 9-1-1 systems in the state. The CenturyLink documentation does not describe any GIS data schema requirements and if the solution provides for field mapping of data fields to align the 19 GIS datasets into a single authoritative GIS database.</p> <p>MCP recommends that the Program require CenturyLink to provide additional detail in the consolidated Services Agreement describing the ability of the Managed Services to field map the GIS data schema so that the nineteen 9-1-1 systems may continue to manage their GIS data as they do today. The solution description should describe any limitations to unique field mapping for up to 19 data sources.</p>	<p>Sandra Gilstad received on May 20, 2014</p>
<p>“Enterprise map updates to be provided to each PSAP.”</p>	<p>Unable to determine whether the solution meets requirements.</p> <p>The referenced documentation describes single GIS servers being located at each VIPER and VESTA call handling system host site, with local GIS application servers at each remote PSAP. The documentation does not describe the process in which the call handling maps will be updated for each call handling system.</p> <p>MCP recommends that the Program require CenturyLink to provide additional detail in the consolidated Services Agreement describing the process for updating the remote GIS application servers. The Services Agreement should describe how the solution will support a state-level, enterprise map that publishes updates to multiple call handling host systems, which then feed each of the remote PSAPs’ GIS application servers. Limitations and assumptions of the Managed Services should be stated in the consolidated Services Agreement.</p>	<p>NG9-1-1 Core Services and mapping solutions questions from email sent by Sandra Gilstad received on May 20, 2014</p> <p>AZ NG9-1-1 Technical Review 4-14-14, Sections 15.3, 15.4 and 15.5</p>
Network Diagram/Description Edits		
<p>Ingress Network Design</p>	<p>Does not meet requirements.</p> <p>The referenced section suggests that each call will be selectively routed twice; once by the LSR and then again by the NG9-1-1 routing solution.</p> <p>MCP recommends that the Program request that CenturyLink incorporate a</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 11</p> <p>“As the PSAP is migrated to a NG PSAP, CenturyLink will update the routing in its LSR and based on ESN,</p>



Topic Area	Commentary	Reference
	<p>solution design that enables CSPs to direct connect to LNGs. This is the preferred method for delivering calls to the ESInet, as it eliminates a hop in the call path; it eliminates the maintenance of LSR records; and it eliminates the potential for CenturyLink to invoice for LSR services.</p>	<p>deliver the call over the EM trunks to a legacy PSAP or over the SR trunks to the LNG and then over the ESInet to a NG PSAP.”</p>
Egress Network Design	<p>Unable to determine whether the solution meets requirements.</p> <p>MCP recommends that the Program require that CenturyLink insert a statement to the effect of “Regardless of bandwidth sizing, the Managed Services fees will provide for the bandwidth required to deliver services between the host CPE sites and each PSAP.” The current language makes this assumption; it would be favorable to the PSAPs to have this commitment in the consolidated Services Agreement.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Sections 13.7.2 & 13.7.4</p> <p>“CenturyLink and Intrado will determine the exact required bandwidth each PSAP will require after site survey and call flow meeting has been conducted. Remote PSAP bandwidth above is only for estimating Host bandwidth requirements.”</p>
Data center bandwidth and ECMC to VIPER configuration	<p>Unable to determine whether the solution meets requirements.</p> <p>The referenced material does not specify bandwidth allotment between the Intrado Emergency Call Management Complex (ECMC) data centers in Miami and Englewood. In review of the solution design, MCP sees the most resilient solution design as the one that provides either ECMC with the ability to set up calls with either VIPER host. For example, the Miami ECMC may send calls to the Englewood VIPER in situations where the Miami VIPER is down and vice versa. The referenced diagram indicates that the Miami ECMC only delivers calls to the Miami VIPER and the Englewood ECMC only delivers calls to the Englewood VIPER. If represented accurately, this configuration would be detrimental to the solution’s availability, as a failure of either VIPER or ECMC would effectively take down the availability of its collocated partner ECMC or VIPER system.</p> <p>MCP recommends that the Program request clarification from CenturyLink on the ECMC/VIPER solution design and the bandwidth requirements between the Miami and Englewood data centers. A meshed configuration between the ECMCs and VIPERs is recommended. MCP believes that it is the intent that VPNs C & D provide the meshed connection between ECMCs and VIPERs;</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 13.6</p> <p>NG911 Managed Services - Arizona Network Diagram</p>



Topic Area	Commentary	Reference
	<p>however, the VPNs between the ECMCs and VIPERs are not labeled on the referenced diagram.</p> <p>Unable to determine whether the solution meets requirements.</p> <p>Per the discussion immediately above, MCP recommends that the Program have CenturyLink update the referenced diagram to depict the iQ Private Port VPN C & D clouds connecting the two ECMCs.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Diagram above Section 14.4</p>
VPN C & D	<p>Unable to determine whether the solution meets requirements.</p> <p>In the referenced documentation, MCP believes that VPNs C & D are not only local, but provide connectivity between data centers and POPs. MCP recommends that the Program confirm this understanding and if true, request that CenturyLink delete the word “local” in the second bullet in Section 14.4, as the VPNs provide connectivity beyond the local ECMC and VIPER node.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 14.4</p> <p>NG911 Managed Services - Arizona Network Diagram</p>
Inter-VIPER Network	<p>Unable to determine whether the solution meets requirements.</p> <p>The referenced VIPER diagram shows a network connection between VIPER primary node and VIPER secondary node. This network connection and its associated bandwidth are not discussed in the Technical Review document, nor is it depicted in the NG911 Managed Services – Arizona Network Diagram.</p> <p>MCP recommends that the Program seek clarification from CenturyLink on whether this network connection will be provided in the Managed Services offering. If it is required, then CenturyLink should update the diagrams to reflect this connectivity and add language to the consolidated Services Agreement detailing the bandwidth required between the two systems. MCP recommends that this connectivity be on separate VPNs similar to the rest of the solution design.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, VIPER Diagram titled “Multi-Node” above Section 15.3</p>
VIPER Configuration	<p>Unable to determine whether the solution meets requirements.</p> <p>The referenced diagram depicts the VIPERs in a primary/secondary configuration. An active-active solution design combined with a meshed configuration with the ECMCs will enable both systems to be continually active in processing calls between both ECMCs for all PSAPs. This configuration assures the Program that provisioning and network connectivity is always being</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, VIPER Diagram titled “Multi-Node” above Section 15.3</p>



Topic Area	Commentary	Reference
	<p>used and therefore tested. The Program and Arizona PSAPs do not want any system or network connection to ever sit idle, as that creates opportunities for systems to become out of synchronization and circuits to run the risk of being decommissioned due to inactivity.</p> <p>MCP recommends that the Program inquire with CenturyLink as to the VIPER configuration to ensure that either node is constantly processing calls in a balanced manner between ECMCs, and that both sites will be sized to process 100 percent of the expected calls with room for future expansion. The details of the CenturyLink response should be reflected in the consolidated Services Agreement.</p>	
VESTA Configuration	<p>Unable to determine whether the solution meets requirements.</p> <p>The referenced diagram depicts main and backup sites. Per the discussion immediately above, MCP recommends that the Program seek clarification from CenturyLink as to whether the VESTAs are configured as active-active or in a primary/secondary configuration, and that both sites will be sized to process 100 percent of the expected calls with room for future expansion. The details of the CenturyLink response should be reflected in the consolidated Services Agreement.</p>	AZ NG9-1-1 Technical Review 4-14-14, VESTA Diagram below Section 15.2
VESTA Host Site Consoles	<p>Does not meet requirements.</p> <p>The referenced diagram shows consoles at host sites. This will not be the case. MCP recommends that the Program request that CenturyLink update the diagram to accurately reflect the services/systems that will be deployed.</p>	AZ NG9-1-1 Technical Review 4-14-14, VESTA Diagram below Section 15.2
IP Routers	<p>Unable to determine whether the solution meets requirements.</p> <p>In the referenced diagram, it appears that the IP routers located in each location are logical representations and not physical representations. As such, MCP recommends that the Program request that CenturyLink confirm this interpretation and if correct, then request that CenturyLink add a note to the diagram with an explanation of logical representation of routers.</p>	NG911 Managed Services - Arizona Network Diagram
Tempe POP and VPN A	<p>Unable to determine whether the solution meets requirements.</p>	NG911 Managed Services - Arizona Network Diagram



Topic Area	Commentary	Reference
	<p>In the referenced diagram, the Tempe POP in the left, middle section of the diagram in LATA 602 shows VPN A ingress to the Tempe POP, with its egress connectivity to the iQ Private Port VPN B cloud. MCP believes that this is an error and the egress connectivity from this POP should connect to the iQ Private Port VPN A cloud.</p> <p>MCP recommends that the Program inquire with CenturyLink about this potential error and if confirmed, request that CenturyLink provide an updated diagram.</p>	
VPN E & F	<p>Unable to determine whether the solution meets requirements.</p> <p>In the referenced diagram, MCP believes that the VPN E & F notes to the right of the Englewood data center and below/right of the Phoenix VESTA host (in the upper right corner) should be updated to state “VPN E & F are part of the VESTA Host and Remote network.” It currently reads “VPN E & F are part of the VIPER Host and Remote network.”</p> <p>MCP recommends that the Program inquire with CenturyLink about this potential error and if confirmed, request that CenturyLink provide an updated diagram.</p>	NG911 Managed Services - Arizona Network Diagram
Phoenix VESTA Host Connections to VPNs E & F	<p>Unable to determine whether the solution meets requirements.</p> <p>In the referenced diagram, VPN E connects from the Phoenix VESTA host to the Tempe POP, which connects to the iQ Private Port VPN F cloud. Similarly, VPN F connects from the Phoenix VESTA host to the Phoenix POP, which connects to iQ Private Port VPN E cloud. MCP believes that the Tempe POP should connect to VPN E cloud and the Phoenix POP should connect to VPN F cloud.</p>	NG911 Managed Services - Arizona Network Diagram



Topic Area	Commentary	Reference
	<p>& H are for the Host / Remote and are not here</p> <p>This line should connect to iQ Private Port VPN E Cloud</p> <p>This line should connect to iQ Private Port VPN F Cloud</p> <p>615 N 48TH ST Floor 1, Ste 125B PHOENIX AZ 85008 IODATA DCID 772</p> <p>VESTA Host A PGM Terminal Server</p> <p>L2 1G Wave</p> <p>1G VPN D 1G VPN C 1G VPN E 1G VPN F</p> <p>TEMPAZCC 135 W Orion St Tempe AZ 85283</p> <p>LATA 602</p> <p>PHOIXAZLII 2120 N Central Ave Phoenix AZ 85003</p> <p>iQ Private Port VPN E</p> <p>iQ Private Port VPN F</p> <p>NxDS1 VPN E NxDS1 VPN F NxDS1 VPN E NxDS1 VPN F</p> <p>Remote VESTA PSAP</p> <p>Remote VESTA PSAP</p> <p>VPN C & D are part of the NG9-1-1 Network. VPN E & F are part of the VIPER Host and Remote network.</p> <p>MCP recommends that the Program inquire with CenturyLink about this potential error and if confirmed, request that CenturyLink provide an updated diagram.</p>	
VESTA Layer 2 Connection	<p>Unable to determine whether the solution meets requirements.</p> <p>Discussed in “Redundant” topic area above.</p>	<p>NG911 Managed Services - Arizona Network Diagram</p>



Topic Area	Commentary	Reference
	<p>The referenced diagram shows a single Layer 2, one gigabit per second (Gbps) connection between the two VESTA host sites.</p> <p>MCP recommends that the Program inquire with CenturyLink to determine whether the Layer 2 connection is mission critical. It is recommended that the Program ask CenturyLink for a cost/benefit analysis of providing redundant Layer 2 connectivity between the hosts given that there may be a significant cost increase to add a redundant connection. The VESTA systems may have processes in place at the host sites that provide for delayed synchronization if the Layer 2 network connection is severed. However, if the connectivity is mission critical, then it is advised that the VESTAs have redundant connectivity via diverse POPs.</p>	
Primary/Secondary VPNs	<p>Unable to determine whether the solution meets requirements.</p> <p>MCP believes that the referenced diagram indicates that there are primary and secondary VPNs between all components in the network. Active-Active path management provides the greatest level of reliability to ensure that no equipment or route path is ever sitting stagnant.</p> <p>MCP recommends that the Program request that CenturyLink explain whether the Primary/Secondary VPN configuration is accurate and if so, how the solution is configured so that load balancing is achieved across all components, VPNs, and IP routers for every PSAP, to enable a fully meshed solution where no component or path is stagnant.</p>	NG911 Managed Services - Arizona Network Diagram



Topic Area	Commentary	Reference
CenturyLink Washington Outage	<p>The CenturyLink/Intrado A9-1-1 outage that occurred on April 9-10, 2014, has raised concerns regarding the proposed solution design. Upon reading the referenced outage report, MCP recommends that the Program request an alarm audit be performed and its results be shared with the Program. Additionally, MCP recommends that the Program request a report of findings resulting from Intrado's A9-1-1 architecture review. MCP recommends that the Program request that CenturyLink share the corrective actions that are being taken to address NOC-to-NOC challenges. Lastly, MCP recommends that the Program request that CenturyLink assure the Program that lessons learned from the ingress trunking configuration in Washington be applied to the network design for Arizona, and that diagrams be updated with accompanying notes detailing what updates were made to the proposed solution design.</p>	<p>CenturyLink Major Outage Report to the Washington Utilities & Transportation Commission: http://wa-bainbridgeisland.civicplus.com/AgendaCenter/ViewFile/Item/382?fileID=1386</p>



The solution design calls for a cloud-hosted, managed services solution that incorporates the latest technology and industry standards. Proper levels of redundancy and diversity are incorporated into the network and system designs, which should provide for a fully fault-tolerant solution. MCP finds the proposed Managed Services offering feasible and that similar solutions are either live or in the deployment stages in other markets in the United States. Similar solutions that have been deployed are those that may be found in the state of Vermont, state of Hawaii, and the city of Durham, North Carolina.¹ Other mission-critical industries such as the financial industry have moved to cloud-hosted service models with great success. The State of Arizona should find comfort in understanding that it is not exploring uncharted territory with the proposed cloud-services model.

4. PROGRAM MANAGEMENT

The following section addresses program management level issues associated with the proposed Managed Services. The solution eases the Program and PSAPs' management of the services, as there is a single vendor responsible for all services. This should result in improved coordination in the delivery of services, troubleshooting problems and rolling out new feature functionality. In general, single vendor models provide for a single responsible party, which leads to less finger-pointing and a more productive working relationship. The following table outlines recommendations for enhancing service agreement documentation, improving the terms of the SLAs, and consolidating the documentation into a single Services Agreement.

¹ City of Durham - <http://www.9-1-1magazine.com/PPT-Durham-NG911-System?TopicID=521>
State of Hawaii - <http://globenewswire.com/news-release/2012/10/17/497850/10008819/en/Hawaiian-Telcom-Chooses-Intrado-for-Next-Generation-9-1-1-Services-Delivery.html>
State of Vermont - <http://www.networkworld.com/news/2011/090711-911-vermont-250601.html>



Table 4 – Program Management Review

Topic Area	Commentary	Reference
Single Point of Contact Solution		
Single Point of Contact	<p>Meets requirements.</p> <p>The referenced document provides confirmation that the proposed Managed Services solution is provided with CenturyLink as the single point of contact for the delivery of services. CenturyLink will provide a program manager for daily business needs and a NOC contact for 24 hours a day, 7 days a week (24x7) support.</p>	A9-1-1 Great Migration Plan for AZ, page 13
The agreement ensures the use of the latest technologies, versions and industry standards for CenturyLink Provided Equipment – General		
Product Lifecycle Management	<p>Does not meet requirements.</p> <p>As a service-based solution, system component refresh is required to be provided to ensure that the services purchased are delivered as specified in the contract. To achieve this, it is required that the services have definitive SLAs defining the contractual performance of the solution. These SLAs will drive the provider’s Product Lifecycle Management for the solution’s software, hardware, firmware, network and maintenance of the solution, to ensure that they are able to deliver to the agreed upon level of service.</p> <p>MCP recommends that the Program require SLAs that define the timing for refreshing the components of the solution, as related to software, hardware, firmware, and network performance.</p> <p>MCP recommends that software SLAs address feature functionality and the timing for providing software updates to the system once they become available. For example, software updates will be applied to all call handling systems within a pre-determined amount of time from their general availability.</p> <p>MCP recommends that hardware SLAs address the refresh cycle for maintaining hardware components such that the solution is never at risk due to software system requirements, manufacturer discontinued products, and failing hardware.</p>	Not Applicable



Topic Area	Commentary	Reference
	<p>MCP recommends that firmware SLAs require the provider to complete manufacturer recommended firmware updates within a pre-defined timeframe and after lab-based regression testing has been performed with new firmware.</p> <p>MCP recommends that network SLAs require a predefined set of network performance metrics, such as network availability measured in minutes of downtime per year; jitter threshold; average roundtrip delay; MOS; and packet loss.</p> <p>MCP recommends that maintenance SLAs require a predefined level of response to service-affecting outages. The SLAs would focus on response times and mean time to repair.</p> <p>MCP recommends that an i3 Guarantee SLA address when the solution will be updated to meet future i3 versions. For example, the Managed Services offering shall be current with i3 standards, with no more than 12 months passing after the ratification of each i3 version.</p> <p>MCP recommends that all SLAs have significant remedies to incent the provider to maintain the system at the agreed upon levels of service. MCP recommends that SLA metric reports be provided monthly and be independently verifiable through system reports, where available. MCP recommends that the Program seeks read-only access to the monitoring and reporting systems.</p>	
The agreement ensures the use of the latest technologies, versions and industry standards for CenturyLink Provided Equipment – Software		
i3 Guarantee and software evergreen	<p>Unable to determine whether the solution meets requirements.</p> <p>The referenced documentation clearly states that the Managed Services offering is guaranteed to provide for all functions and protocols specified in NENA i3; however, it does not address how the Managed Services will continually be updated to the most current i3 specifications. Additionally, the CenturyLink documentation does not address software updates to the VIPER, VESTA and GIS applications. Traditional call handling solutions provide for options to purchase “software evergreen,” where the latest software versions</p>	A9-1-1 Great Migration Plan for AZ, pages 1, 2 and 4



Topic Area	Commentary	Reference
	<p>will be made available for subscribers to this offering.</p> <p>MCP recommends that the Program request that CenturyLink provide contractual language as to how the core i3 functions, call handling systems and GIS applications will be maintained with the latest software versions available, based on then current industry standards, including but not limited to NENA i3 and its associated supporting industry standards. This documentation should address both the Intrado VIPER and Cassidian VESTA systems.</p>	
The agreement ensures the use of the latest technologies, versions and industry standards for CenturyLink Provided Equipment – Hardware		
End-of-Life equipment	<p>Unable to determine whether the solution meets requirements.</p> <p>The referenced diagram shows “AS5350” labeling of a gateway icon at the Phoenix and Tucson LNGs (far left boxes) with ingress to the box via multiple DS1s and direct connectivity into (Cisco) 3945 routers. This design leaves MCP with the understanding that the LNG gateways are Cisco AS5350 Universal Gateways. In our research, we found that these gateways were put on End-of-Life notice in 2006, with the last date of support being December 21, 2011. This leaves us to believe that these could possibly be Cisco AS5350XM Universal Gateways, which are also under End-of-Life notice, but with a last date of support being February 28, 2018; however, Cisco is no longer providing software maintenance support as of February 2014.</p> <p>This research elicits several areas of concern:</p> <ol style="list-style-type: none"> 1. What is the actual device providing the gateway function at the LNGs? 2. If the device is under an End-of-Life notice, then does the device have a current service contract? How long until the service contract expires? 3. What is the process for introducing new hardware, software and firmware to the solution design? 4. What is the migration plan to replace these devices prior to the expiration of the service contract? 5. What other devices not labeled in the diagram are also under an End-of-Life notice? If applicable, what do their service contracts and replacement schedules look like? 	NG911 Managed Services - Arizona Network Diagram



Topic Area	Commentary	Reference
	<p>The issues above pose a threat to the viability of the solution unless there are migration plans established within the product support expiration dates. As such, MCP recommends that the Program request that CenturyLink address the questions above. These concerns highlight the need for requiring hardware SLAs as described in the above Product Lifecycle Management topic to ensure there are significant repercussions for lapses in hardware support.</p>	
<p>The agreement ensures the use of the latest technologies, versions and industry standards for CenturyLink Provided Equipment – Firmware</p>		
Firmware SLAs	<p>Unable to determine whether the solution meets requirements.</p> <p>The following commentary is outlined above in the Product Lifecycle Management topic.</p> <p>As a service-based solution, system component refresh is required to be provided to ensure that the services purchased are delivered as specified in the contract. To achieve this, it is required that the services have definitive SLAs defining the contractual performance of the solution. These SLAs will drive the provider’s Product Lifecycle Management for the solution’s software, hardware, firmware, network and maintenance of the solution, in order to ensure that they are able to deliver to the agreed upon level of service.</p> <p>Specifically, MCP recommends that the Program require SLAs defining the timing for refreshing the components of the solution as related to software, hardware, firmware, and network performance.</p> <p>MCP recommends that firmware SLAs require the provider to complete manufacturer recommended firmware updates within a pre-defined timeframe and after lab-based regression testing has been performed with new firmware.</p>	Not Applicable
<p>The agreement ensures the use of the latest technologies, versions and industry standards for CenturyLink Provided Equipment – Network</p>		
Network Design	<p>Meets requirements.</p> <p>The proposed network design incorporates industry leading standards by incorporating multiple levels of redundancy and diversity throughout the design. Highlights of the network design include:</p> <ul style="list-style-type: none"> • Geographic diversity of LNGs 	AZ NG9-1-1 Technical Review 4-14-14, Sections 6.2, 13.5.2, 13.6.2, 13.7.5



Topic Area	Commentary	Reference
	<ul style="list-style-type: none"> • Geographic diversity of POPs • Geographic diversity of host data centers • Redundant system components • Redundant edge routers • Redundant VPNs for each application • Diverse VPN demarcation for each application • IP Bandwidth allocations for 100 percent redundancy with 100 percent capacity • Use of industry leading network protocols: <ul style="list-style-type: none"> ○ MPLS ○ Signaling System 7 (SS7) – Best solution for TDM environments ○ Virtual Router Redundancy Protocol (VRRP) ○ Hot Standby Router Protocol (HSRP) ○ Layer 2 SLA ○ Layer 3 Border Gateway Protocol (BGP) ○ Quality of Service (QoS) <p>Concerns have been addressed in other sections that include primary/secondary configurations, meshed connectivity between systems, and redundant Layer 2 connectivity between the VESTA hosts. Additionally, MCP recommends that the Program require CenturyLink to incorporate encryption via protocols such as Generic Routing Encapsulation (GRE) over IP Security (IPSec) tunnels.</p>	
The agreement ensures the use of the latest technologies, versions and industry standards for CenturyLink Provided Equipment – Maintenance		
Maintenance for Managed Services	<p>Unable to determine whether the solution meets requirements.</p> <p>As this is a service-based solution, the PSAPs and Program are not responsible for maintaining any of the hardware and software for the Managed Services offering. This provides a great benefit to the Program and its PSAPs, as it eliminates unexpected capital expenditures when equipment failures arise and when software upgrades require new hardware.</p> <p>However, the maintenance documentation provided by CenturyLink lacks detail</p>	<p>MCP Responses Set 1 sed, Answer 2, Section 1.4.3</p> <p>“Technical support and related services for incidents or service disruptions that CenturyLink determines relate to systems, equipment or network issues that are not part of the Next Gen 9-1-1</p>



Topic Area	Commentary	Reference
	<p>pertaining to response times, coordination of troubleshooting with solution partners, feet-on-the-street support, repair times, and tiered incident management support. The referenced statement presents a concern regarding a potential disconnect between the maintenance documentation provided by CenturyLink on May 20, 2014, and the Managed Services offering, as there is no demarcation point in ownership of the equipment and services, i.e., CenturyLink is responsible for all equipment related to the delivery of the 9-1-1 call from the point it reaches the ESInet all the way to the workstation headset jack. Therefore, it is believed that the demarcation reference is not applicable.</p> <p>MCP recommends that the Program require additional detail from CenturyLink of the aforementioned details that are lacking in their response and provide this in the consolidated Services Agreement. The language should align with services being provided.</p>	<p>Routing network (including those on the PSAP side of the demarcation point), or are otherwise not CenturyLink’s responsibility hereunder, will be worked jointly with the PSAP and/or PSAP.”</p> <p>Bold formatting applied by MCP to highlight the statements referenced.</p>
Service Agreement Updates		
<p>Aggregate all documentation into a single Service Agreement</p>	<p>Does not meet requirements.</p> <p>As mentioned previously in this report, MCP recommends that the Program require that CenturyLink incorporate all of the commitments, service descriptions, processes and service offering documentation into a single, consolidated CenturyLink Services Agreement. MCP envisions that the consolidated Services Agreement would incorporate all of the MCP recommendations that the Program feels are applicable and appropriate.</p> <p>This consolidated agreement would be a single resource to the Program as it would incorporate all of the Managed Services and their service descriptions, with the assurances that its contents are backed by the potential contracted provider of the services, CenturyLink. This is especially important as several of the documents provided by CenturyLink are on its manufacturers “paper”, e.g., The Great Migration Plan is an Intrado Proposal and the PowerProbe document is their own marketing brochure. In some cases, it would be appropriate for CenturyLink to refer to appendices for things such as MPLS network SLAs, but a vast majority of the document should be contained within its body.</p>	



Topic Area	Commentary	Reference
	<p>MCP recommends that the consolidated Master Services Agreement contain service guides or detailed service descriptions for the routing service, the i3 solution (LNG, ESRP, PRF, ECRF, LVF, CIDB, LIS, Spatial Information Function [SIF]), ALI management services, MapSAG[®], VIPER[®] CPE systems and applications (MIS, MapFlex 9-1-1[®], Power 911[®]), VESTA[®] CPE systems and applications (Aurora[®], Vela[®], UI, ORION[™] DataSync etc.), TXT29-1-1[®], A9-1-1[®] Address Intelligence, A9-1-1[®] Media), the ClearViewsm reporting solution, PAD, PowerProbe[®], and the software/hardware refresh program. The Services Agreement should document SLAs as recommended in the above Product Lifecycle Management topic and be customized to the Program's needs.</p> <p>The end goal of this recommendation is that all services are well documented with SLAs in a single source on the service provider's contract documents.</p>	
Out-of-Scope Requests	<p>Unable to determine whether the solution meets requirements.</p> <p>The referenced Section 16 was not included in the CenturyLink documentation. MCP recommends that the Program obtain this information from CenturyLink and have it incorporated into the consolidated Services Agreement.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 3.1</p> <p>“The following ALI to ALI steering scenarios are not covered by this Service Exhibit (see Section 16, Out-of-Scope requests)”</p>
Plant/CML References Updated to Cassidian	<p>Does not meet requirements.</p> <p>MCP recommends updating Plant/CML to Cassidian to reflect the accurate company name.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 5.0</p> <ul style="list-style-type: none"> • “Delivery over the iQ MPLS private port directly to the PSAP's CPE. The CPE must be capable of accepting emergency voice calls over IP and has been validated to be compatible with CenturyLink's Request for Assistance Interface (RFAI) or Plant/CML specifications.



Topic Area	Commentary	Reference
		<ul style="list-style-type: none"> As PSAPs migrate from CAMA deployments to RFAI or Plant/CML, the connectivity model will change. As part of an RFAI or Plant/CML deployment the PSAP's connectivity will go through additional network management and security devices (such as Session Border Controllers and Firewalls). This connectivity model change will not cause a change in the cost to CenturyLink and/or the PSAP."
QoS	<p>Unable to determine whether the solution meets requirements.</p> <p>MCP recommends that the Program require that CenturyLink update this language to state that QoS will be implemented across the ESInet. NENA i3 requires that IP traffic within an ESInet must implement DiffServ (RFC2475) for QoS.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 6.2</p> <ul style="list-style-type: none"> "The CenturyLink-provided iQ MPLS private port will support QoS IP prioritization to allow the management of the prioritization of 9-1-1 voice/data/OAM network traffic"
IP Address Scheme	<p>Does not meet requirements.</p> <p>MCP recommends that the sentence be updated to include POPs, VIPER host sites, and VESTA host sites.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 6.3</p> <p>"CenturyLink will manage the IP address scheme for Next Gen 9-1-1 Routing communications through the CenturyLink iQ MPLS private port for connectivity to ECMC sites, LNG sites and PSAPs."</p>
Next Gen 9-1-1 Routing	<p>Unable to determine whether the solution meets requirements.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 7.1</p>



Topic Area	Commentary	Reference
	<p>MCP recommends that the Program seek clarification from CenturyLink as to the meaning of the referenced section. Specifically, what does “specialized management” entail?</p>	<p>“Next Gen 9-1-1 Routing allows for specialized management of wireline, wireless, and VoIP call types.”</p>
Shared 3-Digit Bridge Lists	<p>Unable to determine whether the solution meets requirements.</p> <p>MCP recommends that the Program seek clarification from CenturyLink as to the meaning of the referenced section. Specifically, what are CenturyLink-established preferences and needs? How would those apply to the PSAPs’ flexible routing instruction rules? Is the word “instruction” needed?</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 7.1</p> <p>“Next Gen 9-1-1 Routing will support flexible routing instruction rules, depending on CenturyLink-established preferences and needs.”</p>
Call Setup Time	<p>Unable to determine whether the solution meets requirements.</p> <p>MCP interprets the referenced section as being a future feature. MCP recommends that the Program confirm this understanding for itself. MCP recommends that the Program request a committed timeline for the delivery of this feature.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 7.2</p> <p>“Shared 3-Digit Bridge Lists: The ability for the call taker to use a single button on the call taker’s display and transfer unit to complete either a transfer or three-way conference. These transfers utilize pre-provisioned Star Codes (*200-*999). These Star Codes will be shared among numerous PSAPs (i.e., all PSAPs in a particular State could use the same Star Codes). In order to match the functionality that CenturyLink has deployed within its region, CenturyLink will develop this capability as part of the Product Roadmap.”</p>
	<p>Does not meet requirements.</p> <p>MCP recommends that these types of commitments be backed by a SLA that has significant remedies.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 8.2</p> <p>“Within an 8 or 10 digit CAMA deployment, the Call Setup Time</p>



Topic Area	Commentary	Reference
		duration shall not exceed 5 seconds from the time the call is received by CenturyLink LNG. Within an IP deployment (RFAI), the Call Setup Time duration shall not exceed 3 seconds.”
Alarm Monitoring	<p>Unable to determine whether the solution meets requirements.</p> <p>MCP recommends that “timely communications” be defined in terms that are appropriate for the PSAPs.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 8.3</p> <p>“CenturyLink will provide timely communications to PSAP customer regarding any facility or service conditions that will affect the operations of Services.”</p> <p>“CenturyLink will provide timely communications to PSAP customer and STATE regarding any facility or service conditions that will affect the operations of the E9-1-1 system.”</p>
Alarm Monitoring	<p>Unable to determine whether the solution meets requirements.</p> <p>MCP recommends that CenturyLink define how testing support will be provided. For example, 24x7 or 8 a.m. – 5 p.m. Monday through Friday?</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 8.3</p> <p>“CenturyLink will provide testing support when required to evaluate CPE connectivity problems.”</p>
I to I process	<p>Unable to determine whether the solution meets requirements.</p> <p>The referenced section contains terminology that is unfamiliar to common industry knowledge. MCP recommends that the Program request clarification from CenturyLink on the “I to I process.”</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 9.9</p> <p>“Requests for additional or customized reports, query capabilities, and graphical data display should be made in accordance with the I to I process.”</p>
IP Selective Router Functional	Does not meet requirements.	AZ NG9-1-1 Technical Review 4-14-



Topic Area	Commentary	Reference
Components	<p>The components listed in this section are not IPSR components. MCP recommends that this title be updated to “i3 Functional Elements.”</p>	<p>14, Section 12.1 Title</p> <p>“IP Selective Router Functional Components”</p>
Emergency Call Routing Function (ECRF) and Location Validation Function (LVF)	<p>Does not meet requirements.</p> <p>Arizona PSAPs will migrate independently to i3 depending on their individual readiness.</p> <p>MCP recommends that this sentence be updated to “PSAPs” instead of “State of Arizona.”</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 12.1.1</p> <p>“As the State of Arizona transitions from a Tabular MSAG and ESN based routing to GIS based routing, the required ECRF and LVF elements will be available.”</p>
Border Control Function (BCF)	<p>Does not meet requirements.</p> <p>Border Control Functions require firewalls for data traffic and session border controllers (SBC) for voice traffic. Both data and voice traffic are part of the Managed Service.</p> <p>MCP recommends that “or” be struck from the referenced sentence.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 12.1.2</p> <p>“The CenturyLink solution will include Border Control Function with Firewalls (FW) and / or Session Border Controllers (SBC).”</p>
GIS Routing	<p>Does not meet requirements.</p> <p>PSAPs must be able to migrate to geospatial routing independent of one another.</p> <p>MCP recommends updating the sentence to the following:</p> <p>“The CenturyLink solution provides all required NENA i3 functional elements to support a GIS-based routing architecture as PSAPs are ready to move to this routing architecture.”</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 12.1.4</p> <p>“The CenturyLink solution provides all required NENA components to support a GIS based routing architecture when the STATE is ready to move to this routing architecture.”</p>
LNGs	<p>Does not meet requirements.</p> <p>MCP recommends that the Program require a statement from CenturyLink be added to this section that commits to placing LNGs in two data centers within Arizona. This commitment protects the State in the case that one or both of the</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 13.1</p>



Topic Area	Commentary	Reference
	two tentative data centers become unavailable. This would commit CenturyLink to use data center(s) in the state, in order to eliminate the possibility of the solution backhauling TDM traffic to another state.	
ESRP	<p>Does not meet requirements.</p> <p>MCP recommends that the second sub-bullet be updated from “ESRT/PRF” to “ESRP/PRF.”</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 14.3</p> <ul style="list-style-type: none"> • “Functional representation of proposed solution showing core components of the ECMC including: <ul style="list-style-type: none"> ○ LVF ○ ESRT/PRF ○ ECRF ○ BCF”
PSAP Equipment	<p>Unable to determine whether the solution meets requirements.</p> <p>MCP recommends that the document be updated to clarify how many monitors will be provided and of what size/type, e.g., cathode-ray tube (CRT), flat-panel, 22-inch, touch screen, etc.</p>	AZ NG9-1-1 Technical Review 4-14-14, Section 15.5
Headset Integration	<p>Unable to determine whether the solution meets requirements.</p> <p>There is no mention of whether headset integration services will be provided with the Managed Services.</p> <p>MCP recommends that the Program request that CenturyLink clarify whether headset integration service is included with the installation of PSAP equipment and end-to-end testing.</p>	Not Applicable
Training Size	<p>Unable to determine whether the solution meets requirements.</p> <p>MCP recommends that the class size limit be specified as “number of attendees.”</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 16.2</p> <p>“CenturyLink will provide (1) Agent Train the Trainer class to each new PSAP. Train-The-Trainer classes will cover all agent topics as well as tips to train the call takers specific to the</p>



Topic Area	Commentary	Reference
Ad Hoc Training	<p>Unable to determine whether the solution meets requirements.</p> <p>MCP recommends that the Program ask CenturyLink for clarification of whether the referenced ad-hoc training is at an additional fee or is included in the Managed Services. If there is an additional fee, then what is the fee?</p> <p>Also, the sentence should be updated so that the word “bases” is changed to “basis.”</p>	<p>PSAP. Class size is limited.”</p> <p>AZ NG9-1-1 Technical Review 4-14-14, Section 16.7</p> <p>“CenturyLink will provide onsite technician support on ad-hoc bases to demonstrate features for call taker supervisors. This is not in lieu of formal training.”</p>
Service Level Goals	<p>Does not meet requirements.</p> <p>The industry norm is 99.999 percent availability.</p> <p>MCP recommends that the Program require that CenturyLink revise the Management Availability Performance Goal to be 99.999%.</p> <p>Does not meet requirements.</p> <p>MCP recommends that the Program require that CenturyLink revise the Notification Goal of the Level 1 and Level 2 SLAs to be within 30 minutes per FCC Report and Order 13-158, and include periodic updates until the system is restored. MCP recommends that the Program require that CenturyLink perform, and provide a report on, a root-cause analysis of all outages no more than 90 days after the restoration of service.</p>	<p>Managed 911 - Service Level Goals - 6-11-2013, Section 1.2</p> <p>“9-1-1 Routing and ALI Management Availability Performance Goal is 99.998%.”</p> <p>Managed 911 - Service Level Goals - 6-11-2013, Section 1.2</p> <p>https://www.fcc.gov/document/fcc-adopts-rules-improve-911-reliability Appendix B, Part 4</p> <p>The rules from FCC 13-158 were released on December 13, 2013 and require that 911 Service Providers who provide “NG911 capabilities such as call routing, automatic location information (ALI), automatic number identification (ANI), or the functional equivalent of those capabilities, directly to a public safety answering point (PSAP),”...“shall notify as soon as possible but no later than thirty minutes after discovering the outage</p>



Topic Area	Commentary	Reference
		<p>any official who has been designated by the affected 911 special facility as the provider’s contact person(s) for communications outages at that facility and convey all available information that may be useful in mitigating the effects of the outage, as well as a name, telephone number, and e-mail address at which the service provider can be reached for follow-up.</p> <p>The Covered 911 Service Provider shall communicate additional material information to the affected 911 special facility as it becomes available, but no later than two hours after the initial contact.”</p>
	<p>Does not meet requirements.</p> <p>MCP recommends that the Program request that CenturyLink delete the rolling 2/4/8 months clause from the remedy statement. As written, the rolling 2/4/8 month clause reduces the potential for CenturyLink to have to provide remedy for its service issues, which dilutes the sense of urgency and level of importance of the service to the vendor.</p>	<p>Managed 911 - Service Level Goals - 6-11-2013, Section 1.2</p> <p>“...mean time to repair is not met for a given rolling two months.”</p> <p>“...mean time to repair is not met for a given rolling four months.</p> <p>“...mean time to repair is not met over a rolling 8 month period.”</p>
	<p>Does not meet requirements.</p> <p>MCP recommends that the example for Level 1 should be amended as follows (emphasis added to indicate the updates to the existing language):</p>	<p>Managed 911 - Service Level Goals - 6-11-2013, Section 1.2, Level 1 Example</p> <p>“PSAP not receiving calls, audio is</p>



Topic Area	Commentary	Reference
	<p>“PSAP not receiving calls, audio is not working even if only on intermittent calls, End office traffic is not able to reach PSAP, not returning ALI bids, network hardware or circuit failure to data complex.”</p>	<p>working only intermittent calls, End office traffic is not able to reach PSAP, returning ALI bids, network hardware or circuit failure to data complex.”</p>
	<p>Does not meet requirements.</p> <p>MCP recommends that the example for Level 2 should be amended as follows (emphasis added to indicate the update to the existing language):</p> <p>“... system response time problems; single sided ALI function; single sided routing function.”</p>	<p>Managed 911 - Service Level Goals - 6-11-2013, Section 1.2, Level 2 Example</p> <p>“...system response time problems; single sided ALI function.”</p>
	<p>Does not meet requirements.</p> <p>MCP recommends that the Notification Goal for Level 3 should be amended as follows (emphasis added to indicate the update to the existing language):</p> <p>“as soon as possible within 1 day of the identification of the service disruption.”</p>	<p>Managed 911 - Service Level Goals - 6-11-2013, Section 1.2, Level 3 Notification</p> <p>“as soon as possible 1 day of the identification of the service disruption.”</p>
	<p>Does not meet requirements.</p> <p>MCP recommends that the Program require CenturyLink to provide a SLA for call delivery time.</p>	<p>AZ NG9-1-1 Technical Review 4-14-14, Section 5.2</p> <p>“Within an IP deployment (RFAI), the Call Setup Time duration shall not exceed 3 seconds.”</p>
	<p>Does not meet requirements.</p> <p>MCP recommends that the Program require CenturyLink to provide SLAs as revised above for other mission-critical services provided in this Managed Services offering, including but not necessarily limited to text to 9-1-1, i3 routing functions, and the Hosted Call Handling solution, and not just NG9-1-1 routing and ALI.</p>	<p>Managed 911 - Service Level Goals - 6-11-2013</p>
Support (Network and PSAP)		
Network and PSAP	Unable to determine whether the solution meets requirements.	MCP Responses Set 1 sed, Answer 2



Topic Area	Commentary	Reference
	<p>The Managed Services offering provides 24x7 monitoring and maintenance of the solution, with the NOC providing support to PSAPs around the clock. This level of support is commonplace within the industry. As part of the recommended consolidated Services Agreement effort, MCP recommends that the Program require CenturyLink to rewrite the referenced section's content to address all of the Managed Services and not just the MPLS network and/or the NG9-1-1 routing solution, as it is currently written. See the Maintenance for Managed Services topic above for additional details and concerns regarding support documentation.</p>	
Review of metrics and data provided by the ClearView Reporting Tool		
<p>ClearView Metrics</p>	<p>Does not meet requirements.</p> <p>The ClearView metrics provide PSAPs with insight to call processing within the IPSR. This represents a tremendous amount of information that the PSAPs do not have today for their LSRs. The data appear pertinent to PSAP operations and would seem to be helpful when troubleshooting issues, verifying the sufficiency of call taking capacity for shifts, and researching call transfer trends.</p> <p>The ClearView metrics only address IPSR statistics and appear to have a gap for reporting on i3 call routing functions, data validation, text messaging, and other services included in the offering.</p> <p>NENA is currently working on a standard titled "NENA Next Generation 9-1-1 Data Management Standard," which will define i3 discrepancy and performance reports. MCP has staff contributing to this standard and we anticipate that it will be finalized and published later this year.</p> <p>MCP recommends that the Program ask CenturyLink for clarification regarding whether the Managed Services offering provides reporting on i3 call processing and data validation processes. MCP recommends that the Program request that CenturyLink advise as to the time zone that will be reflected in the ClearView data and how this will correlate to the unique time zone management within the State of Arizona. Additionally, MCP recommends that the Program ask CenturyLink whether the ClearView reporting tool gives users the ability to</p>	<p>Clearview reports - A911</p>



Topic Area	Commentary	Reference
	<p>perform ad hoc reports and build their own metrics based on available data. If appropriate, MCP recommends that the Program request that CenturyLink grant access to these reports so that the Program may view state-level reports for all PSAPs using the Managed Services.</p>	
Review of overall metrics as being necessary and sufficient to support the State's objective.		
Overall Metrics	<p>Does not meet requirements.</p> <p>The Managed Services offering documentation contained only ClearView IPSR metrics. Based on several recommendations throughout the report, MCP believes that there are additional data and metrics that would be of value to the Program and Arizona PSAPs. Many of the SLAs that have been proposed should be accompanied by metrics reports proving compliance/non-compliance with each SLA.</p> <p>MCP recommends that the Program consider the following metrics, and for those that the Program feels may be of value, require CenturyLink to provide applicable monthly metrics.</p> <ul style="list-style-type: none"> • Network Performance Metrics <ul style="list-style-type: none"> ○ Jitter – average ○ MOS – low, high, average ○ Round trip delay – average ○ Packet loss – average ○ Downtime – seconds per month per system ○ Call delivery time – number of calls above 3 seconds, percent of total processed • Operational Metrics <ul style="list-style-type: none"> ○ Trouble tickets opened/closed ○ Trouble tickets – average duration • Call Processing and System Provisioning Metrics <ul style="list-style-type: none"> ○ See ClearView Metrics topic area above 	Clearview reports - A911



5. CONCLUSION

The Managed Services offering from CenturyLink presents the State of Arizona with an opportunity to upgrade its aging 9-1-1 architecture with standards-based NG9-1-1 technology that will serve its PSAPs and citizens needs now and well into the future. The solution enables PSAPs to move from an unpredictable and difficult-to-fund capital expense model to a predictable operating expense model, which is of critical importance to the State in times of limited 9-1-1 funding. The solution is viable and the technical solution design meets industry standards in terms of redundancy, diversity, and survivability. New features such as geospatial routing would foster new operational capabilities by enabling PSAPs to distribute calls more efficiently. Additionally, the solution would enable users to send requests for help via text messages, which is a service that will greatly benefit the deaf and hard-of-hearing community, as well those who may be unable to make a voice call due to service coverage issues or when making such a call will endanger them. While these end results of the deployed solution will provide great benefit to all stakeholders involved, MCP recommends additional due diligence to ensure that the Program has a clear and detailed understanding of the Managed Services model, with proper documentation of the proposed services.

MARICOPA ASSOCIATION OF GOVERNMENTS

INFORMATION SUMMARY... for your review

DATE:

September 30, 2014

SUBJECT:

Consultant Selection for the MAG Regional Household Travel Survey

SUMMARY:

The fiscal year (FY) 2014 MAG Unified Planning Work Program and Annual Budget, approved by the MAG Regional Council in May 2013, includes \$4,500,000 for On-Call Consulting Services for Travel Survey - Data Application. The main purpose of the three-year project is to collect regional travel survey data from residential households and non-residential establishments. The On-Call contracts will include up to \$2,500,000 for the regional household travel survey and up to \$2,000,000 for establishment surveys and required modeling support. All major projects within the on call framework are closely interrelated and will be coordinated by MAG to ensure consistency of survey schedules, sample designs and proper exchange of information between surveys and relevant MAG forecasting models. The survey data will be used to re-calibrate and improve regional travel forecasting models, update regional travel forecasts, and provide information required for a variety of planning and analytical applications at MAG and MAG member agencies. A request for technical and pricing proposals for the MAG 2014 Travel Survey - Data Application Consultant Household Travel Survey Mini RFP was sent to pre-qualified consultants on June 30, 2014.

MAG received two proposals by the July 30, 2014, deadline. On August 13, 2014, a multi-agency evaluation team met and reviewed the proposals. On September 3, 2014, the evaluation team conducted consultant interviews and recommended that MAG select Westat Inc., to conduct the Household Travel Survey for an amount not to exceed \$2,500,000. In addition, the evaluation team recommended that if negotiations with Westat Inc. are not successful, that MAG pursue negotiations with its second choice, Cambridge Systematics, Inc.

PUBLIC INPUT:

No public input has been received.

PROS & CONS:

PROS: This project will enable MAG and MAG member agencies to ensure that emerging planning and travel forecasting needs are addressed in a timely manner, and proper data and transportation modeling tools are available to support future transportation policy decisions and transportation project evaluations. An equally important outcome of the project is availability to the MAG member agencies of the new updated travel survey data sets. The previous data set for a household survey was collected in 2008-2009 and fell on the economic downturn years. Collection of the new data sets is planned for 2015-2016 and will provide a better base for the future planning decisions. There is no recent regional establishment survey data available for the region and the survey has not been conducted at MAG in the past decade. Delaying the work element could compromise the efficiency of the transportation planning and forecasting work required for ongoing and future highway and transit projects and transportation policy decision evaluation.

CONS: None.

TECHNICAL & POLICY IMPLICATIONS:

TECHNICAL: This project will ensure that MAG can continue to provide high quality travel forecasts to MAG member agencies and MAG stakeholders. The MAG regional household travel survey will collect the main data sets required for transportation system analysis and forecasting. The data must be collected periodically in order to keep regional travel forecasts relevant and sensitive to various policy scenarios.

POLICY: The project will improve the ability of the MAG regional travel demand model and data analysis efforts to provide information to policy decision makers regarding regional travel patterns and overall regional highway and transit travel demand.

ACTION NEEDED:

Recommend approval of the selection of Westat, Inc. to conduct the MAG regional household travel survey as a part of the Travel Survey - Data Application On-Call for an amount not to exceed \$2,500,000. If negotiations with Westat Inc. are not successful, that MAG pursue negotiations with its second choice, Cambridge Systematics, Inc., to conduct the project.

PRIOR COMMITTEE ACTIONS:

On August 13, 2014, a multi-agency evaluation team met and reviewed the proposals. On September 3, 2014, the evaluation team conducted consultant interviews and recommended that MAG select Westat Inc., to conduct the Household Travel Survey for an amount not to exceed \$2,500,000. In addition, the evaluation team recommended that if negotiations with Westat Inc. are not successful, that MAG pursue negotiations with its second choice, Cambridge Systematics, Inc.

PROPOSAL EVALUATION TEAM

Darlann Mulmat, San Diego Association of Governments
Denise Lacey, Maricopa County Department of Transportation
Deng Bang Lee, Arizona Department of Transportation

Ratna Korepella, Valley Metro
Tim Strow, Maricopa Association of Governments
Vladimir Livshits, Maricopa Association of Governments

On April 14, 2014, the MAG Regional Council Executive Committee approved the list of on-call consultants for Area of Expertise A (Regional Travel Surveys): Cambridge Systematics, Inc., Parsons Brinckerhoff, Inc., Texas A&M Transportation Institute, Westat Inc. For Area of Expertise B (Data Application, Data Analysis and Model Development): Arcadis U.S., Inc., Caliper Corporation, Cambridge Systematics, Inc., Parsons Brinckerhoff, Inc., Westat Inc. For Area of Expertise C (Traffic and Infrastructure Data Collection and Data Management): American Transportation Research Institute, Cambridge Systematics, Inc., Midwestern Software Solutions, LLC, Traffic Research & Analysis, Inc., for a total amount not to exceed \$4,500,000.

MEMBERS ATTENDING

Mayor Scott Smith, Mesa, Chair
Mayor Michael LeVault, Youngtown, Vice Chair
Mayor W.J. "Jim" Lane, Scottsdale, Treasurer

#Mayor Gail Barney, Queen Creek
Mayor Marie Lopez Rogers, Avondale
Mayor Lana Mook, El Mirage
Mayor Greg Stanton, Phoenix

* Not present.

#Attended via audio-conference

CONTACT PERSON:

Vladimir Livshits, MAG (602) 254-6300

MARICOPA ASSOCIATION OF GOVERNMENTS

INFORMATION SUMMARY... for your review

DATE:

September 30, 2014

SUBJECT:

Outcome of the Central Phoenix Transportation Framework Study

SUMMARY:

The recently completed Central Phoenix Transportation Framework Study was an effort to identify long-range transportation needs for the center of the MAG region in an area bounded by SR-101L on the north, east, west and the Gila River Indian Community on the south. Since beginning this study in late 2010, the study team has reached out to numerous representatives from the general public, MAG member agencies, the Arizona Department of Transportation, Valley Metro and through stakeholder meetings, geographic dialogues, two planning charettes, and twelve Planning Partner events, identified transportation options to inform development of the NextGen Regional Transportation Plan. The Transportation Policy Committee will be provided an update on the work products from this study addressing the regional freeway system, including the study's suggestions for the Interstate 10/Interstate 17 Corridor Master Plan.

The study team has identified fifteen different work products as the outcome to the Central Phoenix Transportation Framework Study. These work products are primarily technical in nature and discuss various transportation construction and operational improvement items that could be incorporated into the NextGen Regional Transportation Plan program. A summary brochure of the project's work products is attached to this summary transmittal. Information on the Central Phoenix Transportation Study's final work products is also available at www.bqaz.org.

A summary of the work products will be provided. In addition, information from the Downtown Phoenix Transportation Study, an initiative of the Central Phoenix Transportation Framework Study jointly funded by MAG and the City of Phoenix, will also be presented to illustrate and implement this framework's planning principles.

PUBLIC INPUT:

Public input to inform the Central Phoenix Transportation Framework Study was received in the Summer and Fall of 2011 during the project's data discovery phase. More than 500 individuals representing the general public and commercial interests participated in five focus groups and six geographic dialogues as part of the outreach effort. The common themes of study, policy, and mobility recommendations were identified as benchmarks in both planning charettes and the subsequent work products that have been developed.

The public also provided input on the Downtown Phoenix Transportation Study in three different opportunities through the study development process. This study was an outreach to more than 150 Downtown Phoenix business and residents.

PROS & CONS:

PROS: The study developed an environmentally sustainable multimodal transportation framework that includes operational and safety improvements, and a framework for regional connectors and roadways within the study area. The project’s recommendations will provide guidance to MAG and member agencies for establishing a transportation framework and an implementation strategy to meet the long-term travel demand.

CONS: Most recommendations identified in the Central Phoenix Transportation Framework Study work products are unfunded beyond the scope of the current Regional Transportation Plan. As with all MAG Framework Studies, this effort was intended to identify the need, develop recommendation, and assess feasibility and constructability to inform the MAG Regional Council in future decisions about the Valley’s transportation system.

TECHNICAL & POLICY IMPLICATIONS:

TECHNICAL: Recommendations proposed in these work products are designed to inform future generations of the Regional Transportation Plan and have been identified with implementation and constructability as primary criteria. It is anticipated that this early detailed look at technical concepts will provide the planning process with the best technical data to improve upon the quality of projects that may be identified for eventual construction and operation in the Central Phoenix Transportation Framework Study area.

POLICY: This Transportation Framework Study represents the fourth of sixth such efforts to identify transportation needs at future years beyond the present planning horizon for the Regional Transportation Plan. These efforts have led to decisions about long-range planning for transit, freight, freeway, and arterial corridors throughout the Valley. The Central Phoenix Transportation Framework Study is the first look at the core of the metropolitan area and the needs for meeting future travel demand. As with previous framework study recommendations, key and strategic improvements will be advanced into future generations of the Regional Transportation Plan, as recommended by the MAG Regional Council.

ACTION NEEDED:

Information and discussion.

PRIOR COMMITTEE ACTIONS:

No previous committee actions have been taken on the products that are being developed for the Central Phoenix Transportation Framework Study.

CONTACT PERSON:

Bob Hazlett, Senior Engineer, 602 254-6300

**Attachment is posted
as separate file.**

MARICOPA ASSOCIATION OF GOVERNMENTS

INFORMATION SUMMARY... for your review

DATE:

September 30, 2014

SUBJECT:

FY 2015 Regional Freeway and Highway Program Update

SUMMARY:

Arizona Revised Statutes (ARS) 28-6352 (A) requires a budget process that ensures the estimated cost of the freeways and other controlled access highways in the Regional Transportation Plan (RTP) does not exceed the total amount of revenues estimated to be available. The MAG Regional Freeway and Highway Program is subject to this requirement. In an oversight capacity, MAG staff collects and reviews project and financial data related to the program from the Arizona Department of Transportation (ADOT). The program is reviewed from both a year-by-year, and in a composite perspective to ensure the funds are available for eventual construction. The year-by-year process, referred to as "cash flow" is completed through a modeling effort for the program between Fiscal Years (FY) 2006 and 2026. These horizon years coincide with the life of the half-cent Maricopa County Transportation Excise Tax, which was passed by the voters of Maricopa County in November 2004.

In October 2009 and May 2012, the Regional Freeway and Highway Program was reviewed and the MAG Regional Council approved scenarios to balance an estimated combined \$6.9 billion shortfall due to cost overruns and revenue shortfalls. In light of those balancing efforts, MAG and the Arizona Department of Transportation (ADOT) have made significant progress in delivering the \$9 billion program for meeting the region's transportation demand. As of the date of this transmittal summary, approximately 45 percent of the program, as rebalanced in 2012, has been delivered with the recent openings of the first mile of the SR-24 freeway between Loop 202/Santan Freeway and Ellsworth Avenue in Mesa, and the 15-mile, six-lane Loop 303 freeway between Interstate 10 and US-60/Grand Avenue in Glendale, Goodyear, Maricopa County, and Surprise.

Regional Council action in May 2012 approved a \$9.079 billion Regional Freeway and Highway Program that matched the projected cash flow. With the delivery of these significant projects, and the continuing planning efforts by MAG and ADOT on the remaining projects in the program, the current cost opinion for the program is \$8.868 billion, which is below the approved program amount. At the time of this transmittal, a new cash flow model, based upon new revenue estimates, was being processed to determine whether the program is within balance based upon the revenue and federal fund projections. The results from this model, as well as an update on the remaining program projects, will be presented.

PUBLIC INPUT:

No public input has been received at this time.

PROS & CONS:

PROS: In 2009 and 2012, cost opinions significantly increased, and coupled with declining, the Regional Freeway and Highway Program has seen a deficit develop over the life of the program to a funding shortfall of approximately \$6.9 billion. Development of scenarios, based upon four principles

consistent with the original planning goals and objectives used to initially establish the Regional Transportation Plan in 2003, provided a basis and direction for governing the remaining funds available for regional freeway and highway construction. The resultant cost-saving measures, as well as partial and full project deferrals, have ensured construction funding for two significant corridors from the program: Loop 202/South Mountain Freeway and Loop 303.

CONS: The 2009 and 2012 rebalancing efforts identified more than \$4.4 billion in full or partial project deferrals. The most significant of these deferrals is the delay of SR-30, also known as the Interstate 10 Reliever Freeway, from SR-85 to SR-202L/South Mountain. As a result, there may be congestion in the Southwest Valley along principal roadways and most significantly along the Interstate 10/Papago Freeway until SR-30 is constructed.

TECHNICAL & POLICY IMPLICATIONS:

TECHNICAL: Monitoring the delivery of the Regional Freeway and Highway Program has improved upon the technical capabilities for both MAG and ADOT. Specifically, the challenges of delivering the program with tighter budgets have encouraged the use of alternative project delivery techniques, such as design-build and public-private-partnerships, to maintain scheduling. These techniques have also seen cost-savings and efficient designs benefitting the overall health of the Regional Freeway and Highway Program.

POLICY: While the rebalancing efforts provided a means to effectively govern the remaining funds identified for the Regional Freeway and Highway Program, it did introduce a new management process for governing deferred projects from the program. In addition, additional review of project scopes is recommended during the project development process to reduce future scope and cost increases. It is important to note that the Phase V (projects beyond FY 2026) identifies those deferrals from their previous phase to ensure priority as future funds become available.

ACTION NEEDED:

Information and discussion.

PRIOR COMMITTEE ACTIONS:

There have been no prior committee actions on this matter.

CONTACT PERSON:

Bob Hazlett, Senior Engineering Project Manager, 602 254-6300.