

June 5, 2012

TO: Members of the MAG Management Committee

FROM: Charlie Meyer, City of Tempe, Chair

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Wednesday, June 13, 2012 - 12:00 noon
Renaissance Phoenix Downtown Hotel (formerly the Wyndham)
Salons One and Two, Second Floor
50 E. Adams, Phoenix (see enclosed map)

PLEASE NOTE THAT THE MEETING WILL BE HELD OFFSITE

The next Management Committee meeting will be held at the time and place noted above. The meeting will follow the presentation by Michael Gallis on The Sun Corridor Economic Region in the 21st Century Global Network (Event flyer is attached).

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. Lunch will be provided at a nominal cost. Due to the meeting being held offsite, arrangements are not being made for teleconferencing.

Parking Options: Free covered parking is available in the garage under the MAG office. Please bring your ticket to the event for validation. The hotel is a short, two block walk from MAG. Valet parking will also be available at the Renaissance Phoenix Downtown Hotel at a discounted rate of \$8 for the first four hours. The valet garage entrance is located on the west side of First Street south of Monroe. You must mention that you are an attendee of the event to receive this valet parking discount.

For those using transit, Valley Metro/RPTA will provide transit tickets for your trip. For those using bicycles, please lock your bicycle in the bike rack in the MAG parking 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
June 13, 2012**

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 and discussion.

5. Recommend approval of the Consent Agenda.

ITEMS PROPOSED FOR CONSENT*

MINUTES

*5A. Approval of May 9, 2012, Meeting Minutes

5A. Review and approval of the May 9, 2012, meeting minutes.

TRANSPORTATION ITEMS

- *5B. Project Changes - Amendment and Administrative Modification to the FY 2011-2015 MAG Transportation Improvement Program

The Fiscal Year (FY) 2011-2015 Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) 2010 Update were approved by the MAG Regional Council on July 28, 2010 and have been modified fifteen times with the last modification approved by the MAG Regional Council on May 23, 2012. Since then, there is a need to modify projects in the programs. The requested project changes include freeway, highway safety, roadway, and transportation enhancements. The changes included may be categorized as exempt from conformity determinations, and administrative modifications do not require a conformity determination. Please refer to the enclosed material.

- 5B. Recommend approval of amendments and administrative modifications to the FY 2011-2015 MAG Transportation Improvement Program, Arterial Life Cycle Program, and as appropriate, to the Regional Transportation Plan 2010 Update.

AIR QUALITY ITEMS

- *5C. Conformity Consultation

The Maricopa Association of Governments is conducting consultation on a conformity assessment for an amendment and administrative modification to the FY 2011-2015 MAG Transportation Improvement Program (TIP). The amendment and administrative modification involve several projects, including Arizona Department of Transportation, Chandler, Maricopa County, and Peoria 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. Comments are requested by June 22, 2012. Please refer to the enclosed material.

- 5C. Consultation.

GENERAL ITEMS

- *5D. Municipal Aging Services Project Toolkit

In February 2011, the Virginia G. Piper Charitable Trust awarded a grant to support the

- 5D. Recommend approval of the MAG Municipal Aging Services Project Toolkit.

development of the MAG Municipal Aging Services Project. The purpose of the project is to determine the most effective role for local governments in meeting the needs of people aged 65 years and more when working collaboratively with nonprofit agencies, faith-based communities, and community groups. After a year of extensive community engagement with more than 1,300 people, a toolkit has been developed with specific action steps in areas prioritized through the community engagement. The MAG Human Services Coordinating Committee and MAG Human Services Technical Committee both recommended approval of the toolkit in May 2012. Please refer to the enclosed material.

ITEMS PROPOSED TO BE HEARD

6. Update on the MAG Managed Lanes Network Development Strategy - Phase I Project

On November 15, 2010, the MAG Regional Council authorized procurement of consultant services to develop the MAG Managed Lanes Network Development Strategy - Phase I project. This multi-phase effort was in response to consideration for public-private-partnership (P3) opportunities in the Phoenix Metropolitan Area where high occupancy vehicle (HOV) lanes could be operated as high occupancy toll (HOT) lanes as part of an overall managed lanes strategy. The project consultant has developed eight planning papers on the following topics: Project Goals and Objectives, Legal and Regulatory Issues, HOV Hours of Operation, HOV Occupancy, HOV Separation Treatment, Pricing and Tolling Methods, Procurement and Financing, and Initial Assessment of Potential Managed Lanes. A summary of the recommendations from these papers is attached to this agenda, and the links to the papers themselves can be found on the MAG website. As the study team completes further research on this project, comments are sought from the Management Committee on these recommendations from the planning papers as the region considers a Managed Lanes Network strategy. Please refer to the enclosed material.

6. Information and discussion.

7. Legislative Update

An update will be provided on legislative issues of interest.

8. Metropolitan Business Planning Initiative Update

The Metropolitan Business Planning Initiative seeks to apply the discipline of business planning to regional economic development efforts. The end result is enhanced levels of coordination, a greater competitive edge in the global market, and the implementation of one or more lead initiatives that will have a transformative impact on the region's economy. An analysis of the region's market suggests a clean technology development center may have potential in this region. An update will be provided on recent interviews with industry and academic leaders on this concept.

9. Election of Officers

Each June, the positions of Chair and Vice Chair are elected by the Management Committee. According to 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 and the current Vice Chair is nominated for the position of Chair. The positions serve one-year terms.

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 will be requested.

11. 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.

Adjournment

7. Information, discussion, and possible action.

8. Information, discussion, and input.

9. Elect a Chair and Vice Chair.

10. Information and discussion.

11. Information.

The Sun Corridor Economic Region in the 21st Century Global Network



The Maricopa Association of Governments, along with its partners, is hosting an event that will look at Arizona from a global market perspective. **Michael Gallis**, of Michael Gallis and Associates, is widely considered one of the country’s leading experts in large-scale metropolitan regional development strategies. Mr. Gallis will discuss the shift of social and economic forces that are reshaping the world—and thereby the context that forms the framework for the future of Arizona. He also will discuss the emerging challenges and opportunities facing the region, and explore factors that are determining which regions are emerging to become “global cities,” while others are not.

Please RSVP to Linda Priano at lpriano@azmag.gov or 602-452-5069 by June 6, 2012. Attached please find a draft agenda and a map, including directions and available parking options.



DRAFT AGENDA

The Sun Corridor Economic Region in the 21st Century Global Network

June 13, 2012 - 10:00 a.m. to 12:00 noon
Renaissance Phoenix Downtown Hotel
South Ballroom
50 East Adams Street, Phoenix, Arizona 85004

- 10:00 a.m. Welcome**
- Mayor Hugh Hallman, *City of Tempe, MAG Regional Council Chair*
- 10:05 a.m. Introduction of Michael Gallis**
- Mayor Thomas Schoaf, *City of Litchfield Park, MAG Economic Development Committee Chair*
- 10:10 a.m. The Sun Corridor Economic Region in the 21st Century Global Network**
- Michael Gallis, *Michael Gallis and Associates*

Mr. Gallis will discuss how the Sun Corridor/Phoenix region fits into the global economy; how the region sees itself; what is going on in the region today; and what does the region want to be...what is the vision? Mr. Gallis will discuss the current status and future opportunities for the region from the perspective of transportation/infrastructure, the economy, and the environment. The region has a lot of advantages, assets and initiatives...how do we piece these together to form a framework for a leading edge global region?

- 11:10 a.m. Reactor Panel**
- Mayor Hugh Hallman, *City of Tempe, Moderator*

The reactor panel, comprising regional leaders, will provide insight on how they see this region within the global economy. They will discuss this region's opportunities and assets and how we can work together through partnerships to be competitive both nationally and globally.

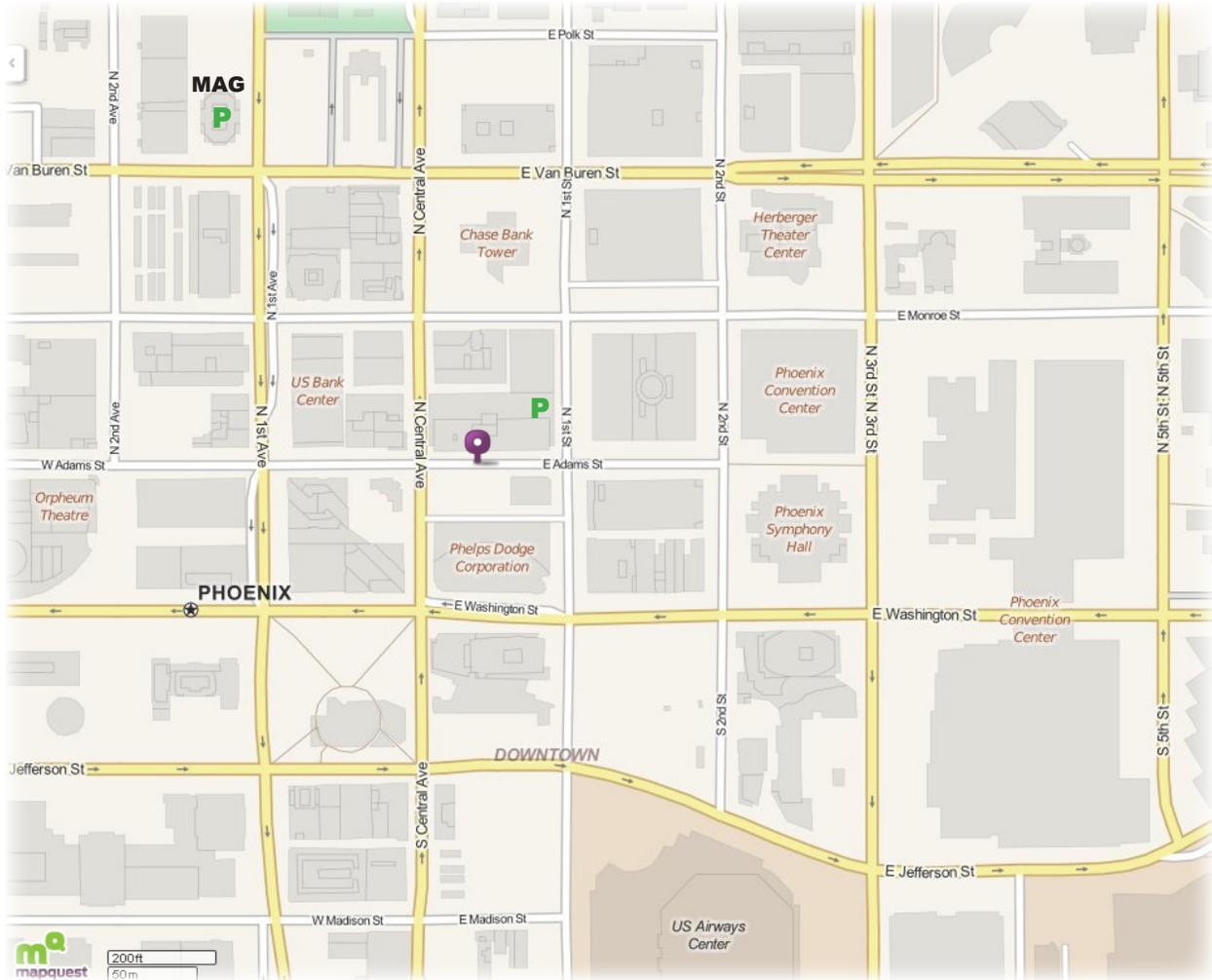
- 11:40 a.m. Open Discussion**



Renaissance Phoenix Downtown Hotel

50 East Adams Street • Phoenix, Arizona 85004

www.marriott.com/hotels/travel/phxbd-renaissance-phoenix-downtown-hotel/



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MINUTES OF THE
MAG MANAGEMENT COMMITTEE MEETING
May 9, 2012
MAG Office - Saguaro Room
Phoenix, Arizona

MEMBERS ATTENDING

- | | |
|---|--|
| Charlie Meyer, Tempe, Chair | * Bill Hernandez, Guadalupe |
| David Cavazos, Phoenix, Vice Chair | Darryl Crossman, Litchfield Park |
| # George Hoffman, Apache Junction | Christopher Brady, Mesa |
| Charlie McClendon, Avondale | * Jim Bacon, Paradise Valley |
| Stephen Cleveland, Buckeye | Carl Swenson, Peoria |
| # Gary Neiss, Carefree | John Kross, Queen Creek |
| Wayne Anderson for Usama Abujbarah,
Cave Creek | * Bryan Meyers, Salt River Pima-Maricopa
Indian Community |
| Rich Dlugas, Chandler | David Richert, Scottsdale |
| Dr. Spencer Isom, El Mirage | Chris Hillman, Surprise |
| * Phil Dorchester, Fort McDowell | Reyes Medrano, Tolleson |
| Yavapai Nation | Joshua Wright, Wickenburg |
| Ken Buchanan, Fountain Hills | Lloyce Robinson, Youngtown |
| Rick Buss, Gila Bend | Floyd Roehrich for John Halikowski, ADOT |
| * David White, Gila River Indian Community | Tom Manos, Maricopa County |
| Leah Hubbard for Patrick Banger, Gilbert | Bryan Jungwirth for Steve Banta,
Valley Metro/RPTA |
| Ed Beasley, Glendale | |
| Brian Dalke, Goodyear | |

* Those members neither present nor represented by proxy.

Participated by telephone conference call. + Participated by videoconference call.

1. Call to Order

The meeting was called to order by Chair Charlie Meyer at 12:02 p.m.

2. Pledge of Allegiance

The Pledge of Allegiance was recited.

Chair Meyer noted that George Hoffman and Gary Neiss were participating in the meeting by teleconference.

Chair Meyer welcomed Tom Manos, the new Maricopa County Manager, to the Management Committee. Mr. Manos was welcomed with applause.

Chair Meyer bid farewell to Ed Beasley, who was retiring as Glendale City Manager, and read a Resolution of Appreciation that had been prepared in his honor. Mr. Beasley received a standing ovation.

Mr. Beasley expressed appreciation for the acknowledgment and said that being with the other Management Committee members has always been enjoyable. He stated that he feels that what happens in the region and the state begins here. Mr. Beasley stated that the past 27 years have flown by. He stated that he would be going on to other endeavors but will always remember the camaraderie of this group.

Chair Meyer announced that public comment cards were available to members of the public who wish to comment. Chair Meyer noted that parking validation was available from staff and transit tickets were available from Valley Metro/RPTA for those using transit to come to the meeting.

3. Call to the Audience

Chair Meyer 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. Chair Meyer noted that 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.

Chair Meyer recognized public comment from Dianne Barker, a resident of Phoenix. She stated that Mayor Hallman and Mr. Meyer should receive the Toastmasters Sparkplug award. Ms. Barker extended her regrets that Tempe had lost the Improv Theater to Phoenix. She expressed appreciation for the bus pass and said that she looks for people in need and most recently gave a pass to a man on crutches. Ms. Barker reported that she was going to a HUD project after the Management Committee meeting. She explained that six large corporations are sponsors of sustainable gardens and she added that they are designed so that those with disabilities are able to work in them. Ms. Barker stated that the City of Phoenix is looking at converting empty lots into sustainable gardens. She remarked that the bus she took that day was running well. Ms. Barker noted that automobile drivers like the bus pullouts, but they are expensive. She also expressed support for agenda item #5F, which allocates air quality improvement funds toward buses and preventative maintenance. Ms. Barker suggested that better air conditioning is needed on buses because many riders end up opening the windows because it is too cold and energy is wasted. She stated that the agencies might want to encourage fitness programs for bus drivers and she added that the country is looking at this because 17 percent of children are headed to being obese. Ms. Barker remarked that something needs to be done because it was not like this 30 years ago. Ms. Barker remarked that multimodal feels good. Chair Meyer thanked Ms. Barker for her comments.

4. Executive Director's Report

Dennis Smith reported on items of interest in the MAG region. He first mentioned Mr. Beasley's retirement by saying that when resolutions are created, there is never enough room on a sheet of paper to mention all of the accomplishments from a great career such as Mr. Beasley's.

Mr. Smith stated that judging for the Desert Peaks Awards had been completed. He said that he had attended the judging and there were ties in multiple categories, which indicate the great competition in the Valley for worthwhile projects. Mr. Smith welcomed the Management Committee to attend the awards ceremony on June 27, 2012, at the Downtown Phoenix Sheraton, following the annual Regional Council meeting.

Mr. Smith stated that a resolution of support for Arizona's ports of entry resulted from the findings of the MAG Freight Transportation Framework Study. He reported that the resolution was adopted by the MAG Regional Council on March 28, 2012, and he remarked that originally, MAG thought those planning agencies on the border would support the resolution, but it has been endorsed by all of the Councils of Governments and Metropolitan Planning Organizations throughout the state because it made sense for the state. Mr. Smith noted that the Governor is forming a Transportation and Trade Alliance and much of the energy from the resolution will be a focus of the new structure. He acknowledged the leadership by ADOT staff in this effort. Mr. Smith noted that President Obama issued an Executive Order on January 19, 2012, to make it easier to get Visas and for foreign visitors. Mr. Smith stated that *The Arizona Republic* has run three editorials on the ports of entry issue and he noted that Texas has been successful at its ports at Arizona's expense. He added that we need to band together to make a difference for the state.

Mr. Smith provided an update on the MAG Economic Development Committee. He said that when the committee was formed, there was a provision for an evaluation of its effectiveness in two years. Mr. Smith stated that the evaluation was on the last agenda of the EDC and will be on the next agenda. He noted that the evaluation survey showed that the members indicated they felt it was a worthy effort. Mr. Smith reported that one of the comments received asked, "Where would the mayors be able to sit down with economic development professionals and have a discussion if not for the EDC?"

Mr. Smith stated that one of the EDC's projects is the Metropolitan Business Plan. He said that the lead initiatives being examined include Clean Technology Development Center, Unmanned Systems Center of Excellence, and a human capital analysis using the Trip Reduction Program. Mr. Smith extended his appreciation to Rick Buss for his assistance to MAG staff on the Clean Technology Development Center regarding solar energy. He added that there is interesting work regarding algae that might be a topic to be presented

Mr. Smith stated that there have been numerous studies done regarding the Sun Corridor, but no connective tissue. As a result, MAG has invited Michael Gallis, a nationally renowned expert in regional development strategies, to an event sponsored by MAG and the large economic development organizations in the region. Mr. Smith stated that the event will be held on June 14, 2012, at the downtown Phoenix Renaissance Hotel, prior to the Management Committee meeting.

Chair Meyer stated that the Management Committee is invited to attend the Michael Gallis presentation on June 14. He noted that the committee's participation if at all possible, is important and synchronous with the work done here. Chair Meyer expressed that he thought it would be a worthwhile effort and he applauded MAG for bringing Mr. Gallis to the region.

Chair Meyer thanked Mr. Smith for his report. No questions for Mr. Smith were noted.

5. Approval of Consent Agenda

Chair Meyer stated that agenda items #5A, #5B, #5C, #5D, #5E, #5F, #5G, and #5H were on the Consent Agenda. No requests for public comment were received.

Mr. Swenson moved to recommend approval of #5A, #5B, #5C, #5D, #5E, #5F, #5G, and #5H. Mr. Buss seconded. Chair Meyer asked if there was any discussion of the motion. Being none, the vote on the motion passed unanimously.

5A. Approval of April 11, 2012, Meeting Minutes

The MAG Management Committee, by consent, approved the April 11, 2012, meeting minutes.

5B. Enhancement Peer Review Group Round 19 Recommendations

The MAG Management Committee, by consent, recommended that the list of ranked applications from the MAG Enhancement Peer Review Group be forwarded to the Arizona Department of Transportation for consideration by the State Transportation Enhancement Review Committee. The Enhancement Peer Review Group reviews and recommends a ranked list of Enhancement Fund applications from this region to the State Transportation Enhancement Review Committee (TERC). This year, eight enhancement fund applications for projects on local roads were received totaling \$5,353,880 with approximately \$9 million available statewide. Two applications for projects on the Arizona Department of Transportation right-of-way were received totaling \$1,886,000 with approximately \$5 million available statewide. On April 23, 2012, the Enhancement Peer Review Group recommended the list of ranked applications be forwarded to the Arizona Department of Transportation for consideration by the TERC.

5C. Update to the Federal Functional Classification of Tegner Street in Wickenburg

The MAG Management Committee, by consent, recommended approval to classify Tegner Street located within the limits of the Town of Wickenburg to a Rural Minor Arterial in the federal functional classification system. The Town of Wickenburg, at the suggestion of the Arizona Department of Transportation (ADOT) has acted to classify Tegner Street in the Town's boundaries to minor arterial in the federal functional classification system. Previously, this facility was part of the State Highway System and was classified as a principal arterial. MAG concurrence in the reclassification is requested. ADOT procedure requires the concurrence of the regional planning body (e.g., MAG) in the functional classification of facilities. This reclassification will not affect federal funding received by the State or the MAG area and will not affect the eligibility

of the facility to receive federal funding. The Transportation Review Committee recommended approval on March 29, 2012.

5D. Arterial Life Cycle Program Fiscal Year 2012 Regional Area Road Fund Closeout

The MAG Management Committee, by consent, recommended approval of the Arterial Life Cycle Program (ALCP) project reimbursements for the Fiscal Year (FY) 2012 ALCP Regional Area Road Fund (RARF) Closeout, amending the FY 2012 Arterial Life Cycle Program, the FY 2011-2015 Transportation Improvement Program, and Regional Transportation Plan 2010 Update, as necessary, and allocating any unused RARF Closeout funds to the next project(s) on the list if one or more of the recommended projects fail to meet all ALCP Project Requirements by the established deadlines. The ALCP RARF Closeout process is outlined in the approved ALCP Policies and Procedures (Policies), approved by the MAG Regional Council on December 9, 2009. This is the third year of the ALCP RARF Closeout process. The process was established to address the positive balance of funds for the current year in the ALCP RARF account. Each year there are projects scheduled for work in the current year that are deferred for a number of reasons leaving unexpended RARF funds in the account. The ALCP program allows local agencies to advance construct projects with their own funds to be reimbursed in a later year, which the Regional Transportation Plan (RTP) originally established. The ALCP RARF Closeout process evaluates both these two events to determine the possibility of reimbursing advanced completed projects earlier than scheduled. The ALCP RARF Closeout process begins with a fiscal analysis of the ALCP and proposed ALCP RARF Closeout options. The ALCP RARF Closeout options are connected to eligible, advanced, completed projects and the priorities established in the ALCP Policies and Procedures. The allocation of ALCP RARF Closeout funds is prioritized by: (1) projects scheduled for reimbursement in the next fiscal year, (2) all other projects according to the chronological order of the programmed reimbursement, (3) the date of the final project invoice, and (4) the date the ALCP Project Reimbursement Request was accepted by MAG staff. Section 260 of the Policies established RARF Closeout procedures, project eligibility, prioritization, and the allocation process of available closeout funds. On April 26, 2012, the MAG Transportation Review Committee recommended approval of ALCP project reimbursements.

5E. Project Changes - Amendment and Administrative Modification to the FY 2011-2015 MAG Transportation Improvement Program

The MAG Management Committee, by consent, recommended approval of amendments and administrative modifications to the FY 2011-2015 MAG Transportation Improvement Program, FY 2012 Arterial Life Cycle Program, and as appropriate, to the Regional Transportation Plan 2010 Update. The Fiscal Year 2011-2015 MAG Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) 2010 Update were approved by the MAG Regional Council on July 28, 2010, and have been modified fourteen times with the last modification approved in April 2012. Since then, the Arizona Department of Transportation (ADOT), and member agencies have requested project changes to projects categorized as Non Arterial Life Cycle projects that include: defer 16 TIP listings, delete 12, add six, increase funding on two, decrease funding on one, combine five listings into three, and name corrections on three listings. Project change requests to funding types include Congestion Mitigation Air Quality (CMAQ), Highway Safety Improvement Program (HSIP), National Highway System (NHS), Regional Area Road Funds

(RARF), Surface Transportation Program (STP), and Transportation Enhancements (TE). Fiscal balance is maintained for project change requests. Valley Metro Rail received a Federal Transit Administration (FTA) Section 5309 Small Starts (5309 SS) award of \$35,481,000 in Federal Fiscal Year 2012, and is requesting to amend eight budget items, and add sixteen new project budgets for the Central Mesa Light Rail. Valley Metro Rail has submitted the Project Construction Grant Agreement to FTA and is pending review and approval. The requests for amendments to the TIP reflect the current Project Construction Grant Agreement budget submittal to FTA. Additionally, the MAG Transit Committee recommended approval of reprogramming the Transit Center/Park and Ride in Glendale to line up with the project development schedule, and programming the remaining STP-Flex, 5309-FGM, and 5307 funds for preventive maintenance. The Transit Committee action is related to these line items. Table A lists all Non Arterial Life Cycle Program (ALCP) project change requests. Tables B and C list ALCP project change requests. The ALCP requested changes include minor budget modifications, five deleted items, and four new items. Funding reimbursements has been clarified on several items. All of the projects to be amended may be categorized as exempt from conformity determinations and an administrative modification does not require a conformity determination. On April 26, 2012, the MAG Transportation Review Committee recommended approval of the requested changes.

5F. Additional FFY 2012 CMAQ Funds Available to Transit Projects

The MAG Management Committee, by consent, recommended approval of programming the \$25,242,460 of CMAQ for bus purchases in 2013 and 2014, programming related 5307 funds from 2013 and 2014 for preventive maintenance; and the related modifications to the FY 2011-2015 MAG Transportation Improvement Program and as appropriate the Regional Transportation Plan 2010 Update. Each year, through the MAG Committee Process, priorities are established on the use all of the federal obligation authority for the current federal fiscal year (FFY); this is generally known as Closeout. On February 22, 2012, the MAG Regional Council approved Scenario #4 to fund projects that will obligate in FFY 2012 at a 50 percent increase of the federal share, up to 100 percent of project costs, with an additional \$293,000 of federal funds to CHN12-805, and the remaining balance to be flexed to transit, with projects and priorities developed at a later time. At the time of the recommendation, the amount to be flexed to transit was \$25,318,375 in federal Congestion Mitigation and Air Quality (CMAQ) funds. The Transit Committee met in February, March and April to discuss programming options. On April 12, 2012, the MAG Transit Committee recommended approval of programming the \$25,242,460 for bus purchases in 2013 and 2014, and then using the freed up 5307 funds for preventive maintenance. On April 26, 2012, the Transportation Review Committee concurred with the Transit Committee's recommendation.

5G. Conformity Consultation

The Maricopa Association of Governments is conducting consultation on a conformity assessment for an amendment and administrative modification to the FY 2011-2015 MAG Transportation Improvement Program (TIP) and Regional Transportation Plan 2010 Update. The amendment and administrative modification involve several projects, including Arizona Department of Transportation projects, various transit projects including the METRO Central Mesa light rail project, and the programming of FY 2012 CMAQ Closeout funds for transit 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. Comments were requested by May 18, 2012.

5H. 2010 Implementation Status of Committed Measures in the MAG 2007 Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area

The MAG Management Committee, by consent, recommended forwarding the 2010 Implementation Status of Committed Measures in the MAG 2007 Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area to the Governor's Office, Arizona Legislature, Arizona Department of Environmental Quality and Environmental Protection Agency. In accordance with the Clean Air Act, the MAG 2007 Five Percent Plan for PM-10 was submitted to the Environmental Protection Agency (EPA) in December 2007. In January 2011, the plan was voluntarily withdrawn to address technical approvability issues identified by EPA and include new information. While the plan was withdrawn, the measures in the plan continue to be implemented to reduce PM-10. On May 23, 2007, the MAG Regional Council approved that each year, MAG would issue a report on the status of the implementation of the committed measures for this region by the cities, towns, Maricopa County and the State. The report would then be made available to the Governor's Office, Arizona Legislature, Arizona Department of Environmental Quality and the Environmental Protection Agency. A report has been prepared that provides the implementation status of the committed measures for 2010. In general, the combined implementation results for 2008, 2009, and 2010 meet or exceed the commitments made to implement a majority of the measures in the MAG 2007 Five Percent Plan for PM-10. On April 26, 2012, the MAG Air Quality Technical Advisory Committee recommended forwarding the report to the Governor's Office, Arizona Legislature, Arizona Department of Environmental Quality, and the Environmental Protection Agency.

6. Regional Freeway and Highway Life Cycle Program - 2012 Rebalancing

Bob Hazlett, MAG Senior Engineer, reported on the effort to balance the Regional Freeway and Highway Program Life Cycle Program, which is facing a deficit of approximately \$390 million. Mr. Hazlett noted that a report on the 2012 rebalancing had been presented to the MAG Transportation Review Committee, the MAG Management Committee, Transportation Policy Committee, and MAG Regional Council. He advised that this item is being presented this month for action by the committees and he noted that the Transportation Review Committee had recommended approval of Scenario 10b.

Mr. Hazlett displayed a map of recently completed construction on the Regional Freeway Program and advised that the MAG high occupancy vehicle (HOV) system is now the fourth largest in the nation, behind Seattle, San Francisco, and Los Angeles. Mr. Hazlett displayed a map of projects under construction that include Loop 303 from I-10 to US-60 and US-60 reconstruction.

Mr. Hazlett then described projects under study by ADOT, which include US-60/Grand Avenue Loop 303 to Loop 101 intersection improvements; Interstate 17, I-10 Split to Loop 101, add lanes and a corridor study/environmental impact statement (EIS); Loop 202/South Mountain EIS/Design Concept Report; Loop 101, I-17 to Loop 202 add lanes; Loop 202, Loop 101 to Gilbert Road, add

lanes; Interstate 10, SR-51 to Loop 202, add lanes and a corridor study/EIS; Loop 101, US-60 to Loop 202, add lanes.

Mr. Hazlett reported on key MAG studies underway that include Central Phoenix Transportation Framework Study, the Southeast Corridor Major Investment Study, the MAG Managed Lanes Network Development Strategy – Phase I (System-Wide), and the US-60/Grand Ave COMPASS study.

Mr. Hazlett displayed a projected timeline for the Program’s cash flow and he noted that there are severe negative balances in 2015 and 2016 where ADOT’s bonding capacity has been impacted by lower gas tax and sales tax revenue estimates. Mr. Hazlett stated that MAG and ADOT are identifying opportunities for cost savings, and looking at cash flow, costs, and timelines for major program items. He stated that ADOT has been doing a good job of monitoring costs and there have been favorable bids, but there is still a projected deficit of \$390 million, in addition to the \$6.6 billion that was balanced in 2009.

Mr. Hazlett noted that due to cash flow, the Loop 202/South Mountain and the I-10/Maricopa Freeway projects cannot be constructed simultaneously and need to be done sequentially. Mr. Hazlett noted that one of the options to be looked at in the rebalancing is swapping the start times between the two projects and starting the Loop 202/South Mountain project first.

Mr. Hazlett stated that the following principles for balancing the program were considered: 1). Do not change timing for immediate construction projects on Loop 303 and US-60/Grand Avenue; 2). Look at cash-flow, costs, and timelines for major program items; 3). Programs on US-60/Grand Avenue and HOV lanes on SR-202L/Red Mountain-Santan Freeways leave unaffected; 4). Twelve scenarios considered – four advanced - as best case for balancing and meeting cash-flow projections. Mr. Hazlett stated that overall, the Regional Freeway and Highway Program is a \$9.6 billion program; \$3.5 billion has been obligated through December 2011 and approximately \$6.1 billion remains through 2026 when the Proposition 400 sales tax sunsets.

Mr. Hazlett summarized major items in Scenario 8: to defer the general purpose lanes Loop 101, I-17 to Loop 202, Loop 202, Loop 101 to Gilbert Road, and Loop 101, US-60 to Loop 202, however, a cost/benefit analysis found that not adding general purpose lanes to those three corridors would be a disbenefit to the region. Mr. Hazlett noted that Scenario 8 includes adding lanes on Loop 303 and I-17.

Mr. Hazlett stated that Scenario 10a would reduce the I-17 project by \$300 million. He noted that I-17 is currently in the EIS process and \$1 billion is allocated to the corridor. He noted that this corridor could be a candidate for a managed lanes Public Private Partnership (P3), leveraging Proposition 400 funds. Mr. Hazlett stated that Scenario 10a would reduce the Loop 303 project between US-60 and I-17 by \$80 million, based on the favorable bids that have been received. He added that bid savings were realized from the SR-24 project and were turned back into the program. Mr. Hazlett stated that Scenario 10a retains adding lanes and the new South Mountain Freeway corridor.

Mr. Hazlett then described Scenario 10b, which includes deferring the fifth and sixth lanes on Loop 303 from US-60 to I-17. Mr. Hazlett noted that the facility is a four lane divided roadway, two lanes in each direction, from I-17 to Grand Avenue with posted speeds of 65 m.p.h., and it provides access to the Peoria and Phoenix areas. Mr. Hazlett stated that this roadway mostly goes through an undeveloped area of state land and originally, a lot of development was envisioned for this area. He indicated that this development did not happen due to the economic crash, and an option was developed because of the possibility of economic development of warehousing and distribution industries in the Goodyear area, where the segment on Loop 303 from I-10 to MC-85 would be built. He noted that this segment had been deferred in 2009 to the fifth phase of the RTP outside the Proposition 400 funding. Mr. Hazlett noted that with the economic situation, it might make sense to defer the Loop 303 project in 10a and return the Loop 303 project in 10b to the program. He noted that the costs for either project are virtually the same. Mr. Hazlett stated that a cost/benefit analysis found that for every dollar spent on the Loop 303 I-10 to MC-85 project would return approximately \$5.75 in benefits.

Mr. Hazlett then addressed Scenario 12, which is similar to Scenario 10a, and swaps the priorities of I-10 and the South Mountain Freeway. He said that the widenings on Loops 101 and 202 were retained. Mr. Hazlett stated that there could be a Scenario 12b. He noted that MAG staff is pursuing detail on a modified scenario by ADOT.

Mr. Hazlett summarized the Scenario 10b cash flow and recommendations: swap the Loop 303 recommendations; provide for El Mirage Road traffic interchange; prioritize the South Mountain Freeway; examine other Interstate 10/Maricopa Freeway opportunities; and reduce the program for the Interstate 17 corridor. Mr. Hazlett displayed a map requested by the City of Goodyear that showed more than 25 warehousing and distribution centers in various stages of development mostly located between Interstate 10 and the Gila River and would be served by the Loop 303 segment in Scenario 10b. He noted that Scenario 10b would serve this rapidly developing area.

Chair Meyer thanked Mr. Hazlett for his report and asked if there were questions.

Mr. Smith asked Mr. Hazlett to address the Loop 303/I-10 traffic interchange under construction. Mr. Hazlett replied that the north half of the Loop 303/I-10 traffic interchange currently is under construction. He explained that it involves significant relocation of the mainline to accommodate the new ramps. Mr. Hazlett stated that for a modest amount of money, ADOT can modify the existing construction at the Interstate 10 system interchange with the addition of bridge frames for the future Loop 303 to the south and thereby save on the overall construction expenses of this extension. He noted that this option would eliminate traffic detours that would be associated with doing the project in the future and would save money up front.

Chair Meyer asked for clarification if the change in timing for the South Mountain Freeway and Interstate 10/Broadway curve projects change the substance of either project. Mr. Hazlett replied that the change in timing would not change the content of the South Mountain Freeway, but there are a couple of other concepts for the Interstate 10/Broadway curve area they would like ADOT to explore, which ADOT has agreed to do. He mentioned that the modeling shows positive results in accommodating the traffic in a tighter footprint. Mr. Hazlett stated that the concept identified by ADOT dates back to 1988 and this is an opportunity to look at other options, such as a

managed lanes approach or Direct High Occupancy Vehicles to get the right traffic in the right lanes. He stated that right now, ADOT is checking MAG's studies to see if there are any fatal flaws from a construction perspective.

Mr. Roehrich expressed concern with a delay in the I-10 project. He said that if the analysis shows a fatal flaw and the original scope is retained and the project is delayed to 2022, that means the study began in 2000 and he feared the federal agencies would say that the traffic analyses, traffic models, and data gathered during the process are out of date and will need to be redone.

Mr. Smith noted that there may be a need to lengthen the process on the Broadway curve segment. He noted that if the policy decision is made to change from the inner loop that would impact Sky Harbor Airport and instead to go around the Durango curve, along with the managed lanes concept, could cause a restart on the project. Mr. Smith commented on the many years of work put into the project already and near the end of the process another option appears. He stated that the question is whether we continue with the older idea or pause and examine if the other concept has merit.

Mr. Beasley stated that Glendale would support Scenario 10a. He said that Glendale supports the rebalancing and for everyone to have a chance to move forward with their projects, but 10b would have an impact on Glendale beyond the economic opportunities in the West Valley. Mr. Beasley noted that if Loop 303 is eliminated or delayed, cross traffic on arterials and in neighborhoods would be impacted.

Mr. Manos stated that Maricopa County will support Scenario 10b, but has some of the same concerns noted by Mr. Beasley. He stated that Loop 303 is important to Maricopa County and to the Board of Supervisors. Mr. Manos noted that the Board understands the difficulty of balancing the program with limited resources and understands the importance of expanding Loop 303 to the south, but completing Loop 303 will continue to be a high priority to Maricopa County.

Mr. Dalke stated that the City of Goodyear supports Scenario 10b and he added that Loop 303 is important to the West Valley. He asked for clarification that Loop 303 south of Interstate 10 was in an earlier phase of the Regional Transportation Plan. Mr. Hazlett replied that was correct. He explained that the segment between MC-85 and Interstate 10 originally was in Phase Three of the Regional Transportation but was deferred to Phase Five in the 2009 Freeway Rebalancing.

With no further questions, Chair Meyer called for a motion. Vice Chair Cavazos moved to recommend approval of 2012 Rebalancing Scenario 10B, where the MAG Regional Freeway and Highway Program meets the projected \$390 million shortfall by repositioning the SR-202L/South Mountain Freeway and Interstate 10/Maricopa Freeway projects to improve the Program's cash flow; transfer funding from the SR-303L segment between US-60 and Interstate 17 to the SR-303L segment between Interstate 10 and MC-85, but retain funding for a grade separated interchange at the existing El Mirage Rd intersection; remove \$300 million from the Program's budget for the Interstate 17/Black Canyon Freeway corridor; and to encourage ADOT to focus upon cost-effective solutions that will provide opportunities to return projects to the Program in the future; and incorporate the revised program in the next update of the MAG Transportation

Improvement Program and the Regional Transportation Plan. Mr. Hillman seconded, and the motion passed, with Mr. Roehrich abstaining.

7. Draft MAG 2012 Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area

Lindy Bauer, MAG Environmental Programs Director, provided an overview of the new Draft MAG 2012 Five Percent Plan for PM-10. Ms. Bauer stated that the new 2012 Plan includes a wide variety of existing control measures and projects that have already been implemented. Ms. Bauer noted that while the 2007 Five Percent Plan was withdrawn, the control measures continue to be implemented and are being resubmitted. Ms. Bauer stated that the new plan contains one new measure to reduce PM-10 during high risk conditions, including high winds. She advised that the focus for the attainment demonstration this time is on high winds, and she added that there have been no violations of the PM-10 standard in stagnant conditions since the prior plan was submitted in December 2007.

Ms. Bauer noted that the Plan includes a wide range of controls on trackout, open burning, unpaved shoulders, unpaved roads, vacant lots, earthmoving, all terrain vehicles, weed abatement, leaf blowers, street sweepers, and nonmetallic mineral processing (sand and gravel operations).

Ms. Bauer stated that MAG closely monitors the air quality monitoring data. She mentioned that EPA has unofficially indicated that 2009 may be a clean year and only a few of the events may be questioned. Ms. Bauer indicated that 2010 was a clean year since there was only one exceedance and no violations of the PM-10 standard. She noted that 2010 being clean is what led EPA to say to MAG to resubmit the measures in the prior Plan. Ms. Bauer stated that in 2011, there were numerous exceptional events that needed to be documented for EPA.

Ms. Bauer stated that the 2008 PM-10 Periodic Emissions Inventory serves as a foundation for the 2012 Plan and includes new information from EPA for paved road dust.

Ms. Bauer discussed that the 2012 Five Percent Plan takes credit for a number of measures in the withdrawn MAG 2007 Five Percent Plan that have been implemented. She stated that most of the credit is being taken from the Maricopa County Dust Control Rules, which have increased in effectiveness over time, the sweeping of freeways, purchasing PM-10 certified street sweepers with CMAQ funds, paving roads, alleys, and shoulders, stabilization projects completed by local governments, reducing speed limits on dirt roads, rubberized asphalt, and the new measure, the Dust Action General Permit, which was passed by the Legislature in 2011.

Ms. Bauer noted that the Plan must have contingency measures. Ms. Bauer stated that 862 total miles of roads/alleys and 1,158 total miles of shoulders were paved or stabilized and 25 new PM-10 certified street sweepers were purchased. Ms. Bauer noted that the Draft MAG 2012 Five Percent Plan for PM-10 meets the needed emissions reduction, has greater tonnage impacts than the targets, and meets the contingency requirement. She displayed a pie chart produced by the Plan that includes all of the measures totaling more than 38,000 tons of PM-10.

Ms. Bauer stated that in conclusion the Draft MAG 2012 Five Percent Plan for PM-10 meets the annual five percent reduction requirement, meets the contingency requirement, and demonstrates

attainment in 2012 for two high wind days. She indicated that an extension of the attainment date from June 6, 2012 to December 31, 2012 has been requested. The extension is being requested so that the Dust Action General Permit can be implemented for an entire year in order to demonstrate attainment. Ms. Bauer stated that the PM-10 emission reductions in 2012 total 19,527 tons, a 33 percent reduction. She advised that three clean years at the monitors are needed for EPA to approve the plan, and she added that documentation of exceptional events is very important.

Ms. Bauer provided an overview of the Draft MAG 2012 Five Percent Plan schedule. She noted that on March 12, 2012, the draft plan became available for public review. Ms. Bauer added that the public hearing on the Draft MAG 2012 Five Percent Plan for PM-10 was held on April 12, 2012. The Plan was recommended for adoption by the MAG Air Quality Technical Advisory Committee on April 26, 2012. She noted that the plan was being presented to MAG Management Committee for action. Ms. Bauer noted that if the Regional Council adopts the plan, MAG would submit the plan to Arizona Department of Environmental Quality, which would submit the plan to the Environmental Protection Agency. Ms. Bauer stated that by August 14, 2012, EPA will need to make a completeness determination on the plan which will stop the 18 month and 24 month sanction clocks that began when the plan was withdrawn. She indicated that by February 14, 2013, EPA needs to approve the plan to stop the imposition of a federal implementation plan.

Chair Meyer extended his gratitude and congratulations to Ms. Bauer and everyone involved in the effort to develop the Draft MAG 2012 Five Percent Plan for PM-10, which was a huge undertaking. With no questions from the committee, Chair Meyer called for a motion.

Mr. Crossman moved to recommend adoption of the Draft MAG 2012 Five Percent Plan for PM-10 for the Maricopa County Nonattainment Area. Mr. Kross seconded, and the motion passed unanimously.

9. Off Highway Vehicle (OHV) Dust Task Force

This agenda item was taken out of order.

Frank Schinzel, Government Liaison with the Maricopa County Air Quality Department, reported on the Arizona Department of Environmental Quality's Off Highway Vehicle (OHV) Dust Task Force.

Mr. Schinzel reported that on June 5, 2012, the OHV Dust Task Force will be holding a meeting to educate local law enforcement agencies on the impact of improper OHV use on air quality and the ordinances available to control illegal OHV use. He stated that off road vehicle use was four percent of the PM-10 emissions inventory last year and increased to six percent this year. Mr. Schinzel added that they feel this rise is not due to increased use, but to the fact that the other areas are improving.

Mr. Schinzel stated that enforcement of the regulations to control dust by the Maricopa County Air Quality Department and ADEQ are limited and they are seeking the assistance of member agency law enforcement. Mr. Schinzel stated that most people will stop and listen, while others are flagrant violators.

Mr. Schinzel said that members of the OHV task force include agencies such as the Arizona Department of Environmental Quality, Arizona Game and Fish Department, State Trust Land, State Parks, Maricopa County Parks, Tonto National Forest, Bureau of Land Management and Maricopa County Air Quality Department. At the meeting, members will discuss solutions to improper off highway vehicle use.

Mr. Schinzel thanked MAG members for stepping up with their assistance to air quality. He noted that many people do not understand the residual effects of off highway vehicle use and requested that Management Committee members speak to their police chiefs to send high-ranking law enforcement representatives to the scheduled meeting. Mr. Schinzel explained one of the things they could help with is on HPA days, there is a requirement to cease off highway vehicle activities, however, only law enforcement has the authority to enforce this because they have authority over motor vehicles. Mr. Schinzel provided his contact information at each member's place.

Chair Meyer thanked Mr. Schinzel for coming to the meeting and asked members if they had questions.

Mr. Brady asked who has jurisdiction over activities on state trust land. Mr. Schinzel replied that it depends; if the state trust land is within a city, it would be the city force, if the land is in the county, it would be the county forces. Mr. Brady asked if DPS would not have jurisdiction. Mr. Schinzel replied that he understood that typically DPS would not have jurisdiction; it would be local law enforcement, including the Maricopa County Sheriff's Office.

10. Approval of the Draft FY 2013 MAG Unified Planning Work Program and Annual Budget and the Member Dues and Assessments

Becky Kimbrough, MAG Fiscal Services Manager, provided a report on the draft FY 2013 MAG Budget that was on the agenda for action. She said they are requesting that the resolution to adopt the draft FY 2013 MAG Unified Planning Work Program and Annual Budget and the member dues and assessments.

Ms. Kimbrough stated that the draft Work Program is presented incrementally each year, beginning in January with proposed dues and assessments. She advised that this year MAG is proposing to retain the 50 percent overall reduction of member dues. Ms. Kimbrough stated that in February the proposed projects for the Work Program are presented and in March the initial draft was sent to MAG committees. Ms. Kimbrough stated that in April, changes to staff and projects, including the addition of the Cave Creek/Carefree Transportation Framework Study and the additional funding for the Maricopa County Trip Reduction program were presented.

Ms. Kimbrough stated that there is an overall decrease to the proposed FY 2013 budget from the current year budget of 13.2 percent without including carryforward consultant estimates. She noted that including the carryforward consultant budgeted amounts, there is an overall decrease in the FY 2013 budget of 12.04 percent.

Chair Meyer thanked Ms. Kimbrough for her report and asked if there were questions. Hearing none, he called for a motion.

Mr. Cleveland moved to recommend approval of the resolution adopting the Draft FY 2013 MAG Unified Planning Work Program and Annual Budget and the member dues and assessments. Mr. Wright seconded, and the motion passed unanimously.

8. Legislative Update

Nathan Pryor, MAG Intergovernmental Policy Coordinator, provided an update on legislative issues of interest. He reported that Congressman Flake has been working on legislation called the CLEER Act to address air quality issues. He noted that staff has been working with the Congressman's office on air quality issues for the past few months and the legislation might be introduced this week. Mr. Pryor noted that more detail would be provided after the legislation is introduced.

Mr. Pryor then addressed the federal deficit and the impacts it could have on regional and local programs. He said that it has come to staff's attention that programs such as Community Development Block Grants (CDBG) and Social Services Block Grants (SSBG), might be targeted for budget reductions.

Mr. Pryor stated that Congress currently is working on the FY 2013 federal budget and both the House and Senate have announced that reducing the federal deficit is a priority. He reported that the House version introduced by Representative Ryan includes tax reductions, a revamp of Medicare, reduction to entitlement programs, and agency spending cuts.

Mr. Pryor displayed a graph compiled by the Government Accounting Office that showed the history of total spending and total receipts from 1980 to 2080. He pointed out how total spending is outpacing receipts. Mr. Pryor displayed another graph with a shorter outlook – 2010 to 2040. He noted the baseline that is current law compared to current policy and the Senate's Bowles-Simpson plan that is more austere.

Mr. Pryor then displayed the federal FY 2012 outlays per program and he noted that the two top programs in terms of expenditure are the entitlement programs, Health and Human Services that includes Medicare, and the Social Security Administration. He said that defense and interest on the federal debt are the next two highest expenditures. Mr. Pryor stated that if entitlement programs are not reduced, the spending cuts will need to come from agencies and their programs, such as SSBG and CDBG. He reported that the Highway Trust Fund has been propped up with transfers of approximately \$7 billion to \$9 billion annually for the past few years, and if that is eliminated, there could be a change in how the Fund is administered.

Mr. Pryor showed a graph that showed that current trends in spending for Medicare, Medicaid, and Social Security are not sustainable. He noted that the graph shows that around 2035 mandatory spending will exceed government revenue, however, this date has been revised to 2032 or 2033 in recent weeks. Mr. Pryor noted that due to this being an election year, the budget will

become a very political issue. He reported that the White House, House and Senate have all said to expect spending reductions.

Chair Meyer thanked Mr. Pryor for his report. No questions for Mr. Pryor were noted.

11. Request for Future Agenda Items

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.

No requests for future agenda items were noted.

12. 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.

No comments from the Committee were noted.

Adjournment

There being no further business, Mr. Crossman moved, Mr. Buss seconded, and the meeting was adjourned at 1:05 p.m.

Chair

Secretary

MARICOPA ASSOCIATION OF GOVERNMENTS INFORMATION SUMMARY...

DATE:

June 5, 2012

SUBJECT:

Project Changes – Amendment and Administrative Modification to the FY 2011-2015 MAG Transportation Improvement Program, FY 2012 Arterial Life Cycle Program, and to the Regional Transportation Plan 2010 Update

SUMMARY:

The Fiscal Year 2011-2015 MAG Transportation Improvement Program (TIP) and Regional Transportation Plan (RTP) 2010 Update were approved by the MAG Regional Council on July 28, 2010, and have been modified fifteen times with the last modification approved on May 23, 2012.

With the close of the State Fiscal Year approaching, the Arizona Department of Transportation (ADOT) and member agencies have requested project changes that include: cost changes and additions for new Highway Safety Improvement Program (HSIP), Safe Routes to School, and Transportation Enhancements awards. Three project change requests have been added since the Transportation Review Committee recommended approval and are tinted in yellow. Fiscal balance is maintained for the project change requests in Table A.

Project changes to the Fiscal Year 2012 Arterial Life Cycle Program (ALCP) include revised project costs that reflect HSIP funds awarded by ADOT. Two agencies requested to defer federal funds from the current Federal Fiscal Year (FFY) to a later year in the program. To maximize, the amount of federal funds obligated in the current FFY reimbursements programmed for Northern Parkway were advanced to the FFY 2012. Fiscal balance is maintained for the requests listed in Tables B and C.

The attached Table A lists all Non Arterial Life Cycle Program project change requests.

Tables B and C list Arterial Life Cycle Program (ALCP) project change requests.

All of the projects to be amended may be categorized as exempt from conformity determinations and an administrative modification does not require a conformity determination.

PUBLIC INPUT:

None.

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 2011-2015 MAG Transportation Improvement Program, Arterial Life Cycle Program, and as appropriate, to the Regional Transportation Plan 2010 Update.

PRIOR COMMITTEE ACTIONS:

MAG Transportation Review Committee: On May 24, 2012, this item was recommended for approval. (Please note that changes to the tables since the Transportation Review Committee have tinted backgrounds.)

MEMBERS ATTENDING

- | | |
|---|---|
| Scottsdale: David Meinhart, Chair | Litchfield Park: Julius Diogenes for Woody Scoutten |
| Avondale: David Fitzhugh, Vice-Chair | Maricopa County: John Hauskins |
| ADOT: Kwi-Sung Kang for Floyd Roehrich | Mesa: Jeff Martin for Scott Butler |
| * Buckeye: Scott Lowe | Paradise Valley: Bill Mead |
| Chandler: RJ Zeder for Patrice Kraus | Peoria: Andrew Granger |
| El Mirage: Jorge Gastelum for Lance Calvert | Phoenix: Rick Naimark |
| Fountain Hills: Randy Harrel | * Queen Creek: Tom Condit |
| Gila Bend: Eric Fitzer | RPTA: Bryan Jungwirth |
| * Gila River: Doug Torres | Surprise: Bob Beckley |
| Gilbert: Leah Hubbard | Tempe: Chad Heinrich |
| Glendale: Terry Johnson | Valley Metro Rail: Wulf Grote for John Farry |
| Goodyear: Cato Esquivel | Wickenburg: Rick Austin |
| * Guadalupe: Gino Turrubiarres | Youngtown: Grant Anderson for Lloyce Robinson |

EX-OFFICIO MEMBERS ATTENDING

- | | |
|--|---|
| *Street Committee: Charles Andrews, Avondale | *Bicycle/Pedestrian Committee: Katherine Coles, City of Phoenix |
| *ITS Committee: Debbie Albert, Glendale | *Transportation Safety Committee: Julian Dresang, City of Tempe |

* Members neither present nor represented by proxy.

+Attended by Videoconference

Attended by Audioconference

CONTACT PERSON:

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

Table A. Non-ALCP Project Changes to the Fiscal Year 2011-2015 MAG Transportation Improvement Program

6/4/2012

HIGHWAY														
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	Requested Change
CVK07-601C	Cave Creek	Townwide	Pave dirt roads program - Construct	2014		0.5	1	1	CMAQ	\$10,155	\$ 169,845	\$ -	\$ 180,000	Amend: Defer the project to FY 2014 due to complications obtaining the environmental clearance. This project has not been deferred since the approval of MAG Programming Principals in October 2011.
DOT11-110	ADOT	303 (Estrella Fwy): Peoria Ave - Waddell Rd	Landscape Design	2011	Mar-14	2	6	6	RARF/STP-TE	\$ 2,280	\$ 37,720	\$ 200,000	\$ 240,000	Amend: Increase total project budget by \$40,000 (\$37,720 Federal Transportation Enhancement - Projects of Opportunity, \$2,280 Local) from \$200,000 to \$240,000.
DOT11-113	ADOT	303 (Estrella Fwy): Waddell Rd - Mountain View Rd	Landscape Design	2011	Mar-14	4	6	6	RARF/STP-TE	\$ 3,420	\$ 56,580	\$ 300,000	\$ 360,000	Amend: Increase total project budget by \$60,000 (\$56,580 Federal Transportation Enhancement - Projects of Opportunity, \$3,420 Local) from \$300,000 to \$360,000.
DOT13-930	ADOT	202 (Red Mountain Fwy): SR101L to Gilbert Rd	Design general purpose lane	2014	Mar-17	6	8	10	RARF	\$ -	\$ -	\$ 4,600,000	\$ 4,600,000	Amend: Increase regional budget by \$700,000. Proposed cost total cost is now \$4,600,000. Design cost increased to reflect additional construction cost.
DOT13-948	ADOT	10: Perryville Rd TI	Construct traffic interchange	2013	Dec-14	0.2	TI	TI	NHS	\$ -	\$ 13,800,000	\$ 9,500,000	\$ 23,300,000	Amend: Increase cost and establish a Design Build project in FY 2013. Proposed total cost is now \$23,300,000 (\$5,300,000 regional increase). Previous estimate was Level 0 (planning). Updated estimate based on costs from draft DCR were increased based on design of bridge to accommodate future parkway on Perryville Road.
DOT15-172	ADOT	202 (Red Mountain Fwy): SR101L to Gilbert Rd	Construct general purpose lane	2015	Mar-17	6	8	10	RARF	\$ -	\$ -	\$ 69,000,000	\$ 69,000,000	Amend: Increase regional cost \$12,600,000. Proposed total cost is now \$69,000,000. Cost increase is a result of eliminating design exceptions at EB McKellips Road off-ramp and WB from Dobson to Loop 101. This requires the more costly retaining wall and cantilevered roadway construction.
ELM11-801	El Mirage	Downtown El Mirage	Paving existing unpaved alleys	2012	Dec-13	1.7	0	0	CMAQ	\$ -	\$ 657,146	\$ -	\$ 657,146	Amend: Detailed estimate returned asphalt cost increase, increase total project cost by 112,661.
GLB04-205	Gilbert	Gilbert Rd: Warner Rd to Baseline Rd	Install fiber & conduit along Gilbert Rd.	2012		3	4	4	CMAQ	\$ -	\$ 460,500	\$ -	\$ 460,500	Amend: Original project location description included a section north of town limits with incorrect lane count; length of project reduced and lanes before and after corrected.

Maricopa Association of Governments

HIGHWAY														
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	Requested Change
PEO12-110	Peoria	Intersection of Cactus Rd and 75th Avenue	Design intersection improvement.	2013		0.1	4	4	HSIP	\$ 20,697	\$ 342,397	\$ -	\$ 363,094	Amend: Reduce local cost from 317,773 to 20,697 and reduce total cost from 660,170 to 363,094. Move in TIP from FY12 to FY13
PEO12-111	Peoria	Intersection of Cactus Rd and 75th Avenue. Peoria Ave and 75th Ave.	Design intersection improvement.	2013		0.1	4	4	HSIP	\$ 38,331	\$ 634,142	\$ -	\$ 672,473	Amend: Change the location to Peoria Ave and 75th Avenue, Move in TIP from FY12 to FY13
PEO14-102	Peoria	Intersection of Cactus Rd and 75th Avenue	Acquisition of right-of-way for intersection improvement.	2014		0.1	4	4	HSIP	\$ 60,279	\$ 997,248	\$ -	\$ 1,057,527	Amend: Reduce local cost from 981473 to 60,279, reduce federal cost from 1,057,527 to 997,248, and reduce total cost from 2,039,000 to 1,057,527. Move in TIP from FY12 to FY14
PEO14-103	Peoria	Intersection of Cactus Rd and 75th Avenue. Peoria Ave and 75th Ave.	Acquisition of right-of-way for intersection improvement.	2014		0.1	4	4	HSIP	\$ 27,727	\$ 458,713	\$ -	\$ 486,440	Amend: Change the location to Peoria Ave and 75th Avenue
PEO15-105	Peoria	Intersection of Cactus Rd and 75th Avenue. Peoria Ave and 75th Ave.	Relocate utilities, construct/add dual left turn lanes and right turn lanes on all approaches, raised median, and upgrade bike/pedestrian facilities	2015		0.1	4	4	HSIP	\$ 395,642	\$ 6,545,445	\$ -	\$ 6,941,087	Amend: Change the location to Peoria Ave and 75th Avenue
PHX10-801	Phoenix	41st Ave: Granada Rd - Holly Ave	Construct Sidewalks, ADA ramps, & Street Lighting	2012		0.34	2	2	SRTS	\$ -	\$ 250,000	\$ -	\$ 250,000	Amend: Add new project to the TIP. ADOT SRTS award.
TMP12-119	Tempe	Intersection of Broadway Rd and Priest Dr.	Construction of Intersection: Broadway Rd and Priest Dr., Construct bus pull-out, ADA sidewalk ramps, and widen east bound right turn lane.	2013		0.1	4	4	HSIP	\$ 12,309	\$ 203,637	\$ -	\$ 215,946	Amend: Add description: Construction of Intersection of Broadway Rd and Priest Dr. Move in TIP from FY12 to FY13.

Changes to TIP in Red

Additions since TRC review are highlighted in

TABLE B. Amendments and Administrative Modifications to the FY2011-2015 TIP and the FY2012 ALCP

5/22/2012

Agency	Work Year	Reimb. Year	TIPIDN	Location	Work	Miles	Lanes Before	Lanes After	Funding	Federal	Regional	Local	Total	Reimb Fund Type	Reimb. Amount	Note
Chandler	2014	2014	CHN110-08RWZ2	Chandler Blvd at Alma School Rd	Acquisition of right-of-way for intersection improvement	0.25	4	6	HSIP/RARF	\$ 1,184,190	\$ 339,125	\$ 326,685	\$ 1,850,000	HSIP/RARF	\$ 1,523,315	Amend. Work and reimbursements deferred from FY2012 to FY2014. Decreased work phase cost. Received HSIP grant (federal) and reduced RARF (regional) funds. Excess RARF funds reallocated to construction.
Chandler	2015	2015	CHN110-09C	Chandler Blvd at Alma School Rd	Construct intersection improvement	0.25	4	6	HSIP	\$ 4,208,929	\$ -	\$ 1,334,806	\$ 5,543,735	HSIP	\$ 4,208,929	Amend. Work and reimbursements deferred from FY2012 to FY2015. Decreased work phase cost. Received HSIP grant (federal) and reduced RARF (regional) funds. Excess RARF funds programmed as project savings.
Chandler	2012	2027	CHN12-109CZ	Chandler Blvd at Alma School Rd	Construct intersection improvement	0.25	4	6	Local	\$ -	\$ 941,543	\$ 403,518	\$ 1,345,061	RARF	\$ 941,543	Amend. Delete line item from the TIP and ALCP
Chandler	2011	2016	CHN14-102DZ	Ocotillo Road: Arizona Avenue to McQueen Road	Design roadway widening	1	2	4	Local	\$ -	\$ -	\$ 787,500	\$ 787,500	RARF	\$ 551,250	Amend. Increased project costs based on HSIP design considerations.
Chandler	2012	2016	CHN11-102DZ	Ocotillo Road: Arizona Avenue to McQueen Road	Design roadway widening	1	2	4	Local	\$ -	\$ -	\$ 787,500	\$ 787,500	RARF	\$ 551,250	Amend. Increased project costs based on HSIP design considerations.
Chandler	2014	2016	CHN14-102RWZ	Ocotillo Road: Arizona Avenue to McQueen Road	Acquire right-of-way for roadway widening	1	2	4	Local	\$ -	\$ -	\$ -	\$ -	RARF	\$ -	Amend. Delete line item from the TIP. Work to begin in FY13.
Chandler	2013	2013	CHN12-102RWZ	Ocotillo Road: Arizona Avenue to McQueen Road	Acquire right-of-way for roadway widening	1	2	4	HSIP	\$ 565,800	\$ -	\$ 534,200	\$ 1,100,000	HSIP	\$ 565,800	Amend. Deferred work from FY12 to FY13. Reduced project costs. Changed fund type from RARF to HSIP.
Chandler	2012	2012	CHN12-110RWZ	Gilbert Rd: Queen Creek to Hunt Hwy	Acquisition of right-of-way for roadway widening	4	2	2	RARF	\$ -	\$ 1,418,314	\$ 607,849	\$ 2,026,163	RARF	\$ 1,418,314	Amend. Regional funds advanced from FY13 to FY12. Funds exchanged with Chandler/Alma School project.
Chandler	2012	2012	CHN12-103CZ2	Gilbert Rd: Queen Creek to Ocotillo	Construct roadway widening	4	2	2	RARF	\$ -	\$ 1,187,356	\$ 508,867	\$ 1,696,222	RARF	\$ 1,187,356	Amend. Regional funds advanced from FY16 to FY12. Funds exchanged with Chandler/Alma School project.
Chandler	2012	2013	NEW	Gilbert Rd: Queen Creek to Ocotillo	Construct roadway widening	4	2	2	Impact Fees	\$ -	\$ -	\$ 2,026,163	\$ 2,026,163	RARF	\$ 1,418,314	Amend. Regional funds advanced from FY16 to FY13. Funds exchanged with Chandler/Alma School project.
Chandler	2012	2014	CHN12-103CZ	Gilbert Rd: Queen Creek to Ocotillo	Construct roadway widening	4	2	2	Impact Fees	\$ -	\$ -	\$ 7,044,999	\$ 7,044,999	RARF	\$ 4,931,499	Amend. Regional funds in FY14 reduced. A portion advanced from FY13 in an exchange with Chandler/Alma School project.
Maricopa County	2012	2012	MMA11-923	Northern Parkway: Dysart to 111th	Design bridge construction and roadway widening	2.5	2	4	STP-MAG	\$ 1,770,367	\$ -	\$ 758,729	\$ 2,529,095	STP-MAG	\$ 1,770,367	Amend. Consolidated line item with MMA13-118DZ. Federal reimbursement advanced from FFY2013 to FFY2012.
Maricopa County	2013	2013	MMA11-923RZ	Northern Parkway: Dysart to 111th	Reimbursement for design of bridge construction and roadway widening	2.5	2	4	STP-MAG	\$ 169,400	\$ -	\$ -	\$ 169,400	STP-MAG	\$ 169,400	Amend. Delete line item from the TIP. Reimbursement advanced from FFY2013 to FFY2012.
Maricopa County	2013	2013	MMA13-118DZ	Northern Parkway: Dysart to 111th	Design bridge construction and roadway widening	2.5	2	4	STP-MAG	\$ 1,600,967	\$ -	\$ 686,129	\$ 2,287,095	STP-MAG	\$ 1,600,967	Amend. Delete line item from the TIP. Consolidated line item with MMA11-923.
Maricopa County	2012	2012	MMA12-117DZ	Northern Parkway: Reems and Litchfield Overpasses	Design roadway widening and overpasses	0.2	0	4	STP-MAG	\$ 780,458	\$ -	\$ 47,175	\$ 827,633	STP-MAG	\$ 347,606	Amend. Consolidated line item with MMA13-117DZ. Federal reimbursement advanced from FFY2013 to FFY2012.
Maricopa County	2013	2013	MMA13-117DZ	Northern Parkway: Reems and Litchfield Overpasses	Design roadway widening and overpasses	0.2	0	4	STP-MAG	\$ 347,606	\$ -	\$ 148,974	\$ 496,580	STP-MAG	\$ 347,606	Amend. Delete item from the TIP. Consolidated line item with MMA12-117DZ.
Maricopa County	2012	2012	MMA13-106CLZ	Northern Parkway: Sarival to Dysart	Construct and landscape roadway widening	4	4	6	STP-MAG	\$ 495,970	\$ -	\$ 27,758	\$ 523,728	STP-MAG	\$ 495,970	Amend. Work and reimbursement advanced from FY2013 to FY2012.

Agency	Work Year	Reimb. Year	TIPIDN	Location	Work	Miles	Lanes Before	Lanes After	Funding	Federal	Regional	Local	Total	Reimb Fund Type	Reimb. Amount	Note
Maricopa County	2012	2012	MMA11-922	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for bridge construction and roadway widening	2.5	2	4	STP-MAG	\$ 686,731	\$ -	\$ 943,403	\$ 1,630,134	STP-MAG	\$ 686,731	Amend. Federal reimbursement advanced from FFY2013 to FFY2012.
Maricopa County	2013	2013	MMA11-922RZ	Northern Parkway: Dysart to 111th	Reimbursement for acquiring of right-of-way for bridge construction and roadway widening	2.5	2	4	STP-MAG	\$ 943,403	\$ -	\$ -	\$ 943,403	STP-MAG	\$ 943,403	Amend. Reduced regional reimbursement. A portion was advanced to FFY12.
Phoenix	2013	2013	PHX100-60D2	Black Mountain Blvd: SR-51 and Loop 101 (Pima Fwy) to Deer Valley Rd	Design roadway widening	2	0	6	STP-MAG	\$ 1,287,935	\$ -	\$ 551,972	\$ 1,839,907	STP-MAG	\$ 1,287,935	Amend. Work and reimbursement deferred from FFY12 to FFY13.

TABLE C. Amendments and Administrative Modifications to the FY2012 ALCP

Agency	Work Year	Reimb. Year	TIPIDN	Location	Work	Miles	Lanes Before	Lanes After	Funding	Federal	Regional	Local	Total	Reimb Fund Type	Reimb. Amount	Note
Chandler	2016	2016	NONE	Chandler Blvd at Alma School Rd	Reimbursement for advanced construction of intersection improvement	0.25	4	6	RARF	\$ -	\$ 326,685	\$ -	\$ 326,685	RARF	\$ 326,685	Amend. Reimbursement deferred from FY12 to FY16.
Chandler	2016	2016	NONE	Chandler Blvd at Alma School Rd	Reimbursement for advanced acquisition of right-of-way for intersection improvement	0.25	4	6	RARF	\$ -	\$ 1,334,806	\$ -	\$ 1,334,806	RARF	\$ 1,334,806	Amend. Reimbursement deferred from FY12 to FY16.
Chandler	2016	2016	NONE	Chandler Blvd at Alma School Rd	Project Savings for intersection improvement	0.25	4	6	RARF	\$ -	\$ 605,054	\$ -	\$ 605,054	RARF	\$ 605,054	Amend. Add new work phase to the ALCP. RARF funds reallocated from other work phases.
Chandler	2027	2027	NONE	Chandler Blvd at Alma School Rd	Project Savings for intersection improvement	0.25	4	6	RARF	\$ -	\$ 941,543	\$ -	\$ 941,543	RARF	\$ 941,543	Amend. Add new work phase to the ALCP. RARF funds reallocated from other work phases.
Chandler	2016	2016	NONE	Ocotillo Road: Arizona Avenue to McQueen Road	Reimbursement for advance design of roadway widening	1	2	4	RARF	\$ -	\$ 1,102,500	\$ -	\$ 1,102,500	RARF	\$ 1,102,500	Amend. Increased regional share based on increased project costs. Regional funds reallocated from construction.
Chandler	2016	2016	NONE	Ocotillo Road: Arizona Avenue to McQueen Road	Reimbursement for advanced acquisition of right-of-way for roadway widening	1	2	4	RARF	\$ -	\$ 534,200	\$ -	\$ 534,200	RARF	\$ 534,200	Amend. Changed work description and reduced regional share based on HSIP grant and revised project costs. Reallocated regional funds to construction.
Chandler	2016	2016	NONE	Ocotillo Road: Arizona Avenue to McQueen Road	Reimbursement for advanced construction of roadway widening	1	2	4	RARF	\$ -	\$ 1,263,156	\$ -	\$ 1,263,156	RARF	\$ 1,263,156	Amend. Changed work description. Work to occur in FY13 and FY14.
Chandler	2022	2022	NONE	Ocotillo Road: Arizona Avenue to McQueen Road	Reimbursement for advanced construction of roadway widening	1	2	4	RARF	\$ -	\$ 2,395,000	\$ -	\$ 2,395,000	RARF	\$ 2,395,000	Amend. Changed work description. Work to occur in FY13 and FY14.
Chandler	2027	2027	NONE	Ocotillo Road: Arizona Avenue to McQueen Road	Reimbursement for advanced construction of roadway widening	1	2	4	RARF	\$ -	\$ 172,240	\$ -	\$ 172,240	RARF	\$ 172,240	Amend. Changed work description. Work to occur in FY13 and FY14.
Chandler	NA	NA	NONE	Ocotillo Road: Arizona Avenue to McQueen Road	Project Savings for roadway widening	1	2	4	RARF	\$ -	\$ 1,235,496	\$ -	\$ 1,235,496	RARF	\$ 1,235,496	Amend. Add new work phase to the ALCP. RARF funds reallocated from other work phases.

MARICOPA ASSOCIATION OF GOVERNMENTS

INFORMATION SUMMARY... for your review

DATE:

June 5, 2012

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 2011-2015 MAG Transportation Improvement Program (TIP) and Regional Transportation Plan 2010 Update. The amendment and administrative modification involve several projects, including Arizona Department of Transportation, Chandler, Maricopa County, and Peoria 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 June 22, 2012.

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, METRO/RPTA, Maricopa County Air Quality Department, Central Arizona Association of Governments, Pinal County Air Quality Control District, 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 Regional Transportation Plan 2010 Update.

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.

June 5, 2012

TO: Leslie Rogers, Federal Transit Administration
Karla Petty, Federal Highway Administration
John Halikowski, Arizona Department of Transportation
Henry Darwin, Arizona Department of Environmental Quality
Neal Young, City of Phoenix Public Transit Department
Stephen Banta, METRO/RPTA
William Wiley, Maricopa County Air Quality Department
Brian Tapp, Central Arizona Association of Governments
Donald Gabrielson, Pinal County Air Quality Control District
Gregory Nudd, 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 2011-2015 MAG TRANSPORTATION
IMPROVEMENT PROGRAM AND REGIONAL TRANSPORTATION PLAN 2010 UPDATE

The Maricopa Association of Governments is conducting consultation on a conformity assessment for an amendment and administrative modification to the FY 2011-2015 MAG Transportation Improvement Program (TIP) and Regional Transportation Plan 2010 Update. The amendment and administrative modification involve several projects, including Arizona Department of Transportation, Chandler, Maricopa County, and Peoria projects. Comments on the conformity assessment are requested by June 22, 2012.

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 Regional Transportation Plan 2010 Update, as amended, that was made by the Federal Highway Administration and Federal Transit Administration on March 15, 2012 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 2011-2015 MAG TRANSPORTATION IMPROVEMENT PROGRAM AND REGIONAL TRANSPORTATION PLAN 2010 UPDATE

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 2011-2015 MAG Transportation Improvement Program and Regional Transportation Plan 2010 Update include 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 Regional Transportation Plan 2010 Update, as amended, that was made by the Federal Highway Administration and Federal Transit Administration on March 15, 2012 remains unchanged by this action.

Amendment and Administrative Modification to the FY 2011-2015 MAG Transportation Improvement Program and Regional Transportation Plan 2010 Update

HIGHWAY														
TIP #	Agency	Project Location	Project Description	Fiscal Year	Length miles	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Requested Change	Conformity Assessment
CVK07-601C	Cave Creek	Townwide	Pave dirt roads program - Construct	2014	0.5	1	1	CMAQ	\$ 10,155	\$ 169,845	\$ -	\$ 180,000	Amend: Defer the project to FY 2014 due to complications obtaining the environmental clearance. This project has not been deferred since the approval of MAG Programming Principals in October 2011.	A minor project revision is needed to defer project. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
DOT11-110	ADOT	303 (Estrella Fwy): Peoria Ave - Waddell Rd	Landscape Design	2011	2	6	6	RARF/ STP-TE	\$ 2,280	\$ 37,720	\$ 200,000	\$ 240,000	Amend: Increase total project budget by \$40,000 (\$37,720 Federal Transportation Enhancement - Projects of Opportunity, \$2,280 Local) from \$200,000 to \$240,000.	A minor project revision is needed to increase project funding. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
DOT11-113	ADOT	303 (Estrella Fwy): Waddell Rd - Mountain View Rd	Landscape Design	2011	4	6	6	RARF/ STP-TE	\$ 3,420	\$ 56,580	\$ 300,000	\$ 360,000	Amend: Increase total project budget by \$60,000 (\$56,580 Federal Transportation Enhancement - Projects of Opportunity, \$3,420 Local) from \$300,000 to \$360,000.	A minor project revision is needed to increase project funding. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
DOT13-930	ADOT	202 (Red Mountain Fwy): SR101L to Gilbert Rd	Design general purpose lane	2014	6	8	10	RARF	\$ -	\$ -	\$ 4,600,000	\$ 4,600,000	Amend: Increase regional budget by \$700,000. Proposed cost total cost is now \$4,600,000. Design cost increased to reflect additional construction cost.	A minor project revision is needed to increase project funding. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
DOT13-948	ADOT	10: Perryville Rd TI	Construct traffic interchange	2013	0.2	TI	TI	NHS	\$ -	\$ 13,800,000	\$ 9,500,000	\$ 23,300,000	Amend: Increase cost and establish a Design Build project in FY 2013. Proposed total cost is now \$23,300,000 (\$5,300,000 regional increase). Previous estimate was Level 0 (planning). Updated estimate based on costs from draft DCR were increased based on design of bridge to accommodate future parkway on Perryville Road.	A minor project revision is needed to increase project funding. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.

TIP #	Agency	Project Location	Project Description	Fiscal Year	Length miles	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Requested Change	Conformity Assessment
DOT15-172	ADOT	202 (Red Mountain Fwy): SR101L to Gilbert Rd	Construct general purpose lane	2015	6	8	10	RARF	\$ -	\$ -	\$ 69,000,000	\$ 69,000,000	Amend: Increase regional cost \$12,600,000. Proposed total cost is now \$69,000,000. Cost increase is a result of eliminating design exceptions at EB McKellips Road off-ramp and WB from Dobson to Loop 101. This requires the more costly retaining wall and cantilevered roadway construction.	A minor project revision is needed to increase project funding. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
ELM11-801	El Mirage	Downtown El Mirage	Paving existing unpaved alleys	2012	1.7	0	0	CMAQ	\$ -	\$ 657,146	\$ -	\$ 657,146	Amend: Detailed estimate returned asphalt cost increase, increase total project cost by 112,661.	A minor project revision is needed to increase project funding. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
GLB04-205	Gilbert	Gilbert Rd: Warner Rd to Baseline Rd	Install fiber & conduit along Gilbert Rd.	2012	3	4	4	CMAQ	\$ -	\$ 460,500	\$ -	\$ 460,500	Amend: Original project location description included a section north of town limits with incorrect lane count; length of project reduced and lanes before and after corrected.	A minor project revision is needed to revise project description. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
PEO12-110	Peoria	Intersection of Cactus Rd and 75th Avenue	Design intersection improvement.	2013		4	4	HSIP	\$ 20,697	\$ 342,397	\$ -	\$ 363,094	Amend: Reduce local cost from 317,773 to 20,697 and reduce total cost from 660,170 to 363,094. Move in TIP from FY12 to FY13	A minor project revision is needed to decrease project funding. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
PEO12-111	Peoria	Intersection of Peoria Ave and 75th Ave.	Design intersection improvement.	2013		4	4	HSIP	\$ 38,331	\$ 634,142	\$ -	\$ 672,473	Amend: Change the location to Peoria Ave and 75th Avenue, Move in TIP from FY12 to FY13	A minor project revision is needed to revise project location and defer project to FY 2013. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
PEO14-102	Peoria	Intersection of Cactus Rd and 75th Avenue	Acquisition of right-of-way for intersection improvement.	2014		4	4	HSIP	\$ 60,279	\$ 997,248	\$ -	\$ 1,057,527	Amend: Reduce local cost from 981473 to 60,279, reduce federal cost from 1,057,527 to 997,248, and reduce total cost from 2,039,000 to 1,057,527. Move in TIP from FY12 to FY14.	A minor project revision is needed to decrease project funding and defer project to FY 2013. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.

TIP #	Agency	Project Location	Project Description	Fiscal Year	Length miles	Lanes Before	Lanes After	Fund Type	Local Cost	Federal Cost	Regional Cost	Total Cost	Requested Change	Conformity Assessment
PEO14-103	Peoria	Intersection of Peoria Ave and 75th Ave.	Acquisition of right-of-way for intersection improvement.	2014		4	4	HSIP	\$ 27,727	\$ 458,713	\$ -	\$ 486,440	Amend: Change the location to Peoria Ave and 75th Avenue	A minor project revision is needed to revise project location. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
PEO15-105	Peoria	Intersection of Peoria Ave and 75th Ave.	Relocate utilities, construct/add dual left turn lanes and right turn lanes on all approaches, raised median, and upgrade bike/pedestrian facilities	2015		4	4	HSIP	\$ 395,642	\$ 6,545,445	\$ -	\$ 6,941,087	Amend: Change the location to Peoria Ave and 75th Avenue	A minor project revision is needed to revise project location. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
PHX10-801	Phoenix	41st Ave: Granada Rd - Holly Ave	Construct Sidewalks, ADA ramps, & Street Lighting	2012	0.34	2	2	SRTS	\$ -	\$ 250,000	\$ -	\$ 250,000	Amend: Add new project to the TIP. ADOT Safe Routes To School (SRTS) award.	The new project is considered exempt under the category "Bicycle and pedestrian facilities." The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
TMP12-119	Tempe	Intersection of Broadway Rd and Priest Dr.	Construction of Intersection: Broadway Rd and Priest Dr., bus pull-out, ADA sidewalk ramps, and widen east bound right turn lane.	2013		4	4	HSIP	\$ 12,309	\$ 203,637	\$ -	\$ 215,946	Amend: Add description: Construction of Intersection of Broadway Rd and Priest Dr. Move in TIP from FY12 to FY13.	A minor project revision is needed to revise project description and to defer project to FY 2013. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.

Agency	Work Year	Reimb. Year	TIPIDN	Location	Work	Miles	Funding	Federal	Regional	Local	Total	Reimb Fund Type	Reimb. Amount	Note	Conformity Assessment
Chandler	2014	2014	CHN110-08RWZ2	Chandler Blvd at Alma School Rd	Acquisition of right-of-way for intersection improvement	0.25	HSIP/ RARF	\$ 1,184,190	\$ 339,125	\$ 326,685	\$ 1,850,000	HSIP/ RARF	\$ 1,523,315	Amend. Work and reimbursements deferred from FY2012 to FY2014. Decreased work phase cost. Received HSIP grant (federal) and reduced RARF (regional) funds. Excess RARF funds reallocated to construction.	A minor project revision is needed to decrease project cost and defer to FY 2014. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2015	2015	CHN110-09C	Chandler Blvd at Alma School Rd	Construct intersection improvement	0.25	HSIP	\$ 4,208,929	\$ -	\$ 1,334,806	\$ 5,543,735	HSIP	\$ 4,208,929	Amend. Work and reimbursements deferred from FY2012 to FY2015. Decreased work phase cost. Received HSIP grant (federal) and reduced RARF (regional) funds. Excess RARF funds programmed as project savings.	A minor project revision is needed to decrease project cost and defer to FY 2015. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2012	2027	CHN12-109CZ	Chandler Blvd at Alma School Rd	Construct intersection improvement	0.25	Local	\$ -	\$ 941,543	\$ 403,518	\$ 1,345,061	RARF	\$ 941,543	Amend. Delete line item from the TIP and ALCP	A minor project revision is needed to delete project line item. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2011	2016	CHN14-102DZ	Ocotillo Road: Arizona Avenue to McQueen Road	Design roadway widening	1	Local	\$ -	\$ -	\$ 787,500	\$ 787,500	RARF	\$ 551,250	Amend. Increased project costs.	A minor project revision is needed to increase project cost. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2012	2016	CHN11-102DZ	Ocotillo Road: Arizona Avenue to McQueen Road	Design roadway widening	1	Local	\$ -	\$ -	\$ 787,500	\$ 787,500	RARF	\$ 551,250	Amend. Increased project costs.	A minor project revision is needed to increase project cost. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.

Agency	Work Year	Reimb. Year	TIPIDN	Location	Work	Miles	Funding	Federal	Regional	Local	Total	Reimb Fund Type	Reimb. Amount	Note	Conformity Assessment
Chandler	2011	2016	CHN14-102RWZ	Ocotillo Road: Arizona Avenue to McQueen Road	Acquire right-of-way for roadway widening	1	Local	\$ -	\$ -	\$ -	\$ -	RARF	\$ -	Amend. Delete line item from the TIP. Work to begin in FY13.	A minor project revision is needed to delete project line item. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2013	2013	CHN12-102RWZ	Ocotillo Road: Arizona Avenue to McQueen Road	Acquire right-of-way for roadway widening	1	HSIP	\$ 565,800	\$ -	\$ 534,200	\$ 1,100,000	HSIP	\$ 565,800	Amend. Deferred work from FY12 to FY13. Reduced project costs. Changed fund type from RARF to HSIP.	A minor project revision is needed to decrease project cost and defer to FY 2013. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2012	2012	CHN12-110RWZ	Gilbert Rd: Queen Creek to Hunt Hwy	Acquisition of right-of-way for roadway widening	4	RARF	\$ -	\$ 1,418,314	\$ 607,849	\$ 2,026,163	RARF	\$ 1,418,314	Amend. Regional funds advanced from FY13 to FY12. Funds exchanged with Chandler/Alma School project.	A minor project revision is needed to advance funding to FY 2012. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2012	2012	CHN12-103CZ2	Gilbert Rd: Queen Creek to Ocotillo	Construct roadway widening	4	RARF	\$ -	\$ 1,187,356	\$ 508,867	\$ 1,696,222	RARF	\$ 1,187,356	Amend. Regional funds advanced from FY16 to FY12. Funds exchanged with Chandler/Alma School project.	A minor project revision is needed to advance funding to FY 2012. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2012	2013	NEW	Gilbert Rd: Queen Creek to Ocotillo	Construct roadway widening	4	Impact Fees	\$ -	\$ -	\$ 2,026,163	\$ 2,026,163	RARF	\$ 1,418,314	Amend. Regional funds advanced from FY16 to FY13. Funds exchanged with Chandler/Alma School project.	A minor project revision is needed to advance funding to FY 2013. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2012	2014	CHN12-103CZ	Gilbert Rd: Queen Creek to Ocotillo	Construct roadway widening	4	Impact Fees	\$ -	\$ -	\$ 7,044,999	\$ 7,044,999	RARF	\$ 4,931,499	Amend. Regional funds in FY14 reduced. A portion advanced from FY13 in an exchange with Chandler/Alma School project.	A minor project revision is needed to reduce funding. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.

Agency	Work Year	Reimb. Year	TIPIDN	Location	Work	Miles	Funding	Federal	Regional	Local	Total	Reimb Fund Type	Reimb. Amount	Note	Conformity Assessment
Maricopa County	2012	2012	MMA11-923	Northern Parkway: Dysart to 111th	Design bridge construction and roadway widening	2.5	STP-MAG	\$ 1,770,367		\$ 758,729	\$ 2,529,095	STP-MAG	\$ 1,770,367	Amend. Consolidated line item with MMA13-118DZ. Federal reimbursement advanced from FFY2013 to FFY2012.	A minor project revision is needed to consolidate project line item. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Maricopa County	2013	2013	MMA11-923RZ	Northern Parkway: Dysart to 111th	Reimbursement for design of bridge construction and roadway widening	2.5	STP-MAG	\$ 169,400	\$ -	\$ -	\$ 169,400	STP-MAG	\$ 169,400	Amend. Delete line item from the TIP. Reimbursement advanced from FFY2013 to FFY2012.	A minor project revision is needed to delete line item. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Maricopa County	2013	2013	MMA13-118DZ	Northern Parkway: Dysart to 111th	Design bridge construction and roadway widening	2.5	STP-MAG	\$ 1,600,967	\$ -	\$ 686,129	\$ 2,287,095	STP-MAG	\$ 1,600,967	Amend. Delete line item from the TIP. Consolidated line item with MMA11-923.	A minor project revision is needed to delete line item. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Maricopa County	2012	2012	MMA12-117DZ	Northern Parkway: Reems and Litchfield Overpasses	Design roadway widening and overpasses	0.2	STP-MAG	\$ 780,458	\$ -	\$ 47,175	\$ 827,633	STP-MAG	\$ 347,606	Amend. Consolidated line item with MMA13-117DZ. Federal reimbursement advanced from FFY2013 to FFY2012.	A minor project revision is needed to consolidate project line item. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Maricopa County	2013	2013	MMA13-117DZ	Northern Parkway: Reems and Litchfield Overpasses	Design roadway widening and overpasses	0.2	STP-MAG	\$ 347,606	\$ -	\$ 148,974	\$ 496,580	STP-MAG	\$ 347,606	Amend. Delete item from the TIP. Consolidated line item with MMA12-117DZ.	A minor project revision is needed to delete line item. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Maricopa County	2012	2012	MMA13-106CLZ	Northern Parkway: Sarival to Dysart	Construct and landscape roadway widening	4	STP-MAG	\$ 495,970	\$ -	\$ 27,758	\$ 523,728	STP-MAG	\$ 495,970	Amend. Work and reimbursement advanced from FY2013 to FY2012.	A minor project revision is needed to advance funding to FY 2012. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.

Agency	Work Year	Reimb. Year	TIPIDN	Location	Work	Miles	Funding	Federal	Regional	Local	Total	Reimb Fund Type	Reimb. Amount	Note	Conformity Assessment
Maricopa County	2012	2012	MMA11-922	Northern Parkway: Dysart to 111th	Acquisition of right-of-way for bridge construction and roadway widening	2.5	STP-MAG	\$ 686,731	\$ -	\$ 943,403	\$ 1,630,134	STP-MAG	\$ 686,731	Amend. Federal reimbursement advanced from FFY2013 to FFY2012.	A minor project revision is needed to advance funding to FY 2012. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Maricopa County	2013	2013	MMA11-922RZ	Northern Parkway: Dysart to 111th	Reimbursement for acquiring of right-of-way for bridge construction and roadway widening	2.5	STP-MAG	\$ 943,403	\$ -	\$ -	\$ 943,403	STP-MAG	\$ 943,403	Amend. Reduced regional reimbursement. A portion was advanced to FFY12.	A minor project revision is needed to reduce regional amount. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Phoenix	2013	2013	PHX100-60D2	Black Mountain Blvd: SR-51 and Loop 101 (Pima Fwy) to Deer Valley Rd	Design roadway widening	2	STP-MAG	\$ 1,287,935	\$ -	\$ 551,972	\$ 1,839,907	STP-MAG	\$ 1,287,935	Amend. Work and reimbursement deferred from FFY12 to FFY13.	A minor project revision is needed to defer reimbursement to FY 2013. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2016	2016	NONE	Chandler Blvd at Alma School Rd	Reimbursement for advanced construction of intersection improvement	0.25	RARF	\$ -	\$ 326,685	\$ -	\$ 326,685	RARF	\$ 326,685	Amend. Reimbursement deferred from FY12 to FY16.	A minor project revision is needed to defer reimbursement to FY 2016. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2016	2016	NONE	Chandler Blvd at Alma School Rd	Reimbursement for advanced acquisition of right-of-way for intersection improvement	0.25	RARF	\$ -	\$ 1,334,806	\$ -	\$ 1,334,806	RARF	\$ 1,334,806	Amend. Reimbursement deferred from FY12 to FY16.	A minor project revision is needed to defer reimbursement to FY 2016. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.

Agency	Work Year	Reimb. Year	TIPIDN	Location	Work	Miles	Funding	Federal	Regional	Local	Total	Reimb Fund Type	Reimb. Amount	Note	Conformity Assessment
Chandler	2016	2016	NONE	Chandler Blvd at Alma School Rd	Project Savings for intersection improvement	0.25	RARF	\$ -	\$ 605,054	\$ -	\$ 605,054	RARF	\$ 605,054	Amend. Add new work phase to the ALCP. RARF funds reallocated from other work phases.	A minor project revision is needed to add new work phase. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2027	2027	NONE	Chandler Blvd at Alma School Rd	Project Savings for intersection improvement	0.25	RARF	\$ -	\$ 941,543	\$ -	\$ 941,543	RARF	\$ 941,543	Amend. Add new work phase to the ALCP. RARF funds reallocated from other work phases.	A minor project revision is needed to add new work phase. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2016	2016	NONE	Ocotillo Road: Arizona Avenue to McQueen Road	Reimbursement for advance design of roadway widening	1	RARF	\$ -	\$ 1,102,500	\$ -	\$ 1,102,500	RARF	\$ 1,102,500	Amend. Increased regional share based on increased project costs. Regional funds reallocated from construction.	A minor project revision is needed to increase regional share. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2016	2016	NONE	Ocotillo Road: Arizona Avenue to McQueen Road	Reimbursement for advanced acquisition of right-of-way for roadway widening	1	RARF	\$ -	\$ 534,200	\$ -	\$ 534,200	RARF	\$ 534,200	Amend. Changed work description and reduced regional share based on HSIP grant and revised project costs. Reallocated regional funds to construction.	A minor project revision is needed to reduce regional share. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2016	2016	NONE	Ocotillo Road: Arizona Avenue to McQueen Road	Reimbursement for advanced construction of roadway widening	1	RARF	\$ -	\$ 1,263,156	\$ -	\$ 1,263,156	RARF	\$ 1,263,156	Amend. Changed work description. Work to occur in FY13 and FY14.	A minor project revision is needed to change project description. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.

Agency	Work Year	Reimb. Year	TIPIDN	Location	Work	Miles	Funding	Federal	Regional	Local	Total	Reimb Fund Type	Reimb. Amount	Note	Conformity Assessment
Chandler	2022	2022	NONE	Ocotillo Road: Arizona Avenue to McQueen Road	Reimbursement for advanced construction of roadway widening	1	RARF	\$ -	\$ 2,395,000	\$ -	\$ 2,395,000	RARF	\$ 2,395,000	Amend. Changed work description. Work to occur in FY13 and FY14.	A minor project revision is needed to change project description. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	2027	2027	NONE	Ocotillo Road: Arizona Avenue to McQueen Road	Reimbursement for advanced construction of roadway widening	1	RARF	\$ -	\$ 172,240	\$ -	\$ 172,240	RARF	\$ 172,240	Amend. Changed work description. Work to occur in FY13 and FY14.	A minor project revision is needed to change project description. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.
Chandler	NA	NA	NONE	Ocotillo Road: Arizona Avenue to McQueen Road	Project Savings for roadway widening	1	RARF	\$ -	\$ 1,235,496	\$ -	\$ 1,235,496	RARF	\$ 1,235,496	Amend. Add new work phase to the ALCP. RARF funds reallocated from other work phases.	A minor project revision is needed to add new work phase. The conformity status of the TIP and Regional Transportation Plan 2010 Update would remain unchanged.

MARICOPA ASSOCIATION OF GOVERNMENTS

INFORMATION SUMMARY... for your review

DATE:

June 5, 2012

SUBJECT:

Municipal Aging Services Project Toolkit

SUMMARY:

In February 2011, the Virginia G. Piper Charitable Trust awarded a grant to support the development of the MAG Municipal Aging Services Project. The purpose of the project is to determine the most effective role for local governments in meeting the needs of people aged 65 years and more when working collaboratively with nonprofit agencies, faith-based communities, and community groups. After a year of extensive community engagement with more than 1,300 people, a toolkit has been developed with specific action steps in areas prioritized through the community engagement. The MAG Human Services Coordinating Committee and MAG Human Services Technical Committee both recommended approval of the toolkit in May 2012.

PUBLIC INPUT:

Opportunities for public input were made available at the May MAG Human Services Technical and Coordinating Committee meetings. No input was offered at those meetings.

PROS & CONS:

PROS: The toolkit will assist municipalities in meeting the needs of residents 65 years and more. Best practices are highlighted to facilitate collaboration with other groups such as nonprofit agencies, faith-based communities, and community groups.

CONS: None are anticipated.

TECHNICAL & POLICY IMPLICATIONS:

TECHNICAL: The toolkit is based on extensive community outreach and research into best practices for meeting the needs of people 65 years and more. The categories within the toolkit were identified as priorities by more than 1,300 people who participated in interviews, focus groups, a survey, and a conference. The categories include supporting people to age in place, promoting transportation options, increasing social participation, increasing organizational capacity, and utilizing technology. Specific actions and resources are listed within each category to assist local governments in meeting the needs of people 65 years and more.

POLICY: As the population aged 65 years and more grows, the region will be faced with unprecedented challenges and resources. The current service system will be strained by the population increasing by more than 50 percent in the next eight years. The needs and priorities of people in this age group are changing dramatically and the current approach may no longer be as relevant, as documented by the survey and community outreach conducted for this project. In addition, older adults in the region have indicated a strong desire to volunteer. The talents and time of people 65 years and more is an important resource that can strengthen the region. This toolkit

provides specific direction for how the needs and talents of people 65 years and more can effectively be addressed.

ACTION NEEDED:

Recommend approval of the MAG Municipal Aging Services Project Toolkit.

PRIOR COMMITTEE ACTIONS:

The MAG Human Services Coordinating Committee voted to recommend approval of the MAG Municipal Aging Services Project Toolkit on May 24, 2012.

MEMBERS ATTENDING

- | | |
|---|---|
| <ul style="list-style-type: none"> + Barbara Lloyd, Tempe Community Council + Vice Mayor Trinity Donovan, Chandler, Chair * Councilmember Alex Finter, Mesa Councilmember Frank Scott for Mayor Marie Lopez Rogers, Avondale + Councilmember Manuel Martinez, Glendale | <ul style="list-style-type: none"> Councilmember Michael Nowakowski, Phoenix, Chair + JoAnne Osborne, Vice Mayor, Goodyear, Vice Chair + Councilmember Jordan Ray, Gilbert * Supervisor Mary Rose Wilcox, Maricopa County * Councilmember Mike Woodard, Surprise |
|---|---|

+Those members present by audio/videoconferencing.
*Those members neither present nor represented by proxy.

The MAG Human Services Technical Committee voted to recommend approval of the MAG Municipal Aging Services Project Toolkit on May 17, 2012.

COMMITTEE MEMBERS

- | | |
|---|---|
| <ul style="list-style-type: none"> Tim Cole for Deanna Jonovich, Phoenix * Mary Berumen, Mesa * Kyle Bogdon, DES/ACYF * Krista Cornish, Buckeye + Naomi Farrell, Tempe Jessica Fierro, Gilbert Janeen Gaskins, Surprise * Laura Guild, Arizona Department of Economic Security Jeffery Jamison, Phoenix Jim Knaut, Area Agency on Aging | <ul style="list-style-type: none"> Margarita Leyvas, Maricopa County, Vice Chair Joyce Lopez-Powell, Valley of the Sun United Way Steven MacFarlane, Phoenix * Jayson Matthews, Tempe Community Council + Leah Powell, Chandler + Cindy Saverino, Arizona Department of Economic Security Christina Avila, Avondale Carol Sherer, Arizona Department of Economic Security/DDD |
|---|---|

+Those members present by audio/videoconferencing.
*Those members neither present nor represented by proxy.

CONTACT PERSON:

Amy St. Peter, MAG Human Services and Special Projects Manager, (602) 254-6300

Municipal Aging Services Project

AZ100 YEARS



Past

Present

Future

Planning for the Next 100 years:

How will the needs and talents of people age 65 years and older be addressed by local governments?

June 2012



The Maricopa Association of Governments
Municipal Aging Services Project Toolkit



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Executive Summary

The Municipal Aging Services Project (MASP)

The region stands on the cusp of dramatic change and unprecedented opportunity. Never before have we witnessed such significant population increases, diversifying priorities, and untapped potential in people 65 years and more. Strategic planning now will channel this change into a profoundly positive impact on our region. The failure to act will result in our system of care becoming radically overburdened, leaving people in unsafe, unhealthy situations that impart serious consequences for the individuals as well as the community. Being proactive now will save time, money, and lives as we reposition the way we meet the needs and tap into the talents of people throughout their entire lifespan.

Local governments have a unique role to fill in this work, although by no means are they solely responsible for meeting the needs of older adults. A legion of dedicated nonprofit agencies, faith-based communities, community groups, and residents are invaluable partners. Local governments can bring critical leverage, most often by providing the infrastructure often elusive to their non-governmental partners. In an era of reducing revenues and increasing needs, collaboration among a variety of diverse partners is not just convenient, it is necessary for everyone's survival.

This toolkit provides specific, concrete action steps with detailed information about resources and best practices to assist local governments in addressing aging services. Tools to support collaboration are a key feature of this toolkit. In the following pages, you will find what you need to implement or enhance services to support people to age in place or live more independently in their homes, increase access to transportation and opportunities to socialize with peers and the community, increase organizational capacity, and utilize technology more effectively. This toolkit does not provide all the answers, but it provides a concrete starting point for real change.

Extensive community engagement drove every facet of this work. The voices and vision of more than 1,300 people in this region shaped the priorities and actions recommended in this toolkit. People 65 years and more spoke about the pain of becoming prisoners in their homes. This toolkit provides strategies to keep people meaningfully engaged in their communities through volunteering and senior centers. Others expressed fear they would no longer be able to get to their medical appointments, losing access to life-saving treatments. This toolkit offers ways to increase access to transportation options in all parts of the region. Agencies shared their frustration with trying to care for more people with fewer resources. This toolkit gives tangible ways to improve organizational capacity. This project is only possible because people shared their concerns and hopes for the region.

We extend deep appreciation to the people who shared their time and insights with us. This includes residents, social workers, municipal employees, elected officials,

community advocates, and more. Wholonomy Consulting provided additional capacity at a critical period in the development of this toolkit. We are also extremely grateful to the Virginia G. Piper Charitable Trust for supporting this project through their guidance and funding. Their leadership in aging services is a phenomenal gift to the region. We are also thankful to the reader for your interest in this project and for the opportunities you have to ensure people of all ages have a valued and important role in our region.

With this toolkit, the MAG Municipal Aging Services Project is concluding, but the work will continue in full force as the action steps and strategies are implemented by a variety of partners. The work will also continue through the City Leaders Institute on Aging in Place. The MetLife Foundation selected the Greater Phoenix region to be one of five pilot sites in the country to develop plans to help people age in place. Supported by Partners for Livable Communities, this national pilot project will provide technical assistance and access to national experts to this region as we explore how we can keep people 65 years and more woven into the fabric of our communities. This will fight social isolation, increase access to services and wellness, and better leverage the many talents of this population. We are excited to build on the foundation of MASP in such a direct and meaningful way.

Summary of Recommendations

The following is a summary of the recommendations developed through this project. Please refer to Appendix II for a detailed description of these recommendations, action steps, resources, national and local resources, and programs.

Support People Aging in Place

Integrate aging in place into planning processes.

- Add action/elements that support aging in place to general plans and other municipal planning documents.
- Conduct studies utilizing community engagement to ascertain how proposed services will impact people age 65 and older.
- Include specific elements for Request for Proposal (RFP) processes that support people aging in place.

Make it possible for people to age in place through program and service options.

- Provide ways of serving seniors in their homes and close to their homes.
- Ensure safety through fall prevention.
- Promote preventative health services.
- Meet caregiver needs.

Promote Transportation Options

Provide alternatives to the car.

- Utilize taxi-cab voucher programs.
- Focus on integrated approaches.
- Increase accessible transportation options.
- Increase visibility and awareness.

Promote safe roads and safe drivers.

- Develop complete streets.
- Create walkable communities.
- Support safe driving.
- Conduct Road Safety Assessments.

Increase Social Participation

Keep older adults active and engaged.

- Engage seniors as volunteers and employees.
- Provide intergenerational programming.
- Increase awareness and advocacy by supporting elder economic security and community development.

Re-imagine senior centers and create prototype senior center of the future.

- Conduct a regional assessment.
- Replicate local and national best practices.
- Become more market, boomer, and consumer driven.

Increase Organizational Capacity

Explore innovative funding partnerships.

- Support alternative or creative funding options.
- Collaborate with agencies and nonprofits.

Form strategic organizational partnerships.

- Coordinate education and training opportunities.
- Build a strong coalition of supporters.
- Co-locate services.

Utilize Technology

Use technology to increase coordination and access to services and information.



For more information, please contact the MAG Human Services Division at (602) 254-6300 or visit us online at www.azmag.gov. Thank you again for your role in meeting the needs and tapping into the talents of people 65 years and more.

Introduction

The Municipal Aging Services Project (MASP)

This project has been designed to create a framework for how local governments respond to the needs and talents of people 65 years and older. This project was undertaken in order to better understand how government can effectively build on the resources of older adults and respond to the changing needs of the growing population 65 years and over.

Throughout MASP, best practices, research, and community engagement have been utilized to develop an aging services framework and toolkit for use by local governments.

The Aging Services Framework has been designed around the following principles:

- **Build on the best of what exists:** It is important to understand what is already working that can provide the building blocks for future services, supports, and infrastructure.
- **Engage older adults as a resource:** The aging adult population can be a powerful community asset. Boomers have much to offer and they understand their needs and desires better than anyone.
- **Research and implement best practices:** There's no need to re-invent the wheel. It is important to highlight and draw-upon local and national best practices. As a result, research of best emerging best practices has been an integral part of MASP and the findings are included as part of this report.

The Municipal Aging Service Project Toolkit

Supported by Virginia G. Piper Charitable Trust, this toolkit draws on the significant community engagement that was undertaken as a part of the MASP, and provides a framework that local governments can use when designing support services for older adults. The result will be that the needs of older adults can be met in the most effective, cost efficient manner.

The changing demographics

According to the US Census Bureau, the 2011 population of Maricopa County is 3.8 million, with people 65 years and older accounting for 12 percent, or just under 463,000¹.

From 2000 to 2010 the MAG region saw tremendous growth in the population 65 years and older, an increase of 103,662 individuals, or 28.9 percent. Projections for future growth predict even greater increases. It is expected that by 2020 the 65 years and older population will grow by 237,000, an increase of 51 percent.

The aging of the “Baby Boomers” is a major contributor to this growth. In 1946 the country began to experience the post-World War II “Baby Boom.” The last of the Baby Boom generation was born in 1964; the oldest boomers turn 66 years in 2012. Over the next few decades the percent of the population 65 years and more will continue to rise as the Boomers age and as life expectancies increase due to improved healthcare.

A closer look at those age 65 years and older

The aging population does not represent a uniform group of people. There is great diversity. The 2010 Census and the American Community Survey (ACS) provide further insight into the population 65 years and older in the region.

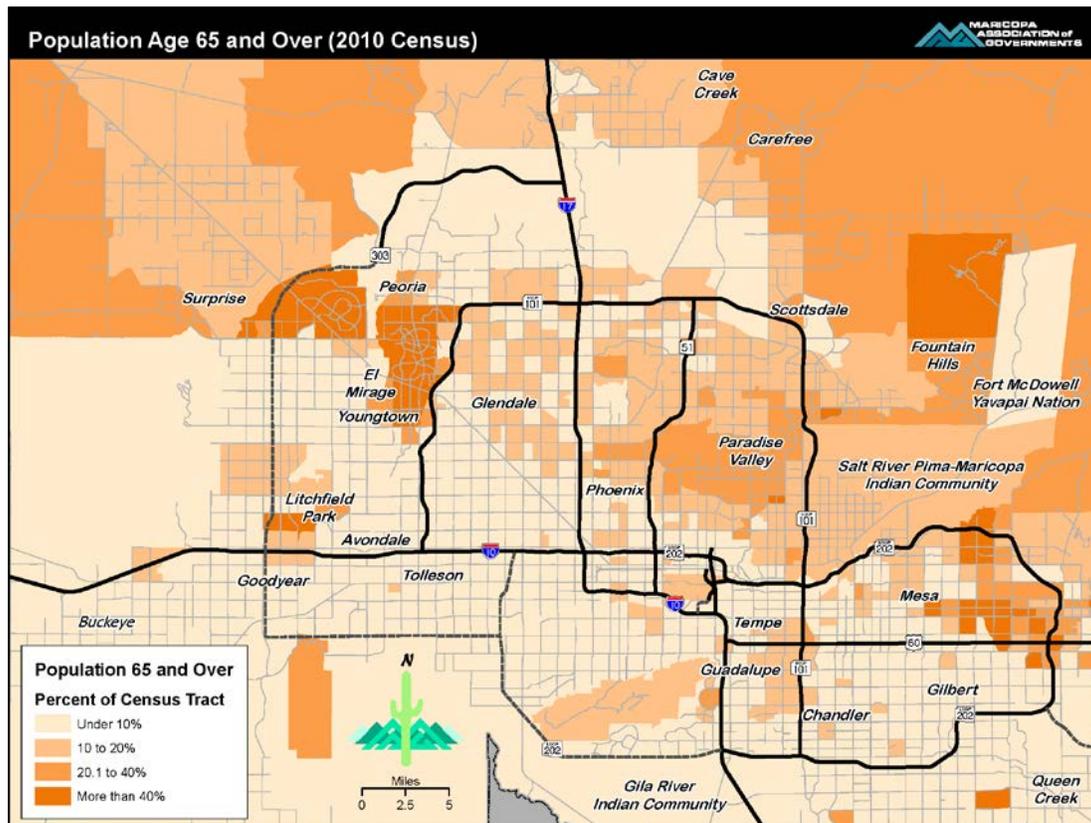
- **Disability:** Of the non-institutionalized population 65 years and older, 144,000 (or 31.5 percent) report having some form of disability. The ACS notes that disability could be any one of six types: hearing difficulty, vision difficulty, cognitive (mental) difficulty, self-care difficulty, ambulatory difficulty (physical difficulty), and independent living difficulty.
- **Poverty:** The ACS also measures income against the federal poverty level. For 2010, almost seven percent of the population 65 years and older in Maricopa County reported income below the federal poverty level.
- **Ethnicity, race, and primary language:** The 2010 Census indicates that 29.6 percent of Maricopa County residents are of Hispanic or Latino origin. Of the population 65 years and older, 9.3 percent reported being of Hispanic or Latino origin. Fourteen percent of the 65 years and older population speak a language at home other than English. Of those, 30 percent speak English “not well” or “not at all.”

Implications of the changing demographics

In some ways, people over 65 years in the MAG region enjoy a number of benefits. Many are living longer, healthier lives. This is also the most educated generation of older adults the country has seen. According to the 2010 American Community Survey, 85.8 percent

¹ U.S. Census Bureau, <http://quickfacts.census.gov/qfd/states/04/04013.html>

of Maricopa County adults 65 years and more are high school graduates or above; 25.2 percent have a bachelors degree or above².



Despite these advantages, an increasing number of older adults are delaying retirement because the recession has depleted their savings and investments. Additionally, the MAG region is highly mobile; it is common for family and friends to live in other parts of the country, leaving those in need without an adequate support system.

According to a MAG study, senior services and centers were among the services to receive the most funding reductions in the recent years of state funding cuts. In total, more than \$2 million was cut from the region’s municipal funding from FY 2009 to FY 2010 for these services. Ancillary services such as transportation services, critical to older adults, were reduced by more than \$1.3 million.

MAG, being uniquely positioned to partner with local governments, nonprofit agencies, and older adult communities, has undertaken this project to respond to these changes and

² 2010 American Community Survey,
http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ACS_10_1YR_S1501&prodType=table

to develop a new approach based on current demographics, dynamics, and the resources of the region.

The Municipal Aging Services Project (MASP)

To learn more about the impact of the region's demographic, funding and expectation shifts, the last year has been spent listening and engaging older adults, those who provide services to older adults, and those who are concerned about how best to support older adults.

Research and engagement for MASP has taken place in three phases:

- **Phase I Inventory:** Phase One of the project began with an inventory of existing services and exploration of the current role and services supported by local government. In total, 135 stakeholder interviews were completed. The interview results identified two important needs of seniors: transportation and socialization.
- **Phase II Community Engagement:** Phase Two sought to engage the community by conducting focus groups throughout the region. Nineteen focus groups were held with a total of 206 participants. The findings of the focus groups supported the original findings of the interviews, but offered additional detail to issues affecting seniors. In order to test the results of the interviews and focus groups, MASP conducted a randomly sampled mail and phone survey of 1,025 regional residents age 55 and over. Finally, community partners from across the region were invited to a community forum on February 15, 2012. The purpose of the event was to begin the process of aligning and organizing the region to proactively support healthy aging. This event was designed to gather input for the creation of a framework for government interventions and supports, with defined roles for local governments.
- **Phase III The Model:** This represents a synthesis of the research and community engagement findings. The findings have driven the development of a list of actionable strategies that can be used to guide the government's response to providing services to those 65 years and more moving forward.

The Future

Although this report represents a culmination of the MASP and provides a road map for moving forward, the work is not yet done. The MAG Human Services Technical Committee (HSTC) and the MAG Human Service Coordinating Committee (HSCC) will build on the recommendations and priorities identified during the Community Engagement phase. If you would like to learn more about this project, please visit the MAG website where all information pertaining to this project is posted. The website address is www.azmag.gov.

Section II—Best Practice Highlights

MAG conducted a local and national search to identify models and best practices that could inform the MASP. The following section highlights two initiatives that represent comprehensive public and private partnerships that informed the work of the MASP. The first initiative highlighted is the BoomerANG Project from Montgomery County, Pennsylvania. The second is the Atlanta Regional Commission Lifelong Communities (ARC) project from Atlanta, Georgia. The goal of both initiatives is to create communities that are prepared to meet the needs of current and future generations of older adults.

In addition to the two initiatives mentioned above, work is referenced from the Center for Civic Partnerships, an organization based out of Sacramento, California, but whose work extends across the nation. The Center has created a comprehensive toolkit, which is also highlighted below, to assist local governments in planning and implementing strategies to assure older adults can age in place.

Finally, this section also includes some information regarding emerging “themes” in the best practices. These are not specific to one initiative or another, but are more general recommendations that have emerged from both the best practices research and also through the community engagement phase of the MASP.

Best Practices—Initiatives

- **The BOOMER *ANG Project (*Aging's Next Generation)³:** This project is a public/private partnership between the Montgomery County, Pennsylvania, Office of Aging and Adult Services and several private foundations. Montgomery County is proactively preparing itself and its citizens, organizations, institutions, and governmental entities to redefine older adult services and opportunities for both its current and future populations. The Boomer*ANG Project seeks to determine:
 - What the focus for and definition of services should be for older adults in an "Aging-Friendly" Montgomery County (through 2015).
 - How the Montgomery County Office of Aging and Adult Services (MCAAS) can make better and more informed decisions for future planning.
 - What new services should be created and implemented.
 - What the most productive partnerships and alliances will be and how they should be cultivated.

³ The BoomerANG Project, Montgomery County, Pennsylvania, January 2006 Final Report Prepared by Michael Marcus, MSW Consultants for Community Resources and John Migliaccio, Ph.D. Maturity Mark Services Company <http://mcaas.montcopa.org/mcaas/cwp/view.a,1505,q,45263.asp>

- How to create a “senior savvy” community oriented to aging-related opportunities in each region of Montgomery County.
 - How to engage the larger Montgomery County community in preparation for its demographic evolution.
- **Atlanta Regional Commission Lifelong Communities⁴:** The Atlanta Regional Commission (ARC) is the regional planning and intergovernmental coordination agency for a 10-county area in Georgia, which includes the City of Atlanta. For 60 years, ARC and its predecessor agencies have helped to focus the region's leadership, attention and resources on key issues of regional consequence. “ARC is dedicated to unifying the region's collective resources to prepare the metropolitan area for a prosperous future”⁵. It does so through professional planning initiatives, the provision of objective information, and the involvement of the community in collaborative partnerships.
 - **ARC's vision:** The Atlanta Regional Commission is the regional leader in identifying values, developing policies and executing plans that matter to residents and communities that ensure competitive advantage and that preserve long-term sustainability.
 - **ARC's mission:** The Atlanta Regional Commission will demonstrate professional and forward-looking leadership to ensure sustainable growth and competitive advantage by focusing and balancing environmental responsibility, economic growth, and social needs.

As in this region, the older adult population in the Atlanta region is growing at a tremendous rate. Most individuals over 60 years have lived in the region for at least three decades and plan to stay for many more. But the cities, counties and neighborhoods are not designed for an aging population. In its work to build Lifelong Communities (LLC), ARC is focused on creating places where individuals can live throughout their lifetime; places that provide a full range of options to residents, ensuring a high quality of life for all. Kathryn Lawler from the Atlanta Regional Commission was the keynote speaker at the February 15, 2012 Community Forum. She shared valuable lessons learned during their efforts to create Lifelong Communities in the Atlanta region.

- **Center for Civic Partnerships:** Eighty million members of the boomer generation (born between 1946–1964) have reached, or are approaching, the traditional retirement age of 65. These boomers overwhelmingly want to age in place. Not all communities are prepared to meet the needs of older residents, or to engage these residents in civic life. The Center for Civic Partnership’s

⁴ Atlanta Regional Commission Lifelong Communities, Lifelong Communities Handbook: Creating Opportunities for Lifelong Living Promoting Housing Options for Older Adults through Zoning Guidelines from the Atlanta Regional Commission, February 2007, www.atlantaregional.com/llc.

⁵ The Atlanta Regional Commission, <http://www.atlantaregional.com>

Community Planning for Aging Well in Communities Toolkit for Planning, Engagement & Action⁶ is a resource for local governments prepared to assist in meaningfully engaging older adults through focus groups, resident surveys, and public forums. The materials have ready to use guidelines, protocols, and questions for gathering input for older adults in planning for the future. This toolkit gives local governments the resources they need to successfully plan for aging well in their communities.

The toolkit:

- Defines the aging well planning process in manageable steps and gives specific guidance for each.
- Provides a structured process for gathering different types of information from different sources at different times.
- Offers ways to involve residents, local government, older adult service providers, businesses, faith communities, nonprofit organizations, and other stakeholders representing the diversity of the community in the planning process.
- Presents a path to a future where older residents can age in place while continuing to engage in and contribute to the community.

Best Practices: Themes

Those best practice themes that have emerged during the course of MASP include the following:

- **Include community engagement:** People 65 years and more have strong preferences and expectations about how they want to live as they age. They have much to offer the communities they live in, as employees and volunteers. There are two realms of engagement:
 - **Older adults know what they need:** It is important to engage older adults in the planning of existing and future programs, and in the creation of resources, or services aimed at meeting their needs.
 - **Older adults are a valuable source of human capital:** Older adults have much to offer and want to be involved and engaged through both employment and volunteer opportunities. It is important to fully utilize older adults as a community resource.
- **Work toward a systems approach^{*}:** Recently, it has been recognized that to address population level issues, the components, or entities, within a service delivery system need to act together, as a system, to leverage, magnify, and sustain impact. This requires that individual organizations focus both on providing high quality services and coordinating and aligning with other service

⁶ <http://www.civicpartnerships.org/docs/services/CHCC/aging-well-toolkit.htm>.

^{*} Appendix II includes a list of local, national and international resources.

providers. An emerging approach of this type of effort is called collective impact, and has been written about and promoted as a new way to solve social problems.⁷ Local government is uniquely positioned to bring groups together in order to catalyze such collaboration.

- **Become more client-focused:** There has been an increased focus with organizations adjusting their operations to be more market driven and consumer focused, and to partner with other organizations. Again, this is necessary to assure that supports to older adults are aligned with their desires and needs.
- **Explore alternative funding options:** The old models and funding streams that have led to the current system were not designed for the growing population of older adults, nor are they designed to align with the preferences and needs of the older adults of tomorrow. Private-public partnerships are a key element of innovative initiatives in this region and nationally. Throughout the MASP engagement process there has been recognition that local governments and service providers need to think creatively about partnerships, raising funds, and delivering outcomes in new ways, ways that are cost-effective and possible given this era of significant reductions in government funding.
- **Ensure cultural and linguistic competency:** In addition to demographic shifts affecting the size of the older adult population, the race and ethnicity of the older adult population is changing. Immigration increases in the region and nationally have created an increased demand for linguistically and culturally competent services.

Additional models and best practices from the region and other national and international efforts are listed in Appendix I.

Through best practice research, characteristics of other successful initiatives and tools have been identified. However, it is also understood that each region is unique. It is therefore important to meld the best practice findings with the results of the community engagement processes.

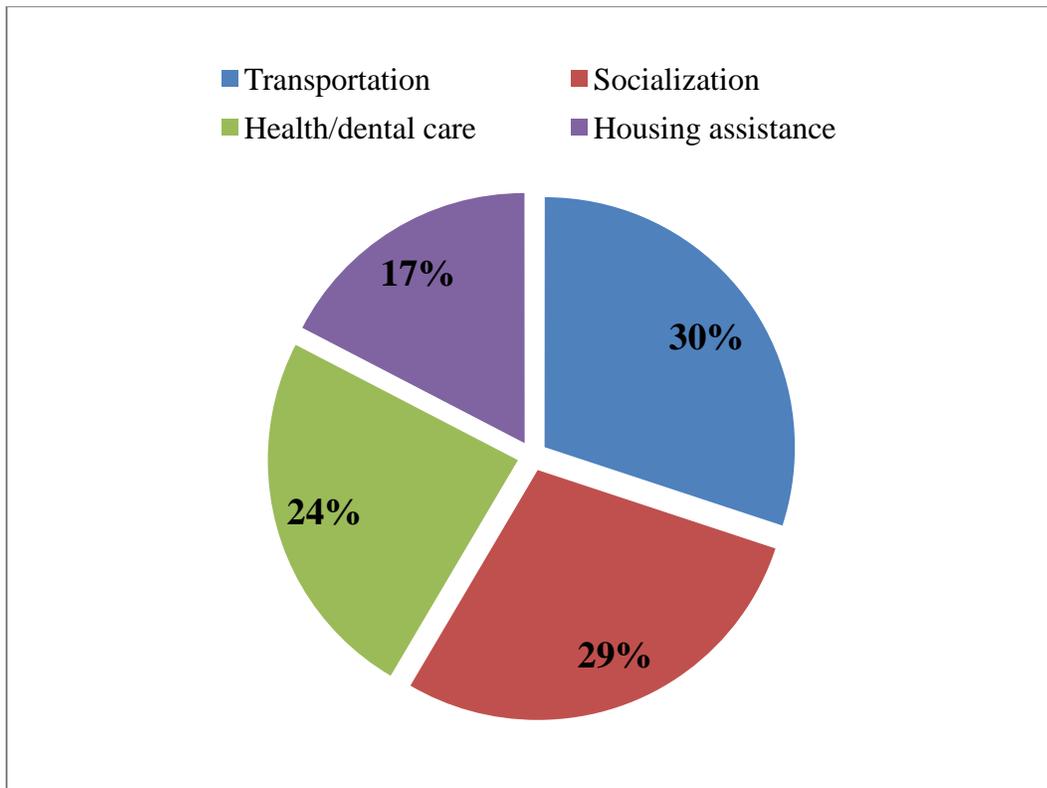
⁷ Collective Impact: Large-scale social change requires broad cross-sector coordination, yet the social sector remains focused on the isolated intervention of individual organizations. For more information: http://www.ssireview.org/articles/entry/collective_impact

Section III—Community Engagement Findings

To learn more about the impact of the growing population of residents 65 years and more, and to understand their desires for the future, the last year has been spent listening to and engaging them through the following activities:

- **Key informant interviews:** With the support of community partners, 135 interviews with community stakeholders were conducted. These interviews drew the attention to the critical issues of transportation and social participation.

Most Needed Services Based on 135 Interviews



- **Focus groups:** To gain deeper insights into these areas, 19 focus groups were conducted with a total of 206 participants.
- **Random sampling survey:** In order to test the results of the interviews and focus groups, more than 1,025 individuals 55 years and older were surveyed by mail and phone.

The focus groups were designed to provide an in-depth look into the lives of people 65 years and more. The information gleaned and the key findings in the areas of transportation and social participation were then used to inform the survey. Through this process, the focus group findings could be tested for accuracy with a larger and randomly selected population sample.

What follows are highlights of the survey findings. The full report of the survey findings is available on the [MAG website](#).

General Issues:

- **Various Issues of Most Concern to Adult Households 55 and Older:** Seventy-nine percent (79 percent) of respondents indicated they are “very concerned” or “concerned” with the affordability of health care. Of additional concern is losing the ability to drive (68 percent), personal health issues (67 percent), and health issues of a spouse age 55 or over (65 percent).
- **Adults Age 55 and Older Are Generally Satisfied with Services and Activities within Maricopa County:** Respondents indicated five services and activities that they are either “very satisfied” or “satisfied” with: public parks and trails (73 percent), volunteer opportunities (66 percent), active recreation opportunities (65 percent), arts and cultural amenities (62 percent), and community/senior center service (53 percent).
- **Reasons That More Often Prevent Households From Using Services for Adults Age 55 and Older:** Forty-three percent (43 percent) of respondents indicated a lack of awareness regarding services, while 37 percent indicated a lack of awareness regarding facilities. Other reasons preventing households from using services more often are “not enough time” (31 percent) and “I use services provided by other agencies” (16 percent).

Senior Centers:

- **Level of Use of Indoor Community Facilities Operated by Cities or Non-Profit Organizations:** Twenty-seven percent (27 percent) of households indicated that they use indoor community facilities operated by cities or non-profit organizations in Maricopa County. In contrast, 73 percent indicated they do not currently use such facilities.
- **Extending Hours at Community Centers is Important to Adults Age 55 and Older:** Sixty-three percent (63 percent) of respondents indicated that maintaining longer hours of operation at community centers is either “very important” (32 percent) or “somewhat important” (31 percent). Only 13 percent of households indicated that this issue is not important.

Transportation:

- **Methods of Travel among Households in Maricopa County:** Ninety-four percent (94 percent) of respondents indicated that they drive a car or truck to

commute within Maricopa County. Walking is a travel method used by 47 percent of households. Other methods, such as riding with a friend or family member (25 percent), public transportation (18 percent), and bicycling (18 percent) were also frequently mentioned. Only one percent of respondents indicated they are homebound and unable to travel.

- **Methods of Travel Respondents Foresee Using Most Often Around Maricopa County in 10 Years:** Based on the sum of their top two choices, the methods of travel that households think they will use most around Maricopa County 10 years from now are: driving a car or truck (67 percent), riding with a friend or family member (32 percent), and public transportation (30 percent). In contrast to current usage, expected growth in population poses a concern for increased demand to current level of services such as Dial-A-Ride, which alone is foreseen to increase 12 times the current level. Dial-A-Ride is currently the most expensive form of transportation costing municipalities an average of \$35 a ride.

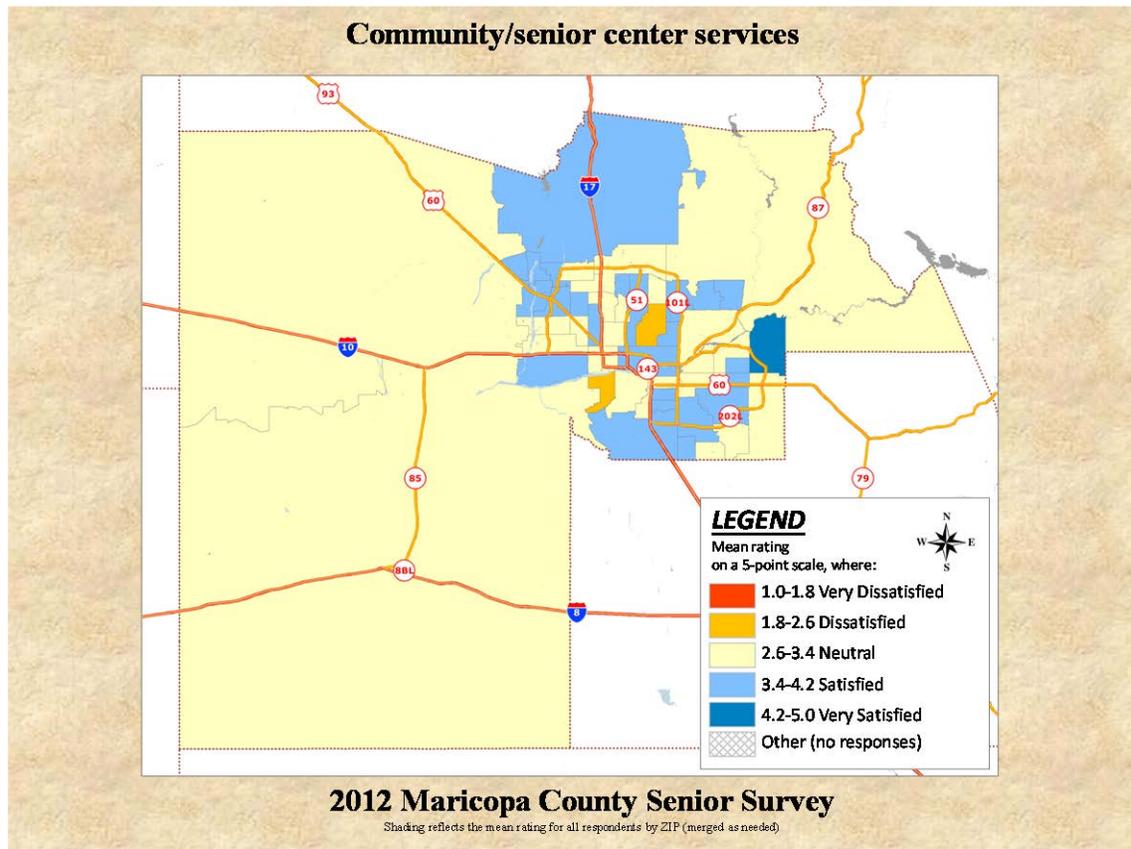
Looking into the Future:

- **Residents' Vision for the Future of Maricopa County:** The issues respondents feel best represent their vision for the future of Maricopa County are: improved health care services (40 percent), a larger regional public transit system (38 percent), improved public transportation (31 percent), affordable housing (28 percent), and additional services to check on seniors living alone (26 percent).

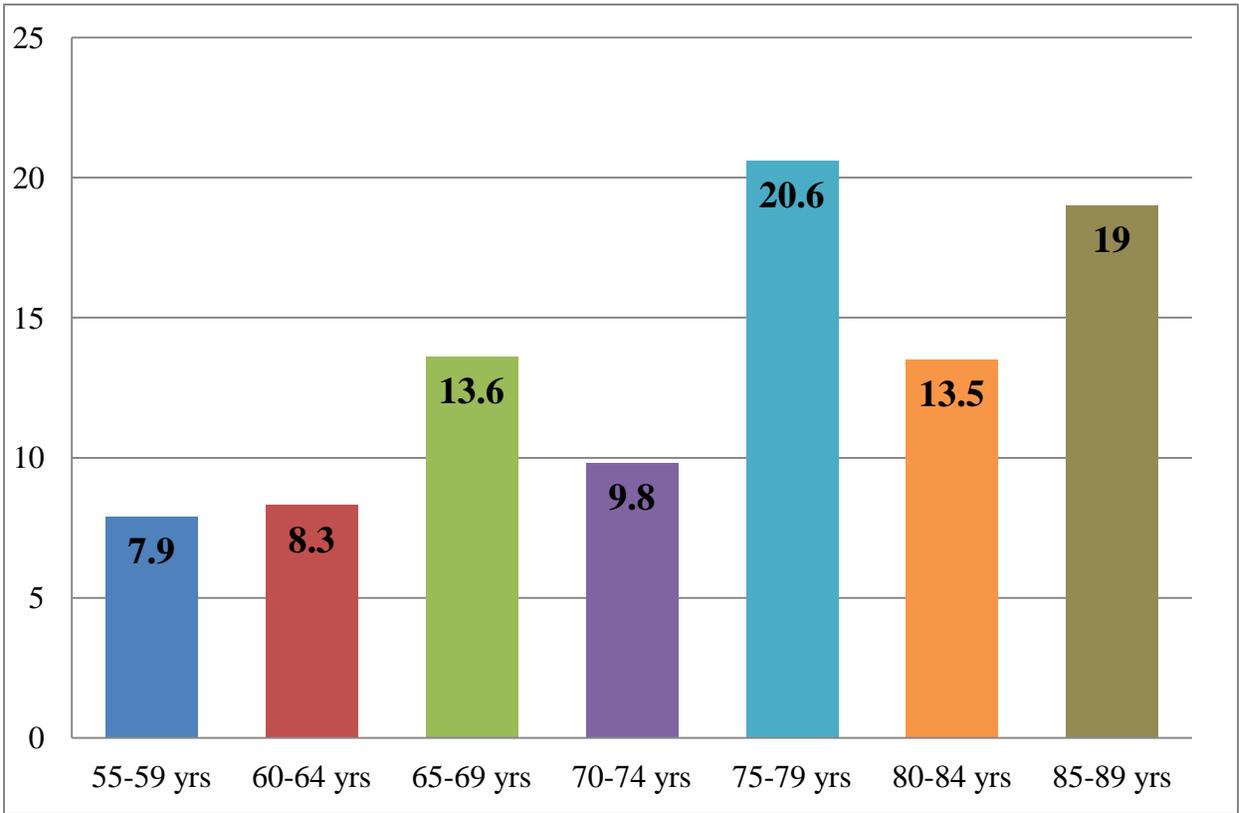
Senior and Community Centers

Survey respondents reflect an active, engaged group who value time spent outside, serving others, and pursuing their interests. Although the numbers of people 65 years plus are increasing dramatically, the numbers of people who frequent senior centers is on the decline in many areas.

- The survey findings show that people in one area in the region indicate they are very satisfied with services currently offered at senior and community centers.
- Senior center participation varies by age and peaks at 75 to 79 years. Satisfaction with senior centers nearly mirrors the participation rates.
- Sixty-three percent of respondents believe that it is very important or somewhat important for community centers or senior centers to be open longer hours.
- Eighty percent of respondents note that lack of awareness regarding facilities and services as reasons for not accessing services designed for persons 55 years and above.
- The two groups with the highest participation rates are over the age of 75 years and the two groups with the lowest participation rates are below the age of 64 years.



Community/Senior Center Participation

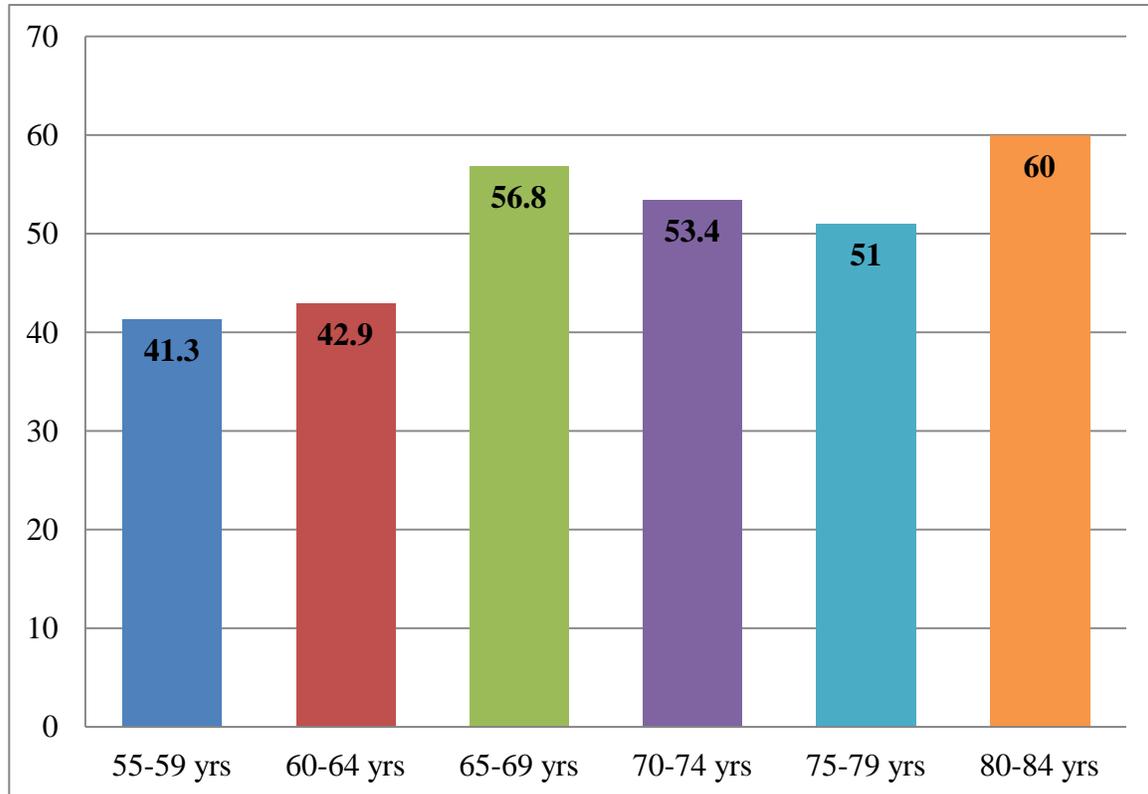


Satisfaction with meeting peers

Concern regarding social participation was a key finding from the focus groups. This theme was echoed in the survey findings:

- Satisfaction with opportunities to meet peers trends up with age. This may be impacted by the higher participation in senior centers.

Satisfied/Very Satisfied with Meeting Peers

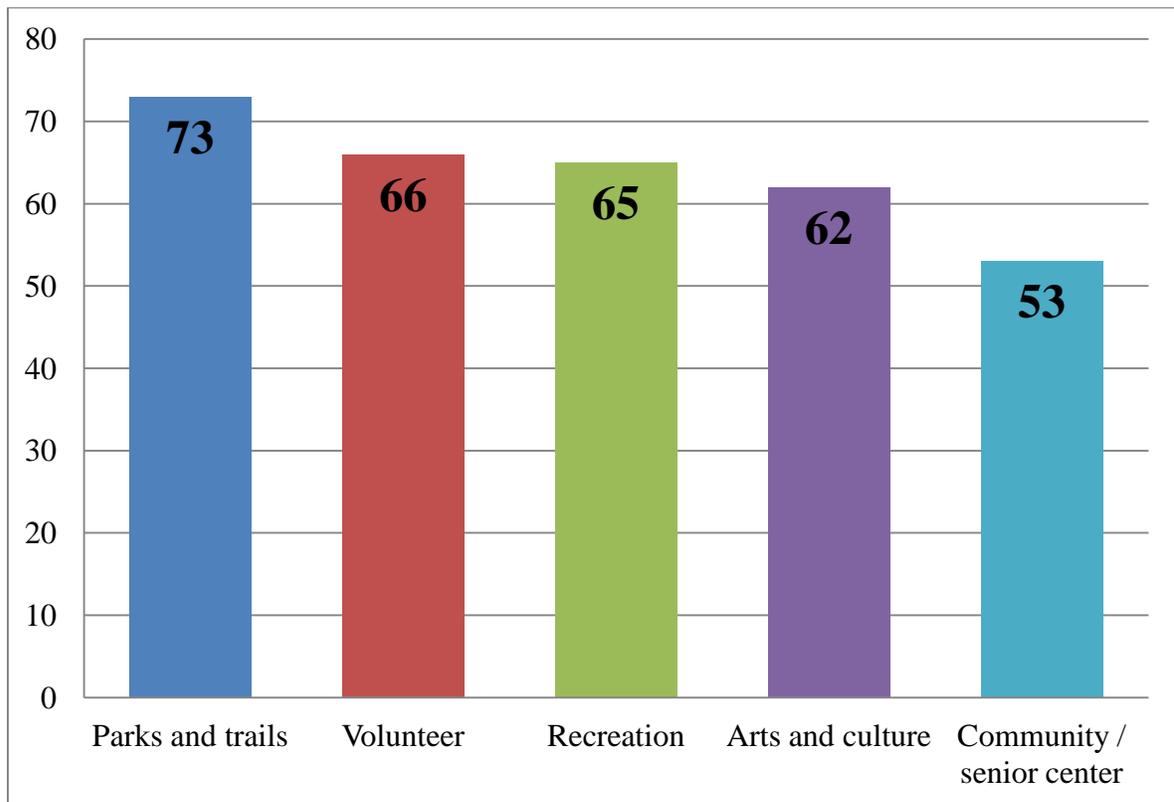


Satisfaction with Services

Respondents reflect an active, engaged group who value time spent outside, providing service to others, and pursuing their interests

- 73 percent are satisfied/very satisfied with parks and trails.
- 66 percent are satisfied/very satisfied with volunteer opportunities.
- 65 percent are satisfied/very satisfied with recreation.
- 62 percent are satisfied/very satisfied with arts and culture.
- 53 percent are satisfied/very satisfied with community/senior centers.

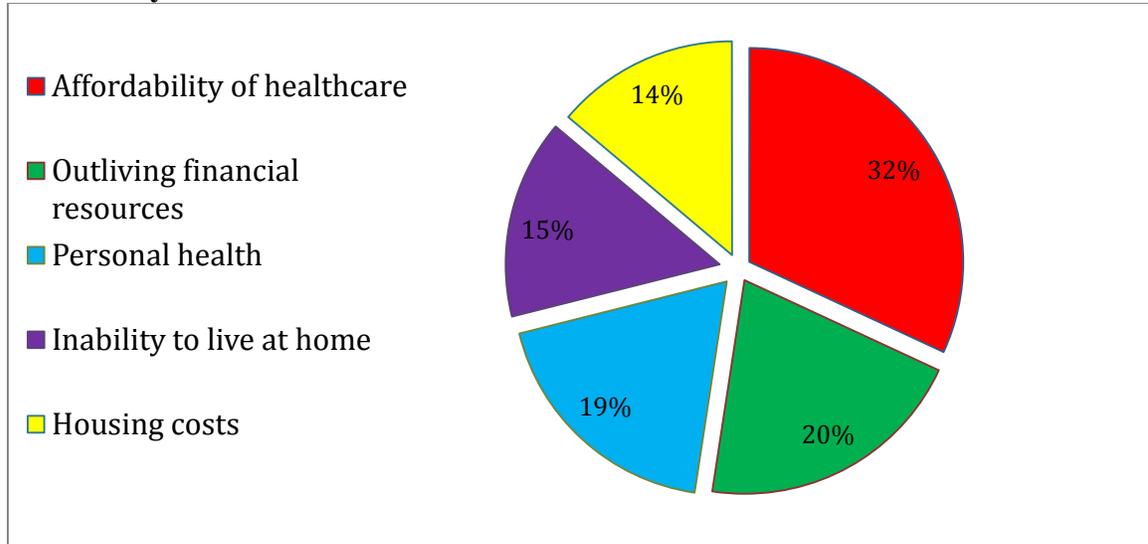
Satisfied/Very Satisfied with Services



Concerns for the Community

Respondents overwhelmingly spoke of their concerns with being able to afford healthcare, to remain in good health, and to keep their spouse in good health as well. While this older generation is generally healthier than their predecessors, more than a third reported their health has declined in the past two years. Many are concerned about living beyond their finances, especially with the impact of the recession. Concerns about income, health, and housing costs may contribute to concerns about being able to remain at home and age in place.

Community concerns



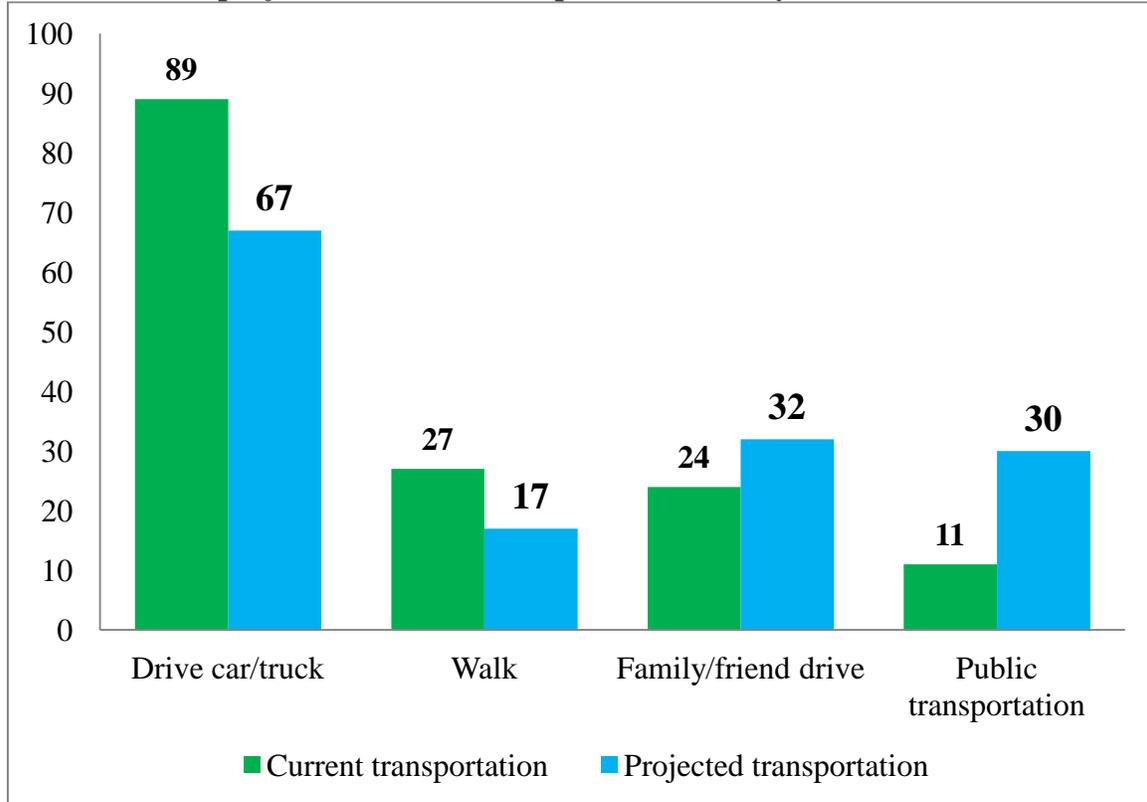
While the chart above identifies concerns, taken together, all of the services described in the slices of the chart are critical to people being able to age in place and live independently.

- Nearly half of adults 55 to 59 years report being dissatisfied with their employment opportunities. While some might not expect adults 85 to 89 years to still be looking for jobs, nearly a third in this age range report being dissatisfied with their job prospects.
- Dissatisfaction with public transportation is shared across all the age ranges with a high of 38.6 percent among 75 to 79 year olds and a low of 33.4 percent among 85 to 89 year olds.

Transportation

According to the survey results the vast majority of respondents currently prefer to drive. While 94 percent report driving, just under 90 percent report driving as their primary mode of transportation. Walking is a distant second choice, followed by getting rides from family and friends.

Current versus projected modes of transportation in ten years



The story changed dramatically when respondents were asked to project ten years into the future. Only two thirds still see themselves driving. Projected transit usage almost triples from 11 percent to 30 percent and Dial-A-Ride, estimated to receive the largest increase, goes from one percent to 12 percent in ten years. This increase would result in 84,000 people expecting to use para-transit services. Para-transit currently has 800,833 riders. It is the most expensive form of transportation at an average of \$35 a trip.

If the survey projections are correct, 210,000 seniors will be using transit by 2020. This dramatic projected increase in transit usage will place increasing demands on the transit system. And the region may not be well positioned to meet these rising demands.

According to the recent report from Transportation for America, [Aging in Place, Stuck without Options: Fixing the Mobility Crisis Threatening the Baby Boom Generation](#)⁸, the MAG Region is projected to rank sixth in the percentage of population 65 to 79 years with poor transit access in 2015, with 56 percent having poor transit access. MASP survey respondents echo these findings.

In the MASP survey, approximately a third of respondents stated that they were not satisfied with the public transportation system, 68 percent of respondents are concerned with losing their ability to drive. This has significant implications for road safety and access to services. More needs to be done to plan for the growing need for an array of accessible transportation options throughout the region.

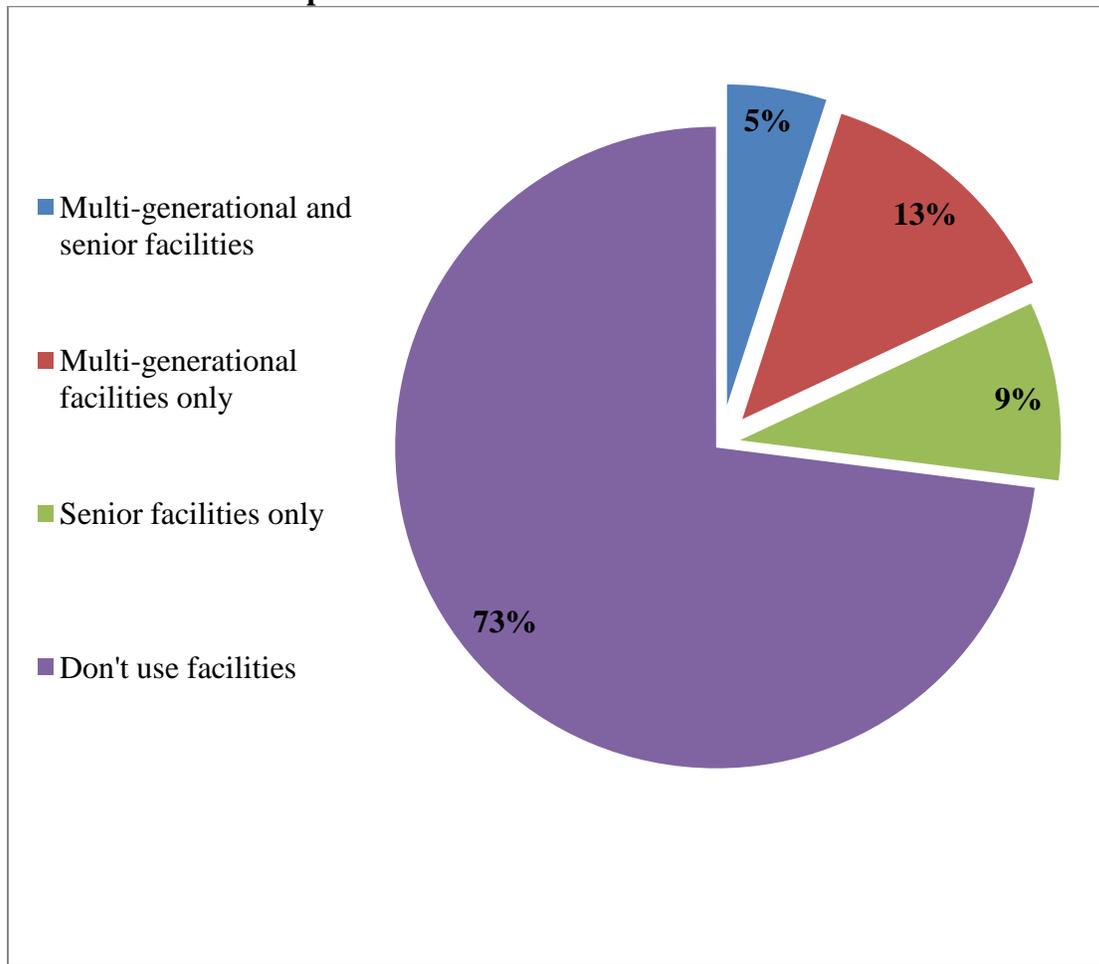
⁸ Transportation for America, 2011. [Aging in Place, Stuck without Options: Fixing the Mobility Crisis Threatening the Baby Boom Generation](#), <http://t4america.org/resources/seniorsmobilitycrisis2011>.

Access to Services

There are unmet needs in the community. However, the survey found that three quarters of respondents (73 percent) reported never using indoor facilities operated by local governments or nonprofit agencies. Within this number, 43 percent indicated lack of awareness as being the main reason. Nearly a third of respondents reported that they don't have time to visit these facilities. A smaller number, 16 percent, reported receiving support from other sources.

In addition to a lack of awareness, it is also possible that the services are not appealing to their target audience. It could also be that people cite a lack of time, when in reality they are shy of going to new places alone. In order to fully understand the nuances of this finding, further research is required.

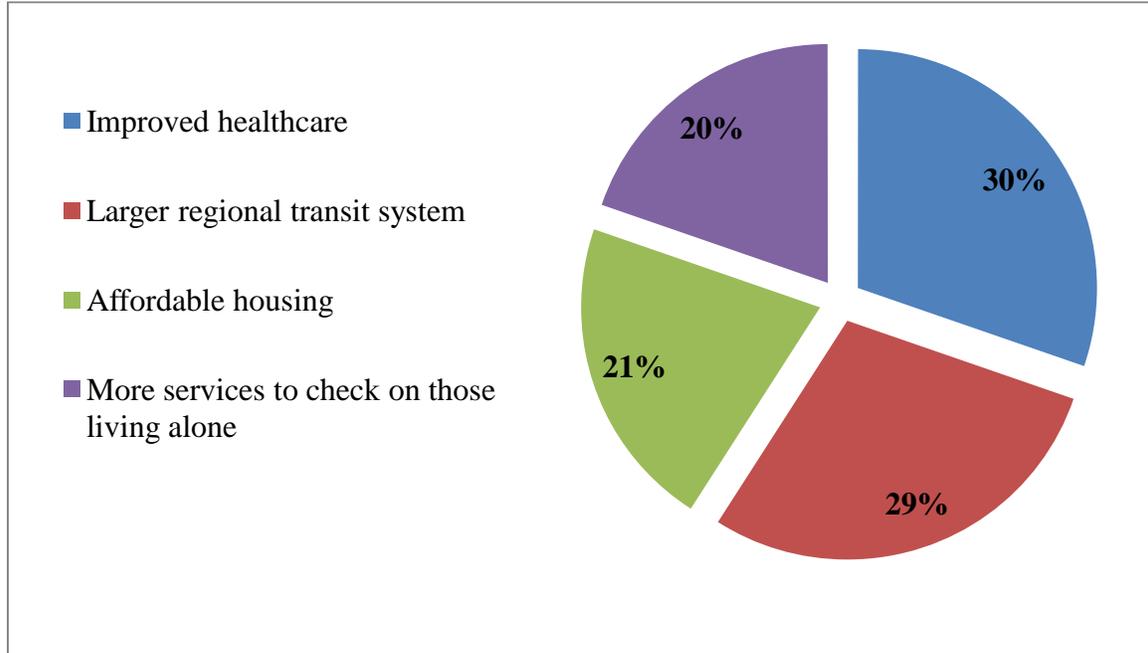
Use of Public and Nonprofit Facilities



Regional Priorities

Respondents to the survey voiced their priorities for the future as including improvements in healthcare, transit, the supply of affordable housing, and additional services to care for those living alone. People have expressed a strong fear of becoming prisoners in their own homes and being forgotten.

Priorities for the Future



Regional planning and intentional actions can prevent their fears from becoming their future. The priorities people have for the future have real implications for what local government needs to start doing today.

Highlights of Community Engagement

Adults 55 years and more expressed the following:

Transportation:

- The region needs a regional transit system that focuses on decreased wait times.
- Transportation should be responsive to seniors' needs making it affordable, accessible, on demand, safe, and reliable.
- Seniors tend to feel isolated from society when they do not drive or when they do not have transportation options.

- More should be done to keep seniors informed of available services and how to travel and access the system.

Socialization:

- Attending community centers and participating in activities helps enrich the lives of older adults.
- Senior center services and activities tend to end around 2:00 p.m. After 2:00 p.m., individuals return to their residences to solitude.
- Access to senior centers within local communities should include transportation.
- Barriers, such as cost, should be mitigated enabling individuals to participate in senior center activities.

Other Issues:

- Seniors face tremendous constraints as they outlive their financial resources. Many resolve to living beyond their income.
- In order to improve the quality of life for adults 55 years and more, it is imperative to improve health care options and reduce costs.
- Community liaisons are needed to advocate and help guide individuals through the various services and eligibility requirements.
- More all-inclusive communities giving individuals access to “one-stop shops” with easy access to shopping, clinics, and banking are needed.

Moving Forward

The results of MASP are two-fold. What follows in the recommendations section is a summary of priorities that have been raised through the process. These will serve to align and leverage the ongoing regional work to address the needs of people 65 and above.

However, the work does not stop here. Through MASP, the MAG region has been selected as one of just five communities in the country to participate in the MetLife Foundation City Leaders Institute. The Institute provides an opportunity to initiate a pilot in the MAG region to facilitate aging in place⁹. It is funded by the MetLife Foundation and implemented by Partners for Livable Communities.

The Village movement may be an option to provide opportunities to socialize, check in on people living alone, and provide referrals to an array of other services. Another option is Senior Centers Without Walls¹⁰, a free telephone program that connects California elders through activities, friendship, and community. Additional local and national models under consideration are listed as part of Appendix II under the heading of City Leaders Institute.

⁹ Appendix II includes a list of local, national and international resources.

¹⁰ <http://www.seniorcenterwithoutwalls.org/>

Section IV—Recommendations

Planning for the future

So how do local governments start planning for these dramatic population and demand shifts now? This question was asked at the community forum on February 15, 2012. The event featured the results of the community outreach. Topics for the event were shaped by the outreach. On February 15, 2012, more than 200 people attended the following workshops:

- Access to resources.
- Engaging seniors as volunteers and employees.
- Intergenerational programming.
- Safety.
- Designing the prototype senior center of the future, re-imagining senior centers.
- Transportation.
- Life and career planning.

During the course of the forum, participants identified topics to pursue in the future. These include:

- Transportation and vouchers.
- Imagining the prototype senior center of the future.
- Meeting caregiver needs.
- Partnering for creative funding options.
- Coordinating education and training opportunities.
- Healthcare and wellbeing.
- Elder economic security and community development for healthy aging.
- Optimizing technology.

The results of the community engagement and the forum have been drawn upon to create this MASP Toolkit and set of recommendations.

Recommendations

Throughout the course of the MASP community engagement process it has become clear that there is a shared understanding of the work that needs to be done, and also that there are many resources already in place that can be leveraged to support these shared goals.

This work is complex. However, there are some general findings from the MASP process that apply to all recommendations. These were developed in concert with the February 15, 2012 workshop presenters:

- **Collaboration is crucial:** Because of the nature of this work and the range of partners involved, collaboration is essential. In this context, collaboration means

working together to meet shared goals. It may be necessary to fund positions in order to collaborate effectively and begin the work of collective impact¹¹.

- **Coordinate efforts:** Aligning and coordinating efforts can make sure that the work is strategic and that best practices are shared throughout the region.
- **Support civic engagement:** Reaching out to those persons who need service can help organizations become consumer-driven. It can also assist in the building of relationships and trust.
- **Prioritize communication within the sector:** The work of building connections within the system is critical if information is to be properly dispersed, integrated and coordinated.
- **Prioritize communication with individuals:** Communication can take place at many levels, from flyers in utility bills to tweeting. There is no single best communication practice. Communication is important and various options should be explored.
- **Be flexible:** One size does not fit all. Whether implementing a volunteer program or exploring transportation options, it is important to have sufficient flexibility to meet disparate needs.
- **Don't re-invent the wheel:** Explore best regional and local best practices. Adapt what exists.
- **Pay attention to sustainability:** This means collecting data from the start and always thinking ahead.
- **Relationships and trust matter:** This applies to relationships between professionals in the system and also relationships with the people served.
- **Value the existing good will:** There is a willingness within the system to work together for the good of the whole. This should be nurtured.

What follows is a summary of the priorities that have been raised through the MASP community engagement processes and best practices research, along with potential strategies. These strategies can be used to guide the work needed to position the MAG region to better serve the needs, and leverage the assets, of its growing population of adults 65 years and above.

In addition, Appendix I provides a summary version of the recommendations, Appendix II provides a list of national and local resources and programs that correspond with the recommendations.

¹¹ Collective Impact—Large-scale social change requires broad cross-sector coordination, yet the social sector remains focused on the isolated intervention of individual organizations, http://www.ssireview.org/articles/entry/collective_impact

Recommended Focus Areas for Building the Future

The following recommendations were developed from the research and community engagement phases. The strategies that local government could use to support older adults have been organized into the following five categories:

- Support People Aging in Place.
- Promote Transportation Options.
- Increase Social Participation.
- Increase Organizational Capacity.
- Utilize Technology.

Support People Aging in Place*

The MASP community engagement has revealed that there is increasing interest in aging in place. However, the ability for an individual to age in place is influenced by many factors. Indeed, many of these are covered in other areas of the recommendations section. However, there are some fundamental steps that can be taken to support people in their desire to age in place. These are included here:

Integrate aging in place into planning processes

- **Integrate plans for people aging in place into all future planning processes:**
 - Add aging in place elements to general plans and other municipal planning documents. Each community may need to define and operationalize this for their area. One example is the City of Scottsdale's character area plan for Southern Scottsdale adopted in 2010. (Appendix II)
 - Conduct studies and community engagement to ascertain how services will impact people 65 years and older. One example of this is the work that MAG is currently undertaking for the Northwest and Southwest Transit Systems Studies. Both studies are an effort to assess the transit service needs within a multi-jurisdictional subarea of the MAG region. For example, the Southwest Valley study area includes portions of the City of Phoenix, City of Avondale, City of Goodyear, City of Tolleson, City of Litchfield Park, and Town of Buckeye. The key outcome of the study will be a local transit system plan that outlines short and long-term goals and actions to implement transit service within the study area and also connect to the regional system. Both studies will examine the regional needs and trends and will include a community engagement component. (Appendix II)
 - Include specific elements in Request for Proposals (RFP) that support people in aging in place. This will ensure that new and existing services

* Appendix II includes a list of local, national and international resources.

and programs provide critical elements. For example, The City of Scottsdale has been working to update the Human Services Commission's funding priorities for awarding professional services contracts as part of the annual non-profit funding cycle. In order to maximize the impact of their resources they have prioritized target populations to be served, and are now looking at research and best practices in programs and services for each of these. By doing this they will be more responsive to community need and will bring more intentionality and focus to these contracts. A result of this process is that their senior service contracts will now focus on programs and services designed to support people aging in place. All recommendations of the Human Services Commission's are approved by the City Council. (Appendix II)

- Dedicate a staff or volunteer position to senior issues.

Make it possible for people to age in place through program and service options

- **Provide ways of serving seniors in their homes and close to their homes:**
 - Build on what already exists:
 - Sun Health and the Area Agency on Aging both operate care transitions programs that provide assistance to people 65 years and older who have been recently discharged from the hospital (Sun Health's program is referral based). This reduces the rate of re-admission and suffering from relapses into illness. (Appendix II)
 - In partnership with community based organizations and cities and towns, the Area Agency on Aging provides numerous home-based care programs. Over the years, as they have seem demand increase (the combined waiting list for services is over 500), the range of home-based options offered has increased. They now include case management services, housekeeping, bathing, meals, nursing, adult day health care, adaptive devices, durable medical equipment and retrofitting, along with a 24/7 senior helpline. (Appendix II)
- **Ensure safety through fall prevention:** Assure safety is a priority issue for older adults. There are a number of programs and initiatives that seek to keep older adults safe from injury such as fall prevention and other screening and assessment programs.
 - Promote services that address the three main factors that contribute to falls. This includes offering services that provide needed home repairs, assistance to counteract confusion and instability caused by medicines interacting (the rate of this happening increases significantly when people are taking more than four medications), and promoting physical activity. Physical activity is the single best remedy to prevent falls.
 - Collaborate with the Arizona Falls Prevention Taskforce. (Appendix II)

- **Promote preventative health services:**
 - Calls relating to diabetes are one of the issues likely to generate the largest number of calls to first responders like the fire department. Services that address this issue will have a dramatic impact on people’s wellbeing, as well as reducing the budget of related departments. Some agencies work on education and awareness, others on serving seniors in their homes. The American Diabetes Association website lists those organizations offering recognized education programs in the region. In addition, Maricopa Integrated Health System (MIHS) along with Valley of the Sun YMCA have announced a new and innovative collaboration with the Medicare Diabetes Screening Project through Novo Nordisk Inc., a leader in diabetes care. MIHS will identify, recruit, and refer up to 100 adults, age 65 and older, with pre-diabetes to YMCA’s evidence-based Diabetes Prevention Program.
 - Consider use of kiosks and relational agents in areas where people 65 years and older are to provide medical information.
- **Meet caregiver needs:** Family caregivers provide the vast majority of the assistance that enables older Arizonans and those with disabilities to live independently in their homes and communities. Caregivers can also include grandparents raising grandchildren. Caregivers are predominately female (66 percent), although the number of male caregivers is rising. Among caregivers 18 years and older, the average age of today’s caregiver is 49 years, and the average age of today’s care recipient is 69 years. Almost half of all caregivers are over 50 years, making them more vulnerable to a decline in their own health, and one-third describe their own health as fair to poor. Based on 2007 estimates, more than 600,000 Arizonans provide almost \$7 billion worth of unpaid, “informal” care each year for adult family members and friends with chronic illnesses or conditions that prevent them from handling daily activities such as bathing, managing medications or preparing meals on their own¹². MASP participants urge that more attention be focused on the needs of these critical providers.
 - Establish a hotline for caregivers and educate the public.
 - Collaborate with the Arizona Caregiver Coalition. (Appendix II)
 - Explore emerging practices. One example of this is the Department of Developmental Disabilities is in the final stages of developing Dementia specific day programs for adults 50 years and more.

¹² <https://www.azdes.gov/main.aspx?menu=8&id=40>

Promote Transportation Options*

Access to transportation is critical for a community that is to successfully serve its aging population and allow them to age in place. Although housing and transportation options are integrally connected, because of the desire to age in place, future transportation challenges and a need to invest in an integrated transportation system was a resounding finding from the community engagement. While implementing transportation improvements is complex, there is recognition that it is vital for the ability of those age 65 years and older, especially those who are disabled or frail.

Promote alternatives to the car

Provide alternatives to the car

- Utilize taxi-cab voucher programs.
 - Replicate the Valley Metro East Valley RideChoice programs, Coupons for Cabs, and CAB Connection. These programs provide persons 65 years and more subsidized voucher/coupon booklets for nominal co-pay \$2.50 for one book valued at \$10. The coupons can then be applied toward the fare and tip of participating taxi companies reducing the cost of a taxi ride. This alternative transportation option benefits individuals requiring less frequent trips with same day service. More information can be found at:
http://www.valleymetro.org/service_locations/east_valley_ridechoice/
- Focus on Integrated approaches.
 - Invite Valley Metro Community Outreach program staff to present at senior centers. The program provides mobility training on how to use the public transit system for senior citizens and persons with a disability. More information can be found at: http://www.valleymetro.org/transit_education/community_outreach/.
 - Studies such as the MAG Southwest and Northwest Valley Local Transit System Study. The focus of the studies is to identify opportunities and strategies for improving existing transit service and to explore multi modal options in providing transportation that best fit the needs of a community. Project information can be found at: <http://www.azmag.gov/Projects/Project.asp?CMSID=4173>.
- Increase accessible transportation options.
 - Engage in the MAG Human Services Coordination Transportation planning process. These efforts explore possible collaborative opportunities that utilize all modes of transportation options such as public transit, shuttle services, volunteer driver programs, and nonprofits to fit the needs of a community. More information can be found at:

* Appendix II includes a list of local, national and international resources.

<http://www.azmag.gov/Projects/Project.asp?CMSID=1047&CMSID2=1110>, or by contacting DeDe Gaisthea, MAG Human Services Transportation Planner at dgaisthea@azmag.gov.

- Increase visibility and awareness.
 - Encourage public involvement of individuals 65 years and more to participate in community forums to bring awareness of transportation concerns of older adults. A national community based best practice is the MAG Transportation Ambassador Program (TAP). TAP provides a venue for stakeholders to discuss transportation concerns and develop strategies to meet the needs for those most vulnerable in the community. For more information contact DeDe Gaisthea, MAG Human Services Transportation Planner at dgaisthea@azmag.gov.

Promote safe roads and safe drivers

- **Develop complete streets:** Explore options for creating complete streets, those accessible and safe for all users: drivers, transit users, pedestrians, bicyclists, older people, children, people with disabilities, people with assisted mobility devices.
 - Implement strategies outlined in the MAG Complete Streets Guide. Complete streets improve the comfort and safety of pedestrian and cyclists of all ages on a roadway. The Complete Streets Guide ensures that facilities for bicycles, pedestrians, and transit are recognized as integral to a properly designed and functioning street. They are as important to mobility, health, and safety as a vehicular travel lane. Examples of complete streets in the MAG region are Mill Avenue in Tempe, downtown Chandler Boulevard, and the historic downtown Glendale area. Information can be found at: http://www.azmag.gov/Documents/BaP_2011-01-25_MAG-Complete-Streets-Guide-December-2010.pdf, or by contacting Maureen DeCindis, MAG, Transportation Planner, at mdecindis@azmag.gov.
- **Create walkable communities:** People have a desire to access service and transportation options close to their homes. This means more emphasis on walkable communities.
 - Enhance Transit-Oriented Development designs by integrating transportation and land use in community developments. A walkable community includes accessibility to services, retail and recreation, that is within a walking distance, such that limited car utilization/ownership can be an option for households. Community enhancement plans such as the MAG Sustainable Transportation Land Use Integration Study will offer strategies on creating walkable communities. Contact Eileen Yazzie, Transportation Program Manager, for more information at eyazzie@azmag.gov.

- **Support safe driving:** Work to ensure that our roads are safe through education and screening.
 - Surprise Senior Center hosts AARP Safe Driving Courses monthly.
 - Encourage open dialogue with people 65 years and more in the awareness of safe driving and assessing their driving habits. Local programs such as the AARP's Driver Safety course promotes safe driving and helps older drivers maintain their mobility and independence. <http://www.aarp.org/home-family/getting-around/>.
 - The Medical Review Program through the Arizona Department of Transportation assesses older drivers ensuring they are medically, psychologically, and physically capable of safely operating a motor vehicle. <http://www.azdot.gov/mvd/MedicalReview/MedicalReviewProgram.asp>.

- **Conduct Road Safety Assessments (RSAs)**
 - Road Safety Assessment (RSA) is one of the many tools to formally assess the safety performance of a facility for all roadway users including older drivers. An RSA is carried out by an independent multidisciplinary team that typically comprises representatives from local law enforcement, road safety education, road/traffic engineering, emergency medical response, and an expert in human factors.

The step-by-step procedure of an RSA can be performed during any or all stages of a project, including planning, preliminary or final design, traffic control planning, construction, pre-opening, and on existing roads. They can also be used on any sized project from minor intersection and roadway retrofits to large transportation projects. The RSAs result in suggestions for short-term low cost as well as long term high cost safety improvements.

Within this region, a number of intersections with the highest crash risk underwent RSA and safety improvements were identified for the future. This tool may be used for additional analysis. For more information, please visit the FHWA website at <http://safety.fhwa.dot.gov/rsa/> or the MAG website at <http://www.azmag.gov/Committees/Committee.asp?CMSID=1059&MID=Transportation>. (Appendix I)

Increase Social Participation*

The MASP process has created a rich resource of information regarding the region's ability to support people in maintaining healthy lifestyles as they age.

Keep older adults active and engaged

- **Engage seniors as volunteers and employees:** At the same time the nation is facing potential labor shortages in critical areas including education and healthcare, a new generation of older Americans would like to keep working, full-time, part-time, paid, and unpaid, in their so-called retirement years. Despite the potential win-win situation, there is little evidence that communities are prepared for this new environment.¹³ Opportunities identified in the MASP project include:
 - Replicate local best practices in utilizing people 65 years plus as volunteers such as the City of Phoenix's partnership with the Orangewood Church. Other best practices include the City of Goodyear Police Department, Duet, and the City of Mesa. (Appendix II)
 - Establish demonstrations to explore innovative models to help baby boomers transition from work to community and national service roles.
 - Promote the physical and mental health benefits of volunteering and encourage all sectors of society to view older Americans as community assets, not liabilities.
- **Intergenerational programming:** Intergenerational programming aims to bring people together in purposeful, mutually beneficial activities and initiatives by promoting a greater understanding and respect between generations¹⁴. The theme of intergenerational programming was one of the forum workshop themes:
 - Replicate local best practices in intergenerational programming such as Benevilla and Rehoboth All Saints Center. For example, Benevilla offers an intergenerational day care program, which has a side-by-side early childhood center for children zero to five years and adult day center for older adults with early stage dementia. For a part of every day the two groups come together participate in shared programs, such as reading to each other, gardening and cooking together, crafts activities, sing-alongs and performances. Benvilla also has a Communities For All Ages

* Appendix II includes a list of local, national and international resources.

¹³ Civic Engagement in an Older America, GSA's forum and focus group independent aging agenda events were designed to provide input to the Policy Committee of the 2005 White House Conference on Aging: www.agingsociety.org/.../Pages%20from%20Geron-NLSept05.pdf

¹⁴ LINKages Society of Alberta, "LINK Project: Linking Intergenerational Needs and Knowledge - Train the Trainer" www.link-ages.ca/pdfs/researchdocs/igp_guidelines.pdf

Initiative. This features a community garden where people of all ages in the community come together and garden. (Appendix II)

- Replicate Carefree’s first “Carefree Gets Neighborly” event conducted over a weekend in February 2012 to promote neighborhood interaction. During the MASP process, a focus group for people aged 65 years and more was hosted by the Foothills Caring Corps. This event spawned the first Carefree Gets Neighborly, an effort to introduce people to their neighbors and combat isolation, especially for older adults and those with disabilities. They plan to repeat the event next year with an element that increases competition among neighborhoods. Since the event, Foothills Caring Corps has also worked with the Holland Community Center and the Desert Foothills Library to partner in offering more social events and opportunities. (Appendix II)
- Enhance Getting Arizona Involved in Neighborhoods (GAIN) events held by a number of communities in October to promote community cohesion. Elements related to people 65 years plus could be expanded within these events. (Appendix II)
- **Increase awareness and advocacy:** Educate older adults and caregivers about recommended preventative services:
 - Support elder economic security and community development. This was identified as a key element of changing the systems serving older adults at the February 15, 2012 community forum. A group discussed the benefits of forming a coalition to mobilize stakeholders around common goals and maximizing available resources. Advocacy was seen as an important element in achieving elder economic security and community development for healthy aging.

Re-imagine senior centers and create prototype senior center of the future

Leverage the assets of existing senior centers. Senior centers have traditionally served the population 60 years and more and have offered services such as meals, activities, classes, and speakers. According to research by BoomerANG, “Even the best managed centers offering the most variety and diversity in programs and activities have not been able to attract more than 20 percent of the available 65 years and more population within their region.” During the forum, workshop participants recommended the following:

- **Conduct a regional assessment:**
 - Conduct an assessment of senior centers using the New York study and BoomerANG study as models. These models can be expanded to include users of senior centers and other people 65 years plus to assess the centers. (Appendix II)
- **Replicate local and national best practices:**
 - Replicate local best practice senior centers such as Granite Reef Senior Center, recipient of NuStep’s Pinnacle Award. (Appendix II)

- Implement a Village movement pilot project with four sites: urban, rural, faith-based, and an ethnically defined community. The pilot project could include a community assessment, a service coordinator, community outreach, the development of a qualified vendor list, the establishment of a website, referrals to community events, and a sustainable business model for communities with a range of incomes, including low to moderate incomes. Pre and post-tests would track the impact made. (Appendix II)
- Replicate virtual senior center models such as “Senior Center Without Walls” from California and “YMCA Without Walls” in Chicago. Initial steps could include a senior center assessment focused on which services currently being offered could be offered virtually. (Appendix II)
- Build the capacity of existing centers to be flexible and to engage them and the seniors they serve in re-imagining the roles of senior centers in creative ways, and with other organizations, so resources can be leveraged.
- **Become more market, boomer and consumer driven:**
 - Engage people 55 years and more when planning services to meet their needs and expectations.

Increase organizational capacity*

Throughout the community engagement and research phases of MASP, much has been said about access to services. The aging population is concerned about access to health care and housing services; they are concerned about the future of service provision if they are able to stay in their homes, and people who care for seniors are concerned about access to support services. Conversely, there is also a documented lack of awareness regarding services currently provided by local government. While some services are over-subscribed, there is a general lack of awareness regarding others. Participants recognize a need to strengthen existing services and expand availability. What follows is a set of potential strategies in these areas:

Explore innovative funding partnerships

Throughout the MASP engagement process there has been recognition that local governments and service providers need to think creatively about partnerships, raising funds, and delivering outcomes in new ways, ways that are cost-effective and possible, given this era of significant reductions in government funding:

- **Support alternative or creative funding options:**
 - Replicate successful models: Benevilla provides a range of service and programs designed to support people aging in place. These include Birt’s Bistro, a microenterprise. Birt’s Bistro provides a social gathering place

* Appendix II includes a list of local, national and international resources.

in the community. However, it is also a revenue stream for Benevilla. The restaurant is open for lunch and two evenings a week. In addition the kitchen is used for training purposes for adults with developmental disabilities and next year's training will also be offered to seniors re-careering with an interest in entering into catering. Birt's Bistro also features local artists, and two on-site social workers, so that it also serves as a resources center. (Appendix II)

- Collaborate with agencies and nonprofits: When faced with the closure of more than a dozen recreation facilities as a result of budget reductions in FY 2011, the City of Phoenix implemented an innovative and unprecedented solution. The City dramatically changed its approach to collaborating with nonprofit agencies by issuing Requests for Proposals for the agencies to provide services at the closed facilities. The nonprofit agencies received quality venues for expanding their programs, the City is assured that its capital investments will be well-maintained, and the residents continue to receive important services. For more information, please contact Ann Wheat, Supervisor of the City of Phoenix Parks and Recreation Department, at ann.wheat@phoenixgov. (Appendix I)

Form strategic organizational partnerships

This topic was identified and highlighted by participants at the February 15, 2012 event. The group recommended:

- **Coordinate education and training opportunities:**
 - Coordinate existing trainers and providers: This would include surveying providers to determine supply and demand and the possible creation of a website to provide centralized information. One model is the Arizona Living Well Institute, a statewide collaborative of individuals, business, and organizations committed to developing an efficient and effective system of delivering the Healthy Living (CDSMP) Workshops throughout Arizona by centralizing leader training, coordinating the delivery of self-management workshops, as well as managing and reporting outcomes data. (Appendix II)
 - Dedicate a staff or volunteer position to senior issues.
- **Build a strong coalition of supporters:** There is general recognition that it takes collaboration to effectively promote access to services. Participants recommend promoting collaborations across health and other service systems and working to create partnerships with community agencies, local government faith communities, employee assistance programs, etc. They also suggest tapping into professional service providers (like accountants, lawyers, doctors):
 - Build positive relationships with a range of people including elected officials, service providers, and end users of the services. Demonstrating a financial impact will help make the case for these partnerships. Public

private partnerships may be helpful as well. For example, in Wickenburg a new collaboration between the Arizona Kidney Foundation, MAG, Valley Metro, the Town of Wickenburg, the Desert Dialysis Center and the Area Agency on Aging means that six older adults living in Wickenburg have been able to continue with dialysis treatments (Appendix I).

- **Co-locate services:**

- Co-locate services with agencies that have different core competencies that can benefit the other partners. For example, the North Penn Community Health Foundation is facilitating a \$28 million project that provides housing for seniors with low incomes, a YMCA, a senior center, and a congregate meal program. The senior center is contracting with the YMCA to provide the health and fitness programs for their clients. The congregate meal program is opening a restaurant, providing the meals for the senior center and the children who go to the YMCA, and seating is mixed and open to all the groups. People who go to the YMCA may be enticed to start attending the senior center. The project is made possible in part through low-income housing tax credits and an endowment to the YMCA. In another example, the City of Scottsdale has co-located services through Granite Reef Village, a LEED certified center next to housing, an accelerated care clinic, and an adult day care program (Appendix II).

Utilize technology*

- **Use technology to increase coordination and access to services and information:**

- Coordinate education and training opportunities by constructing a website of services for agencies serving older adults (refer to Increase Organizational Capacity section).
- Develop an informational website for people 65 years plus. For example, this could have a medical component that relays biosensor data from patients to their healthcare providers.
- Replicate technology programs to serve people 65 years plus by collecting donated computers and related equipment, training volunteers, and providing classes on using the computers and going online. Refer to About Care and Duet as examples. (Appendix II)
- Replicate the City of Scottsdale's website pages developed for each neighborhood. The sites include an interactive element where people can talk with each other online. (Appendix II)

* Appendix II includes a list of local, national and international resources.

- Use technology to increase awareness. For example, Surprise Senior Center offers Benefits Counseling twice monthly by a volunteer trained by Area Agency on Aging. They assist persons using the Benefits Check up website to search programs and eligibility. (Appendix II)
- Explore emerging practices for example, the Department of Developmental Disabilities and the Division of Aging and Adult Services are in the process of completing a computer-based training on dementia that will be used by all support coordinators and available to all provider agencies and others if they wish to use it. (Appendix I)

Section V—Appendices

- I. Recommendations summary table
- II. List of national and local resources/programs
- III. Demographic overview of the region
- IV. Summary of focus group findings
- V. Recommendations from the senior center workshops on February 15th
- VI. Service inventory

Appendix I—Recommendations summary table

Recommendations	Action Steps and Resources
Support People Aging in Place	
Integrate aging in place into planning processes	
Integrate plans for people aging in place into all future planning processes.	<ol style="list-style-type: none"> 1. Add aging in place elements to general plans and other municipal planning documents. Each community may need to define and operationalize this for their area. Refer to City of Scottsdale character area plan for Southern Scottsdale adopted in 2010. (Appendix II) 2. Conduct studies and community engagement to ascertain how services will impact people 65 years and older. Refer to the MAG Northwest and Southwest Transit Systems Studies. (Appendix II) 3. Include specific elements in Request for Proposals (RFP) that support people in aging in place. This will ensure that new services and programs provide critical services. Refer to the City of Scottsdale RFP. (Appendix II) 4. Dedicate a staff or volunteer position to senior issues.
Make it possible for people to age in place through program and service options	
Provide ways of serving seniors in their homes and close to their homes.	<ol style="list-style-type: none"> 1. Sun Health and Area Agency on Aging both operate care transitions programs that provide assistance to people 65 years and older who have been recently discharged from the hospital (Sun Health’s program is referral based). This reduces the rate of re-admission and suffering from relapses into illness. (Appendix II) 2. In partnership with community based organizations and cities and towns, the Area Agency on Aging provides numerous home-base care programs. Over the years, as they have seen demand increase (the combined waiting list for services is over 500), the range of home-based options offered has increased. They now include case management services, housekeeping, bathing, meals, nursing, adult day health care, adaptive devices, durable medical equipment and retrofitting, along with a 24/7 senior helpline. (Appendix II)
Ensure safety through fall prevention.	<ol style="list-style-type: none"> 1. Promote services that address the three main factors that contribute to falls. This includes providing services that provide needed home repairs, assistance to counteract confusion and instability caused

	<p>by medicines interacting (the rate of this happening increases significantly when people are taking more than four medications), and promoting physical activity. Physical activity is the single best remedy to prevent falls. (Appendix II)</p> <p>2. Collaborate with the Arizona Falls Prevention Taskforce (refer to http://www.azstopfalls.org/). (Appendix II)</p>
Promote preventative health services.	<p>1. Calls relating to diabetes are one of the issues likely to generate the largest number of calls to first responders like the fire department. Services that address this issue will have a dramatic impact on people’s wellbeing, as well as reducing budget of related departments. Some agencies work on education and awareness, others on serving seniors in their homes. The American Diabetes Association website lists those organizations offering recognized education programs in the region. In addition, Maricopa Integrated Health System (MIHS) along with Valley of the Sun YMCA have announced a new and innovative collaboration with the Medicare Diabetes Screening Project through Novo Nordisk Inc., a leader in diabetes care. MIHS will identify, recruit and refer up to 100 adults, age 65 and older, with pre-diabetes to YMCA’s evidence-based Diabetes Prevention Program. (Appendix II)</p> <p>2. Consider use of kiosks and relational agents in areas where people 65 years plus are to provide medical information.</p>
Meet caregiver needs.	<p>1. Establish a hotline for caregivers and educate the public. (Appendix II)</p> <p>2. Collaborate with the Arizona Caregiver Coalition (refer to http://www.azcaregiver.org/). (Appendix II)</p> <p>3. Explore emerging practices such as the Department of Developmental Disabilities is in the final stages of developing Dementia specific day programs for our adults ages 50 years and older. For more information, contact Carol S Sherer, District Central Network Manager, Division of Developmental Disabilities at CSSherer@azdes.gov</p>
Promote Transportation Options	
Provide alternatives to the car	
Utilize taxi-cab	1. Replicate the Valley Metro East Valley RideChoice programs, Coupons for Cabs and CAB

vouchers.	<p>Connection. These programs provide persons 65 and over subsidized voucher/coupon booklets for nominal co-pay \$2.50 for one book valued at \$10. The coupons can then be applied toward the fare and tip of participating taxi companies reducing the cost of a taxi ride. This alternative transportation option benefits individuals requiring less frequent trips with same day service.</p> <p>http://www.valleymetro.org/service_locations/east_valley_ridechoice/</p>
Focus on integrated approaches.	<p>1. Invite Valley Metro Community Outreach program to present at senior center. The program provides mobility training on how to use the public transit system for senior citizens and persons with a disability. More information can be found at:</p> <p>http://www.valleymetro.org/transit_education/community_outreach/.</p>
Increase accessible transportation options.	<p>1. Engage in the MAG Human Services Coordination Transportation planning process. These efforts explore possible collaborative opportunities that utilize all modes of transportation options such as public transit, shuttle services, volunteer driver programs, and nonprofits to fit the needs of a community. Information can be found at:</p> <p>http://www.azmag.gov/Projects/Project.asp?CMSID=1047&CMSID2=1110, or by contacting DeDe Gaisthea, MAG Human Services Transportation Planner, at dgaisthea@azmag.gov.</p>
Increase visibility and awareness.	<p>1. Encourage public involvement of individuals over the age of 65 to participate in community forums to bring awareness of transportation concerns of older adults. A national community based best practice is the MAG Transportation Ambassador Program (TAP). TAP provides a venue for stakeholders to discuss transportation concerns and develop strategies to meet the needs for those most vulnerable in the community. For more information contact DeDe Gaisthea, MAG Human Services Transportation Planner, at dgaisthea@azmag.gov.</p>
Promote safe roads and safe drivers	
Develop complete streets.	<p>1. Implement strategies outlined in the MAG Complete Study Guide. Complete streets improve the comfort and safety of pedestrian and cyclists of all ages on a roadway. The Complete Streets Guide ensures that facilities for bicycles, pedestrians, and transit are recognized as integral to a properly designed and functioning street. They are as important to mobility, health, and safety as a vehicular travel lane. Examples of complete streets in the MAG region are Mill Avenue in Tempe, downtown Chandler Boulevard, and the historic downtown Glendale area. Information can be found at the</p>

	<p>following link, http://www.azmag.gov/Documents/BaP_2011-01-25_MAG-Complete-Streets-Guide-December-2010.pdf, or by contacting Maureen DeCindis, MAG, Transportation Planner, at mdecindis@azmag.gov.</p>
Create walkable communities.	<ol style="list-style-type: none"> 1. Enhance Transit-Oriented Development designs by integrating transportation and land use in community developments. A walkable community includes accessibility to services, retail and recreation, that is within a walking distance, such that limited car utilization/ownership can be an option for households. Community enhancement plans such as the MAG Sustainable Transportation Land Use Integration Study will offer strategies on creating walkable communities. Contact Eileen Yazzie, Transportation Program Manager, for more information at eyazzie@azmag.gov.
Support safe driving.	<ol style="list-style-type: none"> 1. Encourage open dialogue with people 65 and over in the awareness of safe driving, and assessing their driving habits. Contact local programs such as the AARP's Driver Safety course promotes safe driving and helps older drivers maintain their mobility and independence. http://www.aarp.org/home-family/getting-around/. 2. The Medical Review Program through the Arizona Department of Transportation assesses older drivers ensuring they are medically, psychologically and physically capable of safely operation a motor vehicle. http://www.azdot.gov/mvd/MedicalReview/MedicalReviewProgram.asp
Conduct Road Safety Assessments	<ol style="list-style-type: none"> 1. Road Safety Assessment (RSA) is one of the many tools to formally assess the safety performance of a facility for all roadway users including older drivers. An RSA is carried out by an independent multidisciplinary team that typically comprises representatives from local law enforcement, road safety education, road/traffic engineering, emergency medical response, and an expert in human factors. For more information, please visit the FHWA website at http://safety.fhwa.dot.gov/rsa/ or the MAG website at http://www.azmag.gov/Committees/Committee.asp?CMSID=1059&MID=Transportation.
Increase Social Participation	
Keep older adults active and engaged	
Engage seniors as volunteers and employees.	<ol style="list-style-type: none"> 1. Replicate local best practices in utilizing people 65 years plus as volunteers such as the City of Phoenix's partnership with the Orangewood Church, City of Goodyear Police Department, Duet, and the City of Mesa. (Appendix II)

	<ol style="list-style-type: none"> 2. Establish demonstrations to explore innovative models to help baby boomers transition from work to community and national service roles. 3. Promote the physical and mental health benefits of volunteering and encourage all sectors of society to view older Americans as community assets, not liabilities.
Provide intergenerational programming.	<ol style="list-style-type: none"> 1. Replicate local best practices in intergenerational programming such as Benevilla and Rehoboth All Saints Center. (Appendix II) 2. Replicate Carefree’s first “Carefree Gets Neighborly” event conducted over a weekend in February 2012 to promote neighborhood interaction. They plan to repeat the event next year with an element that increases competition among neighborhoods. (Appendix II) 3. Enhance Getting Arizona Involved in Neighborhoods (GAIN) events held by a number of communities host in October to promote community cohesion. Elements related to people 65 years plus could be expanded within these events. (Appendix II)
Increase awareness and advocacy by supporting elder economic security and community development.	<ol style="list-style-type: none"> 1. Form a coalition to mobilize stakeholders around common goals and maximizing available resources.
Re-imagine senior centers and create prototype senior center of the future	
Conduct a regional assessment.	<ol style="list-style-type: none"> 1. Conduct a regional assessment of senior centers using the New York study and BoomerANG study as models (refer to the appendix). These models can be expanded to include users of senior centers and other people 65 years plus to assess the centers. (Appendix II)
Replicate best local and national best practices.	<ol style="list-style-type: none"> 1. Implement a Village movement pilot project with four sites: urban, rural, faith-based, and an ethnically defined community. The pilot project would include a community assessment, a service coordinator, community outreach, the development of a qualified vendor list, the establishment of a website, referrals to community events, and a sustainable business model for communities with a range of incomes, including low to moderate incomes. Pre and post tests would track the impact made. (Appendix II)

	<ol style="list-style-type: none"> Replicate virtual senior center models such as “Senior Center Without Walls” from CA and “YMCA Without Walls” in Chicago. (Appendix II) Replicate local best practice senior centers such as Granite Reef Senior Center, recipient of NuStep’s Pinnacle Award. (Appendix II) Build the capacity of the centers to be flexible and to engage them and the seniors they serve in re-imagining the roles of the senior centers in creative ways.
Become more market, boomer and consumer driven.	<ol style="list-style-type: none"> Engage people 55 years and older in all process designed to plan services to meet their needs and expectations.
Increase Organizational Capacity	
Explore innovative funding partnerships	
Support alternative or creative funding options.	<ol style="list-style-type: none"> Engage in public private partnerships and other alternative funding mechanisms. Refer to Birt’s Bistro, a microenterprise through Benevilla. (Appendix II)
Collaborate with agencies and nonprofits	<ol style="list-style-type: none"> Replicate the City of Phoenix’s collaboration with nonprofit agencies to provide services in City buildings. For more information, please contact Ann Wheat, Supervisor of the City of Phoenix Parks and Recreation Department, at ann.wheat@phoenixgov.
Form strategic organizational partnerships	
Coordinate education and training opportunities.	<ol style="list-style-type: none"> Coordinate existing trainers and providers. This would include surveying to determine supply and demand and the creation of a website to provide centralized information. Dedicate a position to senior issues.
Build a strong coalition of supporters.	<ol style="list-style-type: none"> Build positive relationships with a range of people including elected officials, service providers, and end users of the services. Demonstrating a financial impact will help make the case for these partnerships. Public private partnerships may be helpful as well. For example, in Wickenburg a new collaboration between the Arizona Kidney Foundation, MAG, Valley Metro, the Town of Wickenburg, the Desert Dialysis Center and the Area Agency on Aging means that six older adults living in Wickenburg have been able to continue with dialysis treatments.

Co-locate services.	<ol style="list-style-type: none"> 1. Co-locate services with agencies that have different core competencies that can benefit the other partners. For example, the North Penn Community Health Foundation is facilitating a \$28 million project that provides housing for seniors with low incomes, a YMCA, a senior center, and a congregate meal program. The senior center is contracting with the YMCA to provide the health and fitness programs for their clients. The congregate meal program is opening a restaurant, providing the meals for the senior center and the children who go to the YMCA, and seating is mixed and open to all the groups. People who go to the YMCA may be enticed to start attending the senior center. The project is made possible in part through low-income housing tax credits and an endowment. The City of Scottsdale has co-located services through Granite Reef Village, a LEED certified center next to housing, an accelerated care clinic, and an adult day care program. (Appendix II)
Utilize Technology	
Use technology to increase coordination and access to services and information.	<ol style="list-style-type: none"> 1. Coordinate education and training opportunities by constructing a website of services for agencies serving older adults (refer to Increase Organizational Capacity section). 2. Develop an informational website for people 65 years plus. This could have a medical component that relays biosensor data from patients to their healthcare providers. 3. Replicate technology programs to serve people 65 years plus by collecting donated computers and related equipment, training volunteers, and providing classes on using the computers and going online. (Appendix II) 4. Replicate the City of Scottsdale’s website pages developed for each neighborhood. The sites include an interactive element where people can talk with each other online. (Appendix II) 5. Use technology to increase awareness, like utilizing Benefits Check. (Appendix II) 6. Explore emerging practices.

Appendix II—List of National and Local Resources and Programs

A Systems Approach	
Collaboration and Collective Impact	
Local Resources and Models	National/International Resources and Models
<p>E.L.D.E.R. Project - Empowered Leaders Directing Elder Resources: Working to transform older adults into valuable community assets, build neighborhood infrastructure to support older adults to age in their homes, and create connections across systems and integrate services to support older adults. Contact Kathy Wilson at Kwilson@unitedwaytucson.org.</p>	<p>Collective Impact: Large-scale social change requires broad cross-sector coordination, yet the social sector remains focused on the isolated intervention of individual organizations. http://www.ssireview.org/articles/entry/collective_impact</p> <p>Center for Evaluation Innovation: Contributing to ideas about how to evaluate systems building or systems change efforts. Systems change is complex and hard to measure. It involves multiple programs and players and features outcomes at multiple levels. http://www.evaluationinnovation.org/focus-areas/systems-change.</p>
Support People Aging in Place	
Integrate Aging in Place into Planning Processes	
Local Resources and Models	National/International Resources and Models
<p>E.L.D.E.R. Project - Empowered Leaders Directing Elder Resources: Working to transform older adults into valuable community assets, build neighborhood infrastructure to support older adults to age in their homes, and create connections across systems and integrate services to support older adults. Contact Kathy Wilson at Kwilson@unitedwaytucson.org.</p>	<p>Village to Village Network: Villages are membership-driven, grass-roots organizations run by volunteers and paid staff that coordinate access to affordable services. Currently, eighty-nine villages are operating in the United States, Canada, Australia and the Netherlands, with over 100 more in development. http://www.vtvnetwork.org/</p>

<p>MAG Northwest and Southwest Transit Plans: Both studies are an effort to assess the transit service needs within a multi-jurisdictional subarea of the MAG region. For more information on the Southwest Valley Local Transit System Study visit: http://www.azmag.gov/Projects/Project.asp?CMSID=4173</p> <p>City of Scottsdale: The Human Services Commission’s funding priorities for awarding professional services contracts as part of the annual non-profit funding cycle include a specific focus on supporting people aging in place. For more information email censign@scottsdaleaz.gov or call (480) 312-2646.</p> <p>City of Scottsdale Character Area Plan: An area - specific policy document that will be incorporated into and used to update the city’s General Plan by 2011, as well as be used to begin implementation of the community’s goals for the area. http://www.scottsdaleaz.gov/planning/areaplans/CAPsouthern.</p>	
Provide ways of serving seniors in their homes and close to their homes	
Local Resources and Models	National/International Resources and Models
<p>Area Agency on Aging: Provides a range of home-care options (in partnership with community based organizations and cities and towns). http://www.aaaphx.org</p> <p>Senior Help Line: This 24/7 service provides case management, initial review, and connects people to the services they need. For more information call: (602) 264-HELP (602-264-6357).</p> <p>Sun Health: Medication Management program.</p>	<p>American Diabetes Association: Works to prevent and cure diabetes and to improve the lives of all people affected by diabetes. http://www.diabetes.org</p>

www.sunhealth.org.

Maricopa Integrated Health System (MIHS): MIHS, along with Valley of the Sun YMCA have announced a new and innovative collaboration with the Medicare Diabetes Screening Project through Novo Nordisk Inc., a leader in diabetes care. MIHS will identify, recruit and refer up to 100 adults, age 65 and older, with pre-diabetes to YMCA's evidence-based Diabetes Prevention Program.

<http://www.screenfordiabetes.org/news/maricopa-integrated-health-system-partner-with-valley-of-the-sun-ymca-and-the-mdsp-in-phoenix/>.

American Diabetes Association, Phoenix:

<http://www.diabetes.org/in-my-community/local-offices/phoenix-arizona/>.

The Arizona Living Well Institute: This is a statewide collaborative of individuals, business, and organizations committed to developing an efficient and effective system of delivering the Healthy Living (CDSMP) Workshops throughout Arizona by centralizing leader training, coordinating the delivery of self-management workshops, as well as managing and reporting outcomes data. <http://azlwi.org/>

Foothills Caring Corps,: This organization is dedicated to promoting independence and enhancing the quality of life for older residents throughout the community. They do this through a force of volunteers and staff who deliver services and support that

<p>provide access to basic needs such as food, medical care, and activities that promote physical, mental and emotional health. http://foothillscaringcorps.com/.</p>	
Ensure Safety through Fall Prevention	
Local Resources and Models	National/International Resources and Models
<p>Stop Falls Arizona Fall Prevention Coalition (AZFPC): This agency provides education and information to help older adults in Arizona improve their flexibility and balance, reduce their fears of falling, and decrease the likelihood of a fall. The intention is to help connect individual Falls Prevention Programs to the broader statewide collaborations; such as the collaboration between the aging network and the public health community that promotes chronic disease self-management, including reducing the risk of falls among older adults. www.azstopfalls.org</p> <p>A Matter of Balance: Managing Concerns About Falls: This agency emphasizes practical strategies to reduce fear and increase activity levels. Participants learn to view falls and fear of falling as controllable. A Matter of Balance includes eight two-hour sessions for a small group led by a trained facilitator. This program was developed at the Roybal Center at Boston University, and has been nationally recognized. A Matter of Balance: Managing Concerns About Falls is offered in various community centers and organizations in Maricopa County, for more information visit. http://azlwi.org/resources.</p> <p>Annual National Falls Prevention Awareness Day: Hosted by the AZFPC (1st day of Fall). For more information go to</p>	<p>The Fall Prevention Center of Excellence: Works to identify best practices in fall prevention and to help communities offer fall prevention programs to older people who are at risk of falling. http://www.stopfalls.org/.</p> <p>National Council on Aging: Center for Healthy Aging Evidence-Based Programs, Model Programs (and toolkits), and Best Practices for Older Adults. http://www.ncoa.org/improve-health/center-for-healthy-aging.</p> <p>National Resource Center on Supportive Housing and Home Modification: Dedicated to promoting aging in place and independent living for persons of all ages and abilities. It offers training and education opportunities for professionals who wish to respond to the increasing demand for home modification services. It also serves as an information clearinghouse on home modification. www.homemods.org.</p> <p>Centers for Disease Control and Prevention (CDC), “Focus on Preventing Falls”: The CDC offers a variety of materials and resources for all audiences about older adult falls and what you can do to prevent them. These resources are for the general public, public health officials, and anyone interested in programs</p>

<p>http://www.aota.org/News/AOTANews/Falls-Prevention.aspx.</p> <p>Rebuilding Together, Valley of the Sun, Senior Fall Prevention Services: Offers services to homeowners throughout the year. This program provides home safety modifications, which reduce household hazards and provide greater accessibility in the home. This program is a home safety resource for the elderly and disabled of all incomes.</p> <p>http://www.rebuildingtogetherphx.org/programs-events/sfps/.</p>	<p>that aim to prevent falls.</p> <p>http://www.cdc.gov/Features/OlderAmericans/.</p> <p>CDC, Injury Prevention and Control, Home and Recreational Safety—Falls – Older Adults:</p> <p>http://www.cdc.gov/HomeandRecreationalSafety/Falls/FallsPreventionActivity.html</p> <p>NIH Senior Health, Falls and Older Adults:</p> <p>http://nihseniorhealth.gov/falls/toc.html</p> <p>National Safety Council, Protecting Ourselves from Slips, Trip, and Falls:</p> <p>http://www.nsc.org/safety_home/Resources/Pages/Falls.aspx.</p>
Meet Caregiver Needs	
Local Resources and Models	National/International Resources and Models
<p>Arizona Department of Economic Security: Arizona Family Caregiver Resources.</p> <p>https://www.azdes.gov/main.aspx?menu=8&id=5179</p> <p>The Arizona Caregiver Coalition: Initially founded in 2006 as a project of the Social Health & Alzheimer’s Committee (SHAC) of the Governor’s Advisory Council on Aging. The vision of the coalition is for all Arizona caregivers to have knowledge of and access to resources that support them. The mission of the Arizona Caregiver Coalition is to create awareness of care giving issues and improve the quality of life for caregivers and care recipients through advocacy, information and education, support, and access</p>	<p>AARP Foundation GrandCare Support Locator: This program connects grandparents with national, state and local groups, programs, resources and services that support grandparents or other relative caregivers as well as grandparents facing visitation issues.</p> <p>http://www.giclocalsupport.org/pages/gic_db_home.cfm</p> <p>The Desert Southwest Chapter of the Alzheimer's Association: This is a charitable organization incorporated in the State of Arizona and governed by a local board of directors. Their work is devoted to providing service and support to Alzheimer's patients, family members and caregivers throughout Arizona and Southern</p>

to respite resources. <http://www.azcaregiver.org/>

Arizona Lifespan Respite Care Network: A coordinated approach that offers community-based respite care services for family caregivers of adults or children with special needs. Respite care provides short-term care and a period of relief or rest for the caregiver. Services can be provided in the form of in-home respite care or appropriate daycare services when available.

<http://www.azrespite.org/program.htm>

Grandparents Raising Grandchildren: In Arizona, there are 96,062 children living in grandparent-headed households (7.0% of all children in the state.) There are another 36,720 children living in households headed by other relatives. Of the children living in households headed by grandparents or other relatives in Arizona, 54,833 have neither parent present. A description of resources to assist grandparents raising grandchildren is available at:

https://www.azdes.gov/uploadedFiles/DAAS/kinshipcare_arizona_grandfacts.pdf

Nevada. <http://www.alz.org/dsw/>

Family Caregiver Alliance is a community-based nonprofit organization that addresses the needs of families and friends providing long-term care at home. Long recognized as a pioneer in health services, FCA now offers programs at national, state and local levels to support and sustain caregivers.

<http://www.caregiver.org/caregiver/jsp/home.jsp>.

Family Caregiving 101: The National Family Caregivers Association (NFCA) and the National Alliance for Caregiving (NAC) have joined together to recognize, support and advise this vital group of Americans. <http://www.familycaregiving101.org/>

National Alliance for Caregiving: A non-profit coalition of national organizations focusing on issues of family caregiving. Alliance members include grassroots organizations, professional associations, service organizations, disease-specific organizations, a government agency, and corporations.

<http://www.caregiving.org/>.

National Family Caregivers Association: Educates, supports, empowers and speaks up for the more than 65 million Americans who care for loved ones with a chronic illness or disability or the frailties of old age. <http://www.thefamilycaregiver.org/>

Well Spouse Association: Advocates for and addresses the needs of individuals caring for a chronically ill and/or disabled spouse/partner. They offer peer to peer support and educate health care professionals and the general public about the special

	<p>challenges and unique issues "well" spouses face every day, http://www.wellspouse.org/</p> <p>The New York Times New Old Age Blog: http://newoldage.blogs.nytimes.com/</p>
Promote Transportation Options	
Provide alternatives to the car	
Local Resources and Models	National/International Resources and Models
<p>MAG Southwest Valley Local Transit System Study, http://www.mcdot.maricopa.gov/news/2012/sw-valley-transit-study.htm</p> <p>MAG Northwest Valley Local Transit System Study, www.azmag.gov/addons/MAG/download.asp?ID=10721</p> <p>MAG Human Services Coordination Transportation Plan, http://www.azmag.gov/Documents/EaPWD_2012-05-01_Final-FY2013-Human-Services-Coordination-Transportation-Plan.pdf</p> <p>The Maricopa Association of Governments (MAG) <u>Regional Bikeway Master Plan</u> serves as a guide for improving, expanding, and connecting the MAG Region's bicycle facility network, http://www.azmag.gov/bike/masterPlan.asp</p> <p>MAG pedestrian policies and design guidelines: www.azmag.gov/addons/MAG/download.asp?ID=6391</p>	<p>National Complete Streets Coalition: Works to connect and assist communities across the country working to complete the streets. States, cities and towns are asking their planners and engineers to build road networks that are safer, more livable, and welcoming to everyone. http://www.completestreets.org/</p>

<p>MAG Complete Streets Guide: A resource ensuring that facilities for bicycles, pedestrians and transit are recognized as integral to a properly designed and functioning street. They are as important to mobility, health, and safety as a vehicular travel lane. With the implementation of Complete Streets, non-motorized, and public transportation facilities will be considered on the same basis as institutionalized components of streets. www.azmag.gov/.../BaP_2011-01-25_MAG-Complete-Streets-Guide...</p> <p>Valley Metro: Provides Public Transportation Alternatives for the Greater Phoenix Metro Area. http://www.valleymetro.org/vm/</p>	
Promote safe roads and safe drivers	
Local Resources and Models	National/International Resources and Models
<p>Arizona Department of Transportation www.azdot.gov/mvd/medicalreviewprogram/asp</p> <p>MVD's Medical Review Program: A driver condition/behavior report can be used by anyone to report an unsafe driver. www.azdot.gov/mvd/medicalreviewprogram/asp</p>	<p>Seniordrivers.org : A website portal for senior drivers, their families, researchers, and alternative transportation providers, http://www.seniordrivers.org/home/</p> <p>AAA Senior Driving: Helps seniors drive safely for longer. http://seniordriving.aaa.com/</p> <p>CarFit: An educational program that offers older adults the opportunity to check how well their personal vehicles "fit" them. The CarFit program also provides information and materials on community-specific resources that could enhance their safety as drivers, and/or increase their mobility in the community.</p>

<http://www.car-fit.org/>

Increase Social Participation

Engage seniors as volunteers and employees

Local Resources and Models	National/International Resources and Models
<p>The Association for Volunteer Administration of Central Arizona www.cir.org/AVACA</p> <p>Southern Arizona Volunteer Management Association http://savma.org</p> <p>Goodyear Police Department - You Are Not Alone (YANA): A free program offered by the Goodyear Police Department's Volunteers in Police Services (VIPS). This program provides regular phone calls and home visits to seniors who have limited family or community contacts. Seniors can also call the YANA program for help finding specific services and resources. http://goodyearaz.gov/index.aspx?NID=3156</p> <p>Duet: Promotes health and well-being through a broad range of services to older adults who need one-on-one support. http://www.duetaz.org/</p> <p>Arizona Mature Workers: The realization that mature workers bring a wealth of knowledge, expertise, and professionalism to the workplace is leading employers to re-think traditional retirement. Many of those employers are focusing on recruitment and retention of mature workers within their organizations. More employers in Arizona are also recognizing the value of</p>	<p>Serve Philadelphia: Mayor Michael A. Nutter's Office of Civic Engagement and Volunteer Service. http://volunteer.phila.gov/#s</p> <p>Volunteer Match: The organization offers a variety of online services to support a community of nonprofit, volunteer and business leaders committed to civic engagement. http://www.volunteermatch.org</p> <p>Energize, Inc. : An international training, consulting and publishing firm specializing in volunteerism. Energize has assisted organizations of all types with their volunteer efforts-- whether they are health and human service organizations, cultural arts groups, professional associations, or schools. http://www.energizeinc.com/</p> <p>Volunteering in America: This website provides comprehensive data on volunteering including volunteer profiles for all 50 states and the District of Columbia as well as hundreds of metropolitan areas, rankings, demographic trends, and profiles of volunteer organizations making an impact on some of our nation's toughest challenges. http://www.volunteerinamerica.gov</p> <p>Alive: AL!VE serves to enhance and sustain the spirit of volunteering in America by fostering collaboration and networking, promoting professional development, and providing</p>

<p>having volunteers with the same set of skills that are found in mature workers. For this reason, many of those employers are reaching out to mature workers as volunteers. https://www.azdes.gov/main.aspx?menu=8&id=48</p> <p>AZ Links: Shares volunteer opportunities. https://www.azdes.gov/main.aspx?menu=8&id=74.</p>	<p>advocacy for leaders in community engagement. http://volunteeralive.org/</p>
Provide Intergenerational Programming	
Local Resources and Models	National/International Resources and Models
<p>Benevilla: An ever evolving nonprofit which seeks to weave a safety net for those who may be isolated and need assistance to maintain their independence and to control their destinies. They provide a variety of intergenerational programs bridging the gap between generations. http://www.benevilla.org/index.html.</p> <p>Rehoboth CDC: works to cultivate strong communities of care between residents across all ages and ethnic groups to become more integrated and rooted within the Canyon Corridor; the Canyon Corridor CFAA Teams primary goal is reweaving the fabric of the Canyon Corridor Community to become more socially and economically vibrant. RCDC’s primary contribution is to be the catalyst that convenes residents and stakeholders in order to ensure that success is achieved; and, by providing technical assistance, guidance and support. http://cdc.rehobothphx.org/</p> <p>Getting Arizona Involved in Neighborhoods: An annual event to promote community cohesion.</p>	<p>The Intergenerational Center, Temple University: The Intergenerational Center, created in 1979, strengthens communities by bringing generations together to address critical concerns and creating opportunities for lifelong civic engagement: http://templeigc.org/</p> <p>LINKages: Develops, coordinates and supervises activities that create opportunity for interaction between youth and seniors in a safe, structured, caring and learning environment. They have established proven methods for developing mutually beneficial relationships between seniors and young people, a factor vital in the development of successful intergenerational programs and services. http://www.link-ages.ca/index.htm</p>

http://www.tempe.gov/cpu/GAIN/	
Re-imagine Senior Centers and Create Prototype Senior Centers of the Future	
Local Resources and Models	National/International Resources and Models
<p>The Granite Reef Senior Center: Scottsdale, AZ recently won NuStep's Pinnacle Award for the most outstanding senior center in the United States. Scottsdale Senior Services provides an integrated system of services, resources and opportunities to help people improve their lives, neighborhoods and community through recreation, social services and health and wellness services. The City of Scottsdale's two senior centers, the Granite Reef and Via Linda Senior Centers, offer a variety of programs, recreational classes, special events, support services and other opportunities, all geared toward senior adults.</p> <p>http://scottsdale.granicus.com/MediaPlayer.php?view_id=44&clip_id=4120</p>	<p>The BoomerANG Project: Montgomery County, Pennsylvania, January 2006 Final Report Prepared by Michael Marcus, MSW Consultants for Community Resources and John Migliaccio, Ph.D. Matury Mark Services Company.</p> <p>http://mcaas.montcopa.org/mcaas/cwp/view,a,1505,q,45263.asp</p> <p>Transforming Senior Centers into 21st Century Wellness Centers, Louisiana State Office AARP, December 2011, author Kathryn Lawler.</p> <p>Beacon Hill Village: A member-driven organization for Boston residents 50 and over, provides programs and services so members can lead vibrant, active and healthy lives, while living in their own homes and neighborhoods.</p> <p>http://www.beaconhillvillage.org/</p> <p>Naturally Occurring Retirement Communities (NORC): Offers ways to address issues such as socialization, education, support, health care, and transportation. www.norcblueprint.org.</p> <p>Program of All-inclusive Care for the Elderly (PACE): This model is centered around the belief that it is better for the well-being of seniors with chronic care needs and their families to be served in the community whenever possible.</p> <p>http://www.npaonline.org/website/article.asp?id=4.</p>

	<p>Senior Center Without Walls: Senior Center Without Walls offers activities, friendly conversation, and an assortment of classes and support groups to homebound elders and others who find it difficult to go to a community senior center. Participants call from the comfort of home through telephone conference calls. No special equipment is needed and the calls are completely free. http://www.seniorcenterwithoutwalls.org/home</p>
Increase Organizational Capacity	
Support alternative or creative funding options	
Local Resources and Models	National/International Resources and Models
<p>Birt's Bistro: A microenterprise of Benevilla, Birt's Bistro provides a social gathering place in the community and a revenue stream for Benevilla. In addition the kitchen is used for training purposes for adults with developmental disabilities. catering.http://www.benevilla.org/birts.html.</p>	<p>Americans for Community Development: The L³C is a low-profit limited liability company -- a variant form of the popular Limited Liability Company (LLC). The LLC combines the best features of a partnership (flexibility, ease of organization, and simplified taxation) with the best features of a corporation (liability protection and easier transferability of ownership.)</p> <p>The L³C is the brand name for a hybrid structure that links business methods with charitable purposes in a for-profit entity organized to engage in socially beneficial activities. Because L³Cs build on the LLC foundation, the L³C offers a legal and commercial comfort level that stems from the successful experience investors, suppliers, and consumers have had with LLCs over the last generation. The creator, Robert Lang, calls the L³C the for profit with the non profit soul.</p> <p>An L³C is run like a regular business and may be profitable.</p>

	<p>Unlike a standard for-profit business, however, the primary aim of the L³C is not to make a profit, but to achieve socially beneficial purposes. Profit and the appreciation of capital are secondary and insignificant goals. The L³C thus occupies a unique niche between the for-profit and charitable sectors.</p> <p>http://www.americansforcommunitydevelopment.org/concept.php</p>
Co-Locate Services	
Local Resources and Models	National/International Resources and Models
<p>North Penn Community Health Foundation, Granite Reef Village: Scottsdale Senior Services provides an integrated system of services, resources and opportunities to help people improve their lives, neighborhoods and community through recreation, social services and health and wellness services. The City of Scottsdale's two senior centers, the Granite Reef and Via Linda Senior Centers, offer a variety of programs, recreational classes, special events, support services and other opportunities, all geared toward senior adults.</p> <p>http://www.mcdowellvillage.com/p/senior_living/sr_center_3365/scottsdale-az-85257/mcdowell-village-3365.</p>	<p>JDC-ESHEL: The Association for the Planning and Development of Services for the Aged in Israel is a non-profit organization founded and supported by the Israeli government and the American Jewish Joint Distribution Committee. The organization strives to improve the status of the elderly population in Israel, developing conditions and serves to guarantee better quality of life for the elderly, and to improve the image of older people to society as a whole.</p> <p>http://www.norcs.org/page.aspx?id=99382</p>
Increase Quality of Existing Services	
Local Resources and Models	National Resources and Models
<p>St. Luke's Health Initiative (SLHI) Technical Assistance Partnership: This is a complimentary program where teams of nonprofit organizations and community coalitions commit to</p>	<p>CDC's Healthy Aging Program: Visit the Healthy Aging Program website for updated reports and information on aging related issues at: www.cdc.gov/aging.</p>

working together in a self-initiated, self-selecting and self-sustaining process to identify and implement solutions for common organization, technical and community development issues. Teams are matched with consultants who help them collaboratively work through the challenges and opportunities.

<http://aztap.tapslhi.org/about/brief-history>

Public Health Connect: phConnect is a collaboration platform whose members gather in online communities focused around a public health area. Participants may sign onto phConnect, create a profile, and review posts, events, and announcements. Participants will probably benefit most from joining a community. In a community, participants can engage more deeply in the conversations, ask questions, and share their experience on the topic. www.phconnect.org.

The “CAAR Clippings”: The Current Awareness in Aging Report (CAAR) is a weekly email report that helps researchers keep up to date with the latest developments in the field. <http://www.ssc.wisc.edu/cdha/pubs/caar/subscribe.html>.

Administration on Aging (AoA): Offers a monthly “E-News” electronic newsletter and will occasionally send out announcements regarding funding, etc. http://www.aoa.gov/AoARoot/Press_Room/Enews/index.aspx.

National Library of Medicine’s “Medline Plus”: Allows participants to tailor the information they want sent to them based on topic. <http://www.nlm.nih.gov/medlineplus/listserv.html>

National Institutes of Health (NIH) SeniorHealth – occasional announcements. https://service.govdelivery.com/service/multi_subscribe.html?code=USNLMNIHSH.

	<p>Environmental Protection Agency (EPA) Aging Initiative – a monthly newsletter . http://www.epa.gov/aging/resources/listserv.htm.</p> <p>National Institute on Aging (NIA): Dedicated to understanding the nature of aging, supporting the health and well being of older adults, and extending healthy, active years of life for more people. http://list.niapublications.org/niaalert/lists/?p=subscribe&id=1</p> <p>Department of Health and Human Services (HHS): HealthFinder.gov has a daily and weekly newsletter. http://www.healthfinder.gov/</p>
Utilize Technology	
Local Resources and Models	National/International Resources and Models
<p>About Care: Through its volunteer base, About Care provides services, at no cost to its neighboring communities. Services include transportation, shopping errands, respite care, friendly visits, reassurance phone calls, minor home repairs, business assistance and computer assistance. The Computer Assistance program goal is to bring the outside world to the elderly and physically challenged homebound neighbors, within the community, one computer at a time. http://www.aboutcare.org/</p> <p>Duet: This agency helps older adults and their families cope with challenges related to aging. They offer services such as grocery shopping and transportation to doctor visits, health promotion</p>	<p>SeniorPlanet: This is a community of older adults on the Internet, a place where older individuals share ideas and information in a friendly and supportive environment. Developed by Older Adults Technology Services (OATS) in 2006, the goal of SeniorPlanet is to promote the health and wellness of older adults improving on the daily quality of life. The program offers a resource exchange, an events calendar, and senior blogs. http://www.seniorplanet.org/</p>

activities, support groups and computer assistance.

<http://duetaz.org/>.

City of Scottsdale: They City's website offers pages developed for each neighborhood. The sites include an interactive element where people can talk with each other online.

<http://www.scottsdaleaz.gov>.

City of Surprise: Offers Benefits Counseling twice monthly by a volunteer trained by Area Agency on Aging. They assist persons using the [Benefits Check-up website](#) to search programs and eligibility.

Appendix III—Demographic overview of the region

Regional Overview: 65 Years and Older					
UNITED STATES			MARICOPA COUNTY		
Subject	Number	Pct	Subject	Number	Pct
POPULATION¹			POPULATION¹		
2010 Total Population.....	308,745,538		2010 Total Population.....	3,817,117	
2000 Total Population.....	281,421,906		2000 Total Population.....	3,072,149	
Change 2000 to 2010.....	27,323,632	9.7	Change 2000 to 2010.....	744,968	24.2
2010 65+ Population.....	40,267,984		2010 65+ Population.....	462,641	
2000 65+ Population.....	34,991,753		2000 65+ Population.....	358,979	
Change 2000 to 2010.....	5,276,231	15.1	Change 2000 to 2010.....	103,662	28.9
IN SKILLED-NURSING FACILITIES¹			IN SKILLED-NURSING FACILITIES¹		
Total population 65 years and older.....	40,267,984	100.0	Total population 65 years and older.....	462,641	100.0
In skilled-nursing facilities.....	1,252,635	3.1	In skilled-nursing facilities.....	6,273	1.4
Male.....	360,762	28.8	Male.....	2,002	31.9
Female.....	891,873	71.2	Female.....	4,271	68.1
GRANDPARENTS²			GRANDPARENTS²		
Responsible for grandchildren under 18 years.....	2,750,046	100.0	Responsible for grandchildren under 18 years.....	34,571	100.0
Grandparent 65 years and older.....	485,202	17.6	Grandparent 65 years and older.....	4,649	13.4

Regional Overview: 65 Years and Older

UNITED STATES			MARICOPA COUNTY		
Subject	Number	Pct	Subject	Number	Pct
DISABILITY STATUS²			DISABILITY STATUS²		
Civilian noninstitutionalized population 65 years and older.....	39,132,252	100.0	Civilian non-institutionalized population 65 years and older.....	457,689	100.0
With any disability.....	14,361,536	36.7	With any disability.....	144,172	31.5
No disability.....	24,770,716	63.3	No disability.....	313,517	68.5
VETERAN STATUS²			VETERAN STATUS²		
Civilian population 65 years and older.....	40,433,525	100.0	Civilian population 65 years and older.....	464,909	100.0
Civilian veteran.....	9,137,977	22.6	Civilian veteran.....	116,227	25.0
POVERTY²			POVERTY²		
Population for whom poverty status is determined.....	301,535,021	100.0	Population for whom poverty status is determined.....	3,778,090	100.0
Below poverty level.....	46,134,858	15.3	Below poverty level.....	623,385	16.5
65 years and older.....	39,131,641	13.0	65 years and older.....	457,689	12.1
Below poverty level.....	3,521,848	9.0	Below poverty level.....	31,581	6.9

Regional Overview: 65 Years and Older

UNITED STATES			MARICOPA COUNTY		
Subject	Number	Pct	Subject	Number	Pct
INCOME IN PAST 12 MONTHS²			INCOME IN PAST 12 MONTHS²		
<i>(in 2010 inflation-adjusted dollars)</i>			<i>(in 2010 inflation-adjusted dollars)</i>		
Households with householder age 65 years and older.....	24,874,092	100.0	Households with householder age 65 years and older.....	279,411	100.0
With earnings.....	8,531,814	34.3	With earnings.....	88,294	31.6
Mean earnings.....	\$44,470		Mean earnings.....	\$44,181	
With Social Security income.....	22,784,668	91.6	With Social Security income.....	258,735	92.6
Mean Social Security income.....	\$17,653		Mean Social Security income.....	\$19,276	
With Supplemental Security income.....	1,591,942	6.4	With Supplemental Security income.....	13,412	4.8
Mean Supplemental Security income..	\$8,335		Mean Supplemental Security income..	\$10,237	
With cash public assistance income.....	422,860	1.7	With cash public assistance income.....	3,632	1.3
Mean cash public assistance income....	\$3,627		Mean cash public assistance income....	\$4,149	
With retirement income.....	12,014,186	48.3	With retirement income.....	138,588	49.6
Mean retirement income.....	\$21,656		Mean retirement income.....	\$22,087	
With Food Stamp/SNAP benefits.....	1,890,431	7.6	With Food Stamp/SNAP benefits.....	15,088	5.4

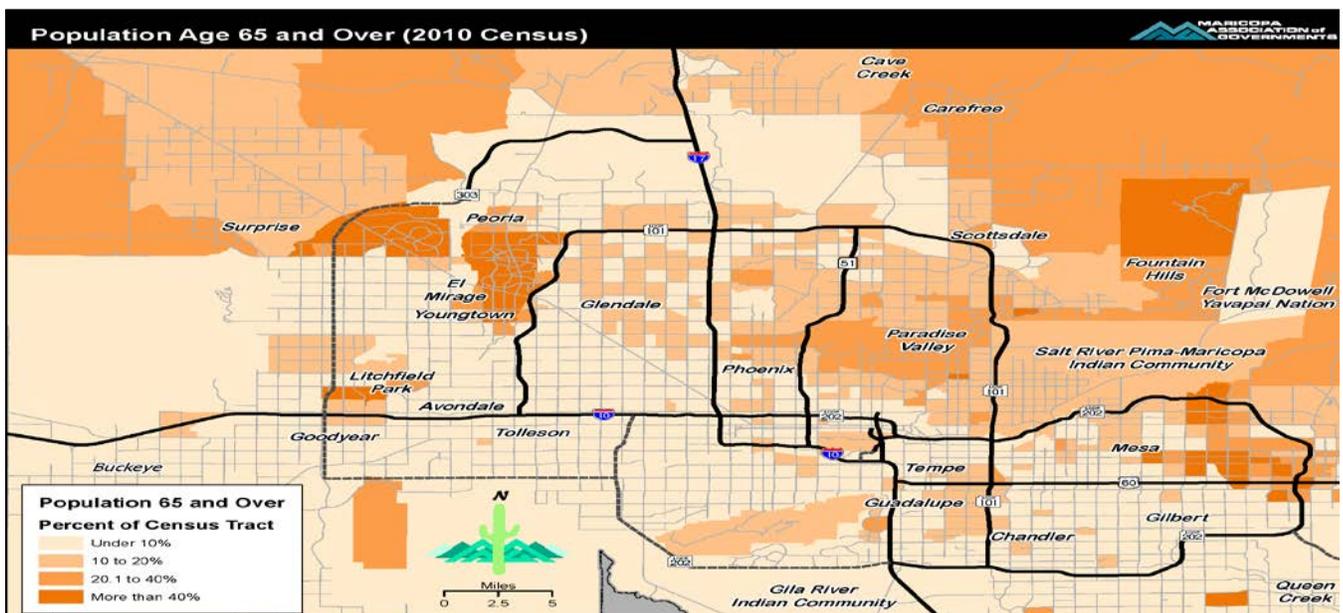
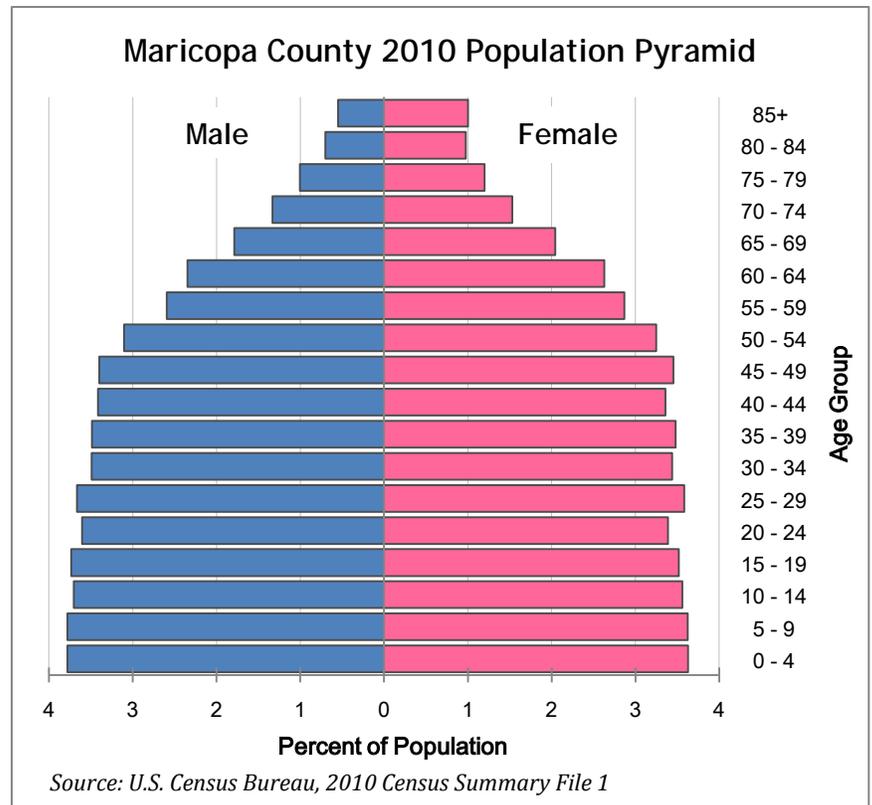
1. Source: U.S. Census Bureau, Decennial Census Programs (2000 and 2010), Summary File 1.

2. Source: U.S. Census Bureau, American Community Survey (ACS) 2010 1-Year Estimates. Prepared by: Maricopa Association of Governments, www.azmag.gov, (602) 254-6300

Population Pyramid

In addition to examining the number, percent, and growth rate of certain age groups, the population pyramid is a key tool used by demographers and researchers for assessing a population's age and gender composition. The population pyramid shows the numeric distribution of males (on the left) and females (on the right) by single years of age.

The population pyramid also gives some context to how the population distribution will likely shift in the near future. The Baby Boom population in 2010 appears in the middle of the pyramid (at ages 46 to 64). This population will begin aging into 65 and more ages in coming years, and future growth will most likely see unprecedented increases in the older age groups.



Appendix IV—A Summary of Focus Group Findings

Focus Group Discussions

The purpose of the focus groups was to evaluate the ideal community in comparison to the current structure of services to seniors, holistically encompassing all aspects of an individual's community. Overall, focus group participants were very receptive to the opportunity of sharing their needs and wishes.

Topic: Transportation

One of the primary topics of discussion was the issue of transportation, which was discussed at every meeting. The quality of life of individuals lies in great part within their ability to access transportation. From doctor appointments to grocery shopping, individual's vitality depends on their ability to freely move from one activity to the next. Given the large geographic area of the valley, individuals have longer distances to travel for their necessities. Meeting individual transportation needs is becoming increasingly difficult, as health issues prevail and independence is restricted. Participants noted that the top of their wish list in this category included: safe vehicles, dependable and unrestricted transportation, and cost-contained options to ensure access to all.

Topic: Socialization

Another issue of much discussion was that of social participation. Individuals felt strongly about the need to provide options for socialization. In particular, participants expressed the need of having more senior centers throughout the valley. Currently, seniors have to travel long distances to get to senior centers. In some cases, assisted transportation to senior centers was eliminated in recent years due to budgetary constraints. Additionally, participants acknowledged the existence of a wide spectrum of ability within the aging community. It was suggested that senior centers be cognizant of the ability range and interest among patrons, and offer options that meet different senior needs. One-size fits all is not valid. To highlight this point, a few focus group participants acknowledged that they feel lost in the larger centers where activities are centered on the active adult. Therefore, increasing the number of centers and offering a variety of options will help reduce alienation among this demographic when the nearest senior center doesn't cater to their activity level or interest.

It is important to highlight one commonality among comments from focus group participants. Of particular interest was the interest in having senior centers open longer than the customary 2:00 p.m. in the afternoon closing time. For many seniors, the senior centers are their only method of socialization and distraction. When senior centers close at 2:00 p.m., so do the lives of the senior center patrons. Seniors are eager to have more culturally enriching opportunities. Some of the solutions discussed by the participants detailed their wish to have excursion opportunities to nearby art galleries, the theater, or a musical experience. Many of these venues offer enriching experiences that occur in the evening hours when seniors are less likely to venture out, particularly alone. However,

when organized by the senior center individuals are more apt to participate in group gatherings, principally because transportation is arranged.

Conclusion

Conclusively, seniors yearn to be heard and to be active participants of the communities they live in. The notion of isolation is not foreign to a senior whose lifestyle tends to be constrained due to limited services. However, seniors are eager to seek solutions and offer ideas to enrich their quality of life. As one focus group participant so poignantly phrased her situation, “You can’t give me more time, but you can help improve the quality of time I still have.”

Appendix V—A Summary of Participant Recommendations of the Senior Center Workshop at the Community Forum

Senior Center Workshops—February 15, 2012

Two workshops were held on the topic of senior centers as part of the February 15, 2012 MAG event *Planning for the Next 100 Years*.

Purpose of the Workshops

The population 65 years and more is projected to increase 50 percent by 2012. It is unlikely that funding for senior centers will keep pace. The concept of senior centers, even their name, is carried over from a different time and different way of thinking about aging. In addition, the desires and expectations of the population that is now near retirement have changed. What is being offered in current senior centers does not match their needs and expectations. A quote from the workshops that illustrates this disconnect is “If we, the people currently working in senior centers, think we would not go to existing centers when we age, who will?”

Developing a response to this situation requires thinking creatively about how to support this population in new ways.

The questions guiding the discussions during the workshops were:

Guiding Question 1: What are the goals of existing senior centers and how can these goals be met or improved by doing things differently?

Guiding Question 2: How do we build on and leverage existing resources and partnerships?

Guiding Question 3: How can the concept of senior centers be re-imagined to appeal to the new generation of “people aging”?

Guiding Question 4: How can the concept of serving seniors be aligned with concepts of community/population integration rather than separating out “aging”?

Guiding Question 5: What opportunities do you see for senior centers that could help create more vibrant, engaged, and healthy seniors?

The following is a summary of the responses shared during the workshop.

Guiding Question 1: What are the goals of existing senior centers and how can these goals be met or improved by doing things differently?

Workshop participants felt that before answering Question 1, an assessment should be done to identify:

- a. What is currently being offered in existing senior centers?
- b. What are the demographics of the people currently being served?

- c. What are the needs and wants of the people currently being served in senior centers?
- d. What are the desires and expectations for those in the 55 plus age bracket?

The assessment should compare existing services with best practices and collect information that would help develop a plan to increase the use of best practices. Participants also suggested convening more meetings like this, allowing one center to learn from another.

There was general recognition that there isn't one demographic that is "aging"; that there is a wide range of fitness, functionality, and age, and that sometimes age doesn't correspond with fitness or functionality. One suggestion for the subcategories within aging were, "fit, fragile, and frail."

Some participants stated that there were space limitations (i.e. one big room), which limited offerings and required thinking about how to partner and use technology in a way that doesn't limit services to in person congregate settings.

A summary of the goals of existing senior centers shared during the discussion are as follows:

- Promote lifelong learning, increase quality of life (social, emotional, mental, holistic, through arts and culture) through wellness programs and increased socialization, social networking and community building
- Provide assistance with end of life transition, personal life and financial assets,
- Offer fun and engaging recreational opportunities. Be flexible.
- Help people learn about available services and access information. Senior centers currently do this through people staffing resource tables or coming in as speakers. Several participants noted that often speakers weren't enough and there was a need for follow through, after a speaker/presentations, but there isn't currently capacity to do this.
- Help people get their individual needs met through individual problem solving, advocacy and support services.
- Provide support groups/resources for caregivers.

Guiding Question 2: How do we build on and leverage existing resources and partnerships?

Potential Partnerships to develop, enhance, or expand:

- Create community centers and resource centers that are not just senior-focused. Create more diversity in programs and centers.
- Expand faith-based programs, Arizona State University, and community colleges, involvement with youth groups, partner with school districts, arts and culture partnerships. Link to arts and culture providers, social service providers, libraries,

businesses, school systems, developers, Area Agency on Aging, AZlinks, foundations, and casinos. Engage the medical community, community health centers, hospitals, etc.

- Include volunteer groups such as lions, rotary, sorority and fraternity alumnae, and large volunteer organizations such as i.e. United Way.
- Collaborate with organizations that provide training in how to utilize skills and talents of older adults such as Experience Matters.
- Include family and friends.
- Create a regional senior center plan.
- Engage national organizations such as the National Council Of Aging and American Society on Aging.
- Expand education of providers and services available (such as Area Agency on Aging, police, fire, arts/culture) .
- Involve media to promote and create interest.

Guiding Questions 3 and 4: How can the concept of senior centers be re-imagined to appeal to the new generation of “people aging”? and How can the concept of serving seniors be aligned with concepts of community/population integration rather than separating out “aging”?

The participants acknowledged that more needs to be known about how to broaden the appeal of senior centers. Finding out more about how to do this could be part of the research involved in a senior center assessment. People acknowledged that integrating services for seniors rather segregating them could help reduce the “stigma” and make the value known and more attractive. People suggested changing the name from “senior center” to something more attractive, which would help change the image, i.e. life enrichment and community center.

Guiding Question 5: What opportunities do you see for senior centers that could help create more vibrant, engaged, and healthy seniors?

The ideas people had (some are similar to the suggestions for partnerships):

Conduct an assessment of existing senior centers to learn more:

Conduct a county-wide assessment. Changes to existing services:

- Create a magnet center to offer unique services, coordinate an array of experts, program provider in locations near seniors.
- Senior centers as a vehicle for exercise, mobility and health.
- Make more accessible, open longer hours.
- Use technology. There are implications for how technology can be used to provide support that is not limited to in person.
- Increase education and use of technology.

- Change the name from “senior center” to change the image.
- Develop mentoring and peer mentoring.
- Create welcoming/warm spaces, vibrant environment, i.e. “greeters” options/menu of activities/escort to show options.
- Multiple-use spaces.
- Create meaningful volunteer opportunities.
- Create opportunities to talk about hard topics (sexually transmitted diseases, , alcoholism, drugs, end of life).
- Help seniors get more for their money.

Recommendations for future partnerships:

- Training riders through the Valley Metro Mobility Center.
- Scottsdale Prevention Institute
- Movie theaters
- Local government
- Coffee shops and grocery stores
- Network with employers to develop senior employment opportunities
- Partnership with the local Regional Behavioral Health Authority (RHBA)

Community Engagement:

- Generate additional private financial resources.
- More community involvement in development of vibrant programs and resources.
- Arts and culture that are age appropriate.
- Include participants in planning.
- Collaborate with other resources and partnerships.
- Make centers more attractive. Create a club mentality with a customer-driven system and value-driven activities
- Educating faith-based communities through “community navigator/concierge”.
- Create collaboration between senior centers and community agency resources.
- Partner with hospitals, Maricopa county, other cities
- Create seamless service opportunities with all providers sharing and planning together.
- Market together with outreach cross communities e.g. retiree groups, snowbirds, human resources at large companies work with “almost” retirees
- Implement volunteer engagement with long-term versus project-based options.

Summary of Recommendations

Conduct a regional assessment of existing senior centers which results in information about the people that currently receive services at senior centers, the services they are receiving and results of those services, and how the services they are receiving align with their wants and needs.

Continue to convene people who share the goal of supporting healthy and active seniors to learn from each other and to identify ways to: re-imagine senior centers; develop new services, methods of service delivery, and partnerships to increase the outcomes and better meet the existing and future needs; and develop language that removes barriers that come with the existing “stigma” and/or limitations of senior centers of today.

Acknowledgements

The Municipal Aging Services Project (MASP) could not have been completed without the help of the many people who have shared their wisdom and insights by participating in focus groups, the community survey, and by attending the community forum. The willingness of community partners to be a part of this process is deeply appreciated. Thanks also goes to the Virginia G. Piper Charitable Trust for its support of the MASP and to all those community partners who have reached out and shared best practices, models, programs, and research.

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Participating Agencies

Arizona Department of Economic Security
Avondale Senior Center
Chandler Senior Center
Chinese Senior Center
Chris Ridge Village
El Mirage Senior Center
Foothills Caring Corps.
Golden Gate Community Center
Marcos de Niza Senior Center
Mesa Active Adult Center
Native American Community Senior Center
Neighbors Who Care
North Tempe Senior Center
Olive Branch Senior Center
Red Mountain Senior Center
Senior Center Managers
Tempe Escalante Senior Center
The Salvation Army
Wheel Help

City / Town	Agency Website	Partnership with nonprofit	In-home Case Mgt.	Outreach	Congregate Meals	Home Del. Meals	Transportation					In-Home/Assist. For Independent Living	Specialty	Caregiver Assist.	Vital Signs / Health	Financial	Afford. Housing	Boomers (Newly retired or ready to retire)	Hours	Weekdays	Weekends	Fees	Phone	Age Restrictions	Notes	Socialization	
							Fee / Sugg. donation	Bus Tickets	Total Transit Discount Cab	Volunteer Drivers	Reserve-a-Ride / Dial-a-Ride																
Carefree		F				x				Medical transportation and grocery shopping.												(480) 488-1105	homebound and / or disabled persons, 18+	Geographic area: 85377			
Cave Creek		F				x				Medical transportation and grocery shopping.												(480) 488-1105	homebound and/or disabled persons, 18 +	Geographic area: 85327, 85331			
Chandler	Chandler Senior Center	B, C, & D		x	x	x								x				x	8:00 a.m. - 5:00 p.m.	Yes	No	Yes/No	(480) 782-2720	No	Community Service of Arizona is contracted with the City and Area Agency on Aging to provide congregate and home delivered meals. The City provides activities.	Arts and Culture; Computers, Fitness, Continuing Education, Nature, Environment and Outdoors, Health and Safety, Cards and Games.	
El Mirage	El Mirage Senior Center			x	x					Van transportation for senior outings.	\$2.00 (F)								8:30 a.m. - 12:30 p.m.	Yes	No	Yes/No	(623) 876-4232	55+	El Mirage resident only.	Has a volunteer program to include senior committee group. Assignments include servers, activity instructors, cashiers. They volunteer via city community events.	
Fort McDowell	-																										
Fountain Hills	Fountain Hills Activity Center for Seniors & Boomers			x		x												x	9:00 a.m. - 4:00 p.m.	Yes		\$15 annual (\$17 beginning 1/1/2012)	(480) 816-5226	18+		Volunteer program; Arts & Crafts, Classes, Discussion Groups, Fun and Games, Movies, Special Events, Trips.	
Gila Bend	Gila Bend Senior Center			x	x	x				Transportation to CAP and senior center.												Yes	Yes	(928) 683-2244	60+		Arts and Crafts, games, food programs, health related discussions and workshops, shopping and excursion trips.
Gilbert	Gilbert Senior Center			x	x	x								x								Yes		(480) 503-6060	55+		Games, Dance, Fitness, , Trips. Volunteer opportunities.
Glendale	Glendale Adult Center - Social Services			x	x									x					8:00 a.m. - 7:00 p.m.	Yes	9:00 a.m. - 1:00 p.m. & 7:00 a.m. - 9:30 p.m. - Saturday	Annual: \$10 residents / \$15 non-residents	(623) 930-4321			Games, music and dance, travel and tours; fitness and exercise.	
	Senior Center (YWCA)	x			x	x				x									8:00 a.m. - 3:00 p.m.	Yes	No	Annual Contribution: \$10	(623) 931-7436			Fitness programs, health screenings, educational issues, games, trips, arts and crafts, theme parties and special events.	
Goodyear	-																								See Avondale Senior Center Services		

City / Town	Agency Website	Partnership with nonprofit	In-home Case Mgt.	Outreach	Congregate Meals	Home Del. Meals	Transportation					In-Home/Assist. For Independent Living	Specialty	Caregiver Assist.	Vital Signs / Health	Financial	Afford. Housing	Boomers (Newly retired or ready to retire)	Hours	Weekdays	Weekends	Fees	Phone	Age Restrictions	Notes	Socialization	
							Fee / Sugg. donation	Bus Tickets	Total Transit Discount Cab	Volunteer Drivers	Reserve-a-Ride / Dial-a-Ride																
Guadalupe	Senior Center			x	x	x								x	x	x		8:00 a.m. - 4:00 p.m.	Mon - Thurs	No		(480) 505-5393	60+ or any age with documented disability	(funded through AAA)	Arts & Crafts Program; Health/Exercise Program.		
Litchfield Park	Senior Citizen Activities																	9:30 a.m. - 11:00 a.m.	-	-		(623) 935-2011		Senior Citizen Program - meets monthly.	Enjoys a variety of activities and events in cooperation with the Litchfield Park Recreation Dept.		
Maricopa County			x																								
Mesa	Red Mountain Multigenerational Center	A		x		x						x	x	x	x	1	x	8:00 a.m. - 4:30 p.m.	Yes		\$15	(480) 218-2221			Fitness, games, classes, support groups, trips and volunteer opportunities.		
	Mesa Center	A		x		x						x	x	x	x	1	x	8:00 a.m. - 4:30 p.m.	Yes		\$15	(480) 962-5612			Spanish classes, dance, art sessions, games, fitness, and volunteer opportunities.		
Paradise Valley	Paradise Valley Senior Center			x	x	x																			Contract service providers. ADA certified individuals only.	Reserve-a-Ride	Clubs and classes, arts and crafts, dancing, special events, games, fitness health and education.
Peoria	Community Action Program and Nutrition Program	E		x	x	x												8:00 a.m. - 5:00 p.m.	Yes	No		(623) 979-3911		Funded through AAA and Maricopa County.			
	Senior Adult Programs																					(623) 773-7436	50+		Games, health and fitness, special events and year-round classes.		
Senior Centers:																											
Phoenix	Adam Diaz			x	x	x	x											8:00 a.m. - 5:00 p.m.	Yes	No		(602) 262-1609	60+ (2)	1. Emergency Financial Assistance and Case Mgt are available to Senior Center members on a limited basis by appointment. 2. Programs also serve disabled under 60. Some classes, trainings and events are available to adults of all ages in conjunction with Parks and Rec. Department programs. 3. Senior Center Activities regularly include fraud prevention and other	Clubs and classes, arts and crafts, trips, special events, games, fitness, health and education, discussion groups. Volunteer opportunities. Activities may vary by location.		
	Chinese Senior Center			x	x	x	x											8:00 a.m. - 5:00 p.m.	Yes	No		(602) 262-6411	60+ (2)				
	Deer Valley			x	x	x	x											8:00 a.m. - 5:00 p.m.	Yes	No		(602) 495-3714	60+ (2)				
	Desert West			x	x	x	x											8:00 a.m. - 5:00 p.m.	Yes	No	\$10 - Residents, \$20 Non-Residents, Additional fees may apply for specific classes, events or trips.	(602) 495-3709	60+ (2)				
	Devonshire			x	x	x	x											8:00 a.m. - 5:00 p.m.	Yes	No		(602) 262-7807	60+ (2)				
	Goelet A. C. Beuf			x	x	x	x											8:00 a.m. - 5:00 p.m.	Yes	No		(602) 534-9743	60+ (2)				
	Manzanita			x	x	x	x											8:00 a.m. - 5:00 p.m.	Yes	No		(602) 262-4949	60+ (2)				
	Marcos de Niza			x	x	x	x											8:00 a.m. - 5:00 p.m.	Yes	No		(602) 262-7249	60+ (2)				
	McDowell Place			x	x	x	x											8:00 a.m. - 5:00 p.m.	Yes	No		(602) 262-1842	60+ (2)				

City / Town	Agency Website	Partnership with nonprofit	In-home Case Mgt.	Outreach	Congregate Meals	Home Del. Meals	Transportation					In-Home/Assist. For Independent Living	Specialty	Caregiver Assist.	Vital Signs / Health	Financial	Afford. Housing	Boomers (Newly retired or ready to retire)	Hours	Weekdays	Weekends	Fees	Phone	Age Restrictions	Notes	Socialization
							Fee / Sugg. donation	Bus Tickets	Total Transit Discount Cab	Volunteer Drivers	Reserve-a-Ride / Dial-a-Ride															
Phoenix	Paradise Valley			x	x	x								Yes				8:00 a.m. - 5:00 p.m.	Yes	No		(602) 495-3785	60+ (2)	1. Emergency Financial Assistance and Case Management are available to Senior Center members on a limited basis by appointment. 2. Programs also serve disabled under 60. Some classes, trainings and events are available to adults of all ages in conjunction with Parks and Rec. Department programs. 3. Senior Center Activities regularly include fraud prevention and other legal and financial workshops.	Clubs and classes, arts and crafts, trips, special events, games, fitness, health and education, discussion groups. Volunteer opportunities. Activities may vary by location.	
	Pecos			x	x	x								Yes				8:00 a.m. - 5:00 p.m.	Yes	No		(602) 534-5366	60+ (2)			
	Senior Opportunities West			x	x	x								Yes				8:00 a.m. - 5:00 p.m.	Yes	No		(602) 262-6610	60+ (2)			
	Shadow Mountain			x	x	x								Yes				8:00 a.m. - 5:00 p.m.	Yes	No	\$10 - Residents, \$20 Non-Residents, Additional fees may apply for specific classes, events or trips.	(602) 534-2303	60+ (2)			
	South Mountain			x	x	x	Seniors 60+ and persons with Title XX or physician certified disabilities.	Discount tickets for shopping and errands.					See Note 3		Yes	See Note 1	See Note 1		8:00 a.m. - 5:00 p.m.	Yes	No		(602) 262-4093			60+ (2)
	Sunnyslope			x	x	x	x	For local transit system, medical, work, or low income individuals.							Yes				8:00 a.m. - 5:00 p.m.	Yes	No		(602) 262-7572			60+ (2)
Queen Creek	Senior Program																	9:00 a.m. - 12:00 p.m.	Wed.	No		(480) 358-3700	50+		Activities and leisure opportunities.	
Scottsdale (see footnotes)	Senior Centers:			x		**						**	x													
	Granite Reef Senior Center	2	3	x	**4	3	5					3	6	2;3	7	8	9	10	8:00 a.m. - 9:00 p.m.	Yes	8:00 a.m. - 7:00 p.m. - Saturday	Fitness Center; Spec Classes; Spec Events	(480) 312-1700	No		Games, arts and crafts, fitness, computer, local trips, performance group, volunteer opportunities.
	Via Linda Senior Center	2	3	x		3	5					3	6	2;3	7	8	9	10	8:00 a.m. - 9:00 p.m.; 8:00 a.m. - 5:00 p.m.	M-Th; Fri	8:00 a.m. - 5:00 p.m. - Saturday	Fitness Center; Spec Classes; Spec Events	(480) 312-5810	No		Games, fitness, special events, lunch outings, trips, volunteer opportunities.
	Paiute Neighborhood Senior Center	2	3	x		3	5					3	6	2;3	7	8	9	10	9:00 a.m. - 5:00 p.m. (see note 11)	M-F	Closed	Spec Classes; Spec Events	(480) 312-0040 or (480) 312-2529	No		Workshops, fitness, movies, monthly potluck, book club, history lectures.
Sun City and Sun City West	Banner Olive Branch Senior Center			x	x	x							x	x				9:00 a.m. - 3:00 p.m. (9:00 a.m. - 2:00 p.m. on Fridays)	M-T	No		(623) 974-6797	60+ and handicapped persons of any age	Funded by AAA and Valley of the Sun United Way.	Entertainment, crafts, exercise, food and computer programs.	
Sun Lakes	Neighbors Who Care					x					x	x	x									(480) 895-7133				
Surprise	Surprise Senior Center			x	x									x				8:00 a.m. - 5:00 p.m. 8:00 a.m. - 4:00 p.m. - Fri.	M-Th		Annual: \$12 residents / \$15.00 non residents		50+		Computer lab and training classes; fitness center; games; walking club.	
	Senior Centers:																									
	Escalante Community Center	G		x	Tues - Fri									x				8:30 a.m. - 3:30 p.m.	T-Fri			(480) 350-5870	60+		Bingo, movies, special events and guest speakers, dance, fitness, games, and volunteer opportunities.	



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June 5, 2012

TO: Members of the Management Committee

FROM: Bob Hazlett, P.E., Senior Engineering Manager

SUBJECT: SUMMARY OF WHITE PAPER RECOMMENDATIONS – MAG MANAGED LANES NETWORK DEVELOPMENT STRATEGY – PHASE I PROJECT

On November 15, 2010, the MAG Regional Council authorized procurement of consultant services to develop the MAG Managed Lanes Network Development Strategy - Phase I project. This multi-phase effort was in response to consideration for public-private-partnership (P3) opportunities in the Phoenix Metropolitan Area where high occupancy vehicle (HOV) lanes could be operated as high occupancy toll (HOT) lanes as part of an overall managed lanes strategy. The project consultant has developed eight planning papers on the following topics:

- Project Goals and Objectives
- Legal and Regulatory Issues
- HOV Hours of Operation
- HOV Occupancy
- HOV Separation Treatment
- Pricing and Tolling Methods
- Active Traffic Management and Managed Freeways

A summary of the recommendations from these papers is attached to this memorandum, and the links to the papers themselves can be found on the MAG website at:
<http://www.azmag.gov/Projects/Project.asp?CMSID=4190>.

In addition to the attached information, the consultant has completed a Tier I screening of the MAG Regional Freeway system to identify segments that could be suitable for a priced managed lanes implementation. The Tier I screening considers existing and projected HOV demand, available capacity, and constructability as parameters for the assessment. The overall result of this screening has noted that the most favorable attributes for capacity and operations tend to contribute to least favorable characteristics for constructability. For example, the Tier I screening of SR-51/Piestewa Freeway suggests that existing and future travel demand are very favorable for priced managed lanes, but the ability to construct to full design standards, especially between the Interstate 10/SR-202L Mini-Stack and Northern Avenue would be difficult.

As information from the Tier I Screening is still under study, preliminary data from this effort will be presented to the Management Committee in its briefing on Wednesday, June 13, 2012. Questions or comments related to the MAG Managed Lanes Network Development Strategy – Phase I project should be directed to me at 602 254-6300 or bhazlett@azmag.gov.

Managed Lanes Network Development Strategy – Phase I

White Paper Summary of Recommendations

MARICOPA ASSOCIATION OF GOVERNMENTS

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HS Public Affairs**

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1.0 BACKGROUND

The Maricopa Association of Governments (MAG) is working in cooperation with the Arizona Department of Transportation (ADOT), Federal Highway Administration (FHWA), and other regional partner agencies to explore the regional managed lanes system, including determining future needs for High-Occupancy Vehicle (HOV) system expansion and the potential for introducing enhanced lane management techniques such as value pricing in the form of High-Occupancy Toll (HOT) lanes, and active traffic management. The outcome of this effort will be a MAG Managed Lanes Network Development Strategy – Phase I Report that will guide future planning and investment in HOV and Managed Lanes facilities in the region.

To support the evaluation of the managed lanes network in the MAG region, a series of technical “white papers” have been developed to examine the relevant issues by drawing upon the substantial and growing research and experience on managed lanes around the nation. These white papers will assess the pros and cons associated with each relevant issue to better enable the regional partners to reach conclusions on the feasibility and specific technical aspects of managed lanes for the Phoenix area. The complete series of white papers will be made available for review on the MAG website. The following is a bulleted summary of the key recommendations of the policy and practice white papers. The subsequent sections provide additional narrative regarding the policy and practice recommendations, in no particular order of priority.

1.1. Regional Managed Lanes Goals and Objectives

Goals	Objectives
Improved Mobility	<ul style="list-style-type: none"> • Reduce travel times and improve travel time reliability • Manage travel demand and traffic congestion • Improve/maximum existing system infrastructure • Maximize use of technology • Increase capacity • Provide mobility options • Improve transit service options, efficiency and reliability
Revenue Alternatives	<ul style="list-style-type: none"> • Leverage existing revenue sources • Access new/alternative revenue sources • Accelerate project delivery to complete the system • Support ongoing operations and maintenance • Support transit service provision • Better plan future investments
Public and Political Support	<ul style="list-style-type: none"> • Support public education and outreach • Identify/foster political champions • Facilitate equitable distribution of costs whereby users pay for what they use
Improved Environmental Quality	<ul style="list-style-type: none"> • Provide air quality benefits • Enhance quality of life

1.2. Access Treatment

- Utilize near-continuous access design and operations
 - Maintain consistency with the current continuous access for the region's HOV lane system
 - Afford operational, enforcement and toll collection benefits of restricted access in strategic locations
 - Traffic conditions and other design, operational and cost considerations will determine specific segments for limited access

1.3. Lane Separation

- Continue current HOV lane separation techniques in conjunction with managed lanes
 - Primarily utilize a combination of painted line and painted buffer lane separation
 - Barrier separation where elevated segments (including Direct HOV ramps) or contraflow operations are involved.
- Begin modifying existing HOV markings to reflect the Manual of Uniform Traffic Control Devices (MUTCD)

1.4. Hours of Operation

- Expand hours of operation to ensure time savings and reliability throughout more of the day
 - Initially expand peak hours of operation (5:00 AM to 10:00 AM; 2:00 PM to 7:00 PM)
 - Establish performance thresholds for expanding to daytime and weekend hours of operation (e.g., 5:00 AM to 9:00 PM)
 - Any change in hours of operation will require extensive public outreach and analysis to explore potential impacts to traffic.
- Ensure regional consistency to promote familiarity and support for managed lanes

1.5. Occupancy Requirements

- Maintain existing occupancy requirement of two or more persons per vehicle (2+) during initial deployment of HOT
 - Permit eligible carpools to use managed lanes facilities toll-free
- Require all managed lanes users to carry a transponder with switchable settings to declare carpool status
 - Simplify enforcement while ensuring flexibility to adjust over time
- Ensure regional consistency in occupancy requirements
 - Possibly utilize different uniform occupancy requirement for all regional HOV facilities compared to regional HOT facilities

1.6. Pricing Methods

- Utilize variable pricing to manage lanes based on levels of congestion within segments of each facility.
 - Fixed-schedule variable pricing provides predictability for users
 - Dynamic variable pricing can better adjust for real-time demand
- Calculate tolls on a per mile basis but communicate toll rates to customers per-segment
 - Utilize per-facility pricing for full length trips on multi-segmented corridors

1.7. Active Traffic Management and Managed Freeways

- Active Traffic Management utilizes various Intelligent Transportation System technologies to dynamically manage and control traffic using following strategies:
 - Speed Harmonization/Lane Control
 - Queue Warning
 - Hard Shoulder Running
 - Junction Control
 - Dynamic Re-routing
 - Traveler Information
- Managed Freeways implement a comprehensive package of strategies to fully manage access to and demand for a freeway facility
 - Utilize integrated data collection sensors along the roadway and advanced system management tools to monitor and control real time traffic conditions to ensure a more consistent level of freeway performance

2.0 REGIONAL MANAGED LANE GOALS AND OBJECTIVES

Managed lane goals and objectives should be consistent with regional and statewide goals and objectives, and should represent one component of a larger congestion management planning effort, since managed lanes are only one of the many tools available. Although managed lane vision, goals, and objectives for central Arizona will be unique and specific to local needs, examples from other areas provide appropriate guidance as a basis for further consideration and development in a local context.

Building upon the vision and guiding principles for transportation the State of Arizona and MAG region, and goals and objectives for managed lanes in other areas, specific goals and objectives for managed lanes in the MAG region were identified by the Project Planning Partners Advisory Group. These goals and objectives will establish the parameters by which subsequent specific policy elements can be defined and the performance of managed lanes can ultimately be evaluated.

Table 2-1 MAG Region Managed Lanes Goals and Objectives

Goals	Objectives
Improved Mobility	<ul style="list-style-type: none"> • Reduce travel times and improve travel time reliability • Manage travel demand and traffic congestion • Improve/maximum existing system infrastructure • Maximize use of technology • Increase capacity • Provide mobility options • Improve transit service options, efficiency and reliability
Revenue Alternatives	<ul style="list-style-type: none"> • Leverage existing revenue sources • Access new/alternative revenue sources • Accelerate project delivery to complete the system • Support ongoing operations and maintenance • Support transit service provision • Better plan future investments
Public and Political Support	<ul style="list-style-type: none"> • Support public education and outreach • Identify/foster political champions • Facilitate equitable distribution of costs whereby users pay for what they use
Improved Environmental Quality	<ul style="list-style-type: none"> • Provide air quality benefits • Enhance quality of life

Overall, the Project Partners placed an emphasis on improving mobility over revenue alternatives, with providing travel time reliability being identified and the most important aspect of mobility. In balancing potentially conflicting mobility and revenue goals, the group placed 2/3 emphasis mobility and 1/3 revenue, where the emphasis on revenue should be used to meet the mobility goals. The group felt that utilizing revenue to leverage existing funding should be a priority over generating new revenue. Achieving political support was also viewed as a key goal to advocate and facilitate implementation of a network of managed lanes within the MAG region.

3.0 ACCESS TREATMENT

Arizona's experience with HOV lanes began with construction commencing in 1983, and completion of the first operational facility on I-10 in 1988. The lanes were (and continue to be) constructed with a continuous line and/or buffer separation design, as shown in Figure 3-1.

Figure 3-1 Sample Lane Separation Treatments on Phoenix-area HOV Lanes



There are three types of access to the existing HOV lanes in the Phoenix area, based upon the location within the corridors.

The first pertains to the mainline HOV lanes, where continuous access to the HOV lanes is provided at all points. Vehicles may cross the painted buffer, regardless of the width and appearance of the buffer at that point, provided such a movement otherwise conforms to moving vehicle guidance and safety requirements.

The remaining two conditions pertain to direct-access to the HOV lanes from other facilities. Freeway-to-freeway direct connectors provide dedicated freeway-to-freeway movement between HOV lanes without weaving, thus positively affecting operations across all lanes of travel at these interchanges. Direct access ramps (DAR) provide dedicated connections from intersecting arterial streets to the HOV lanes. In the MAG region, these direct-access provisions are collectively referred to as Direct HOV (DHOV) ramps. In both cases, the construction of these access ramps may be costly, but the operational benefits can be significant at key locations (Figure 3-2).

Figure 3-2 Sample DHOV Ramps in the Phoenix-area



As the requirements of the Phoenix area managed lane network are developed, it is recommended that a regional tolling approach utilizing near-continuous access design and operations be defined to best maintain consistency with the current continuous access system in place for the region's HOV lane system while affording the

operational, enforcement and toll collection benefits of restricted access in strategic locations. Prevailing traffic conditions and other design, operational and cost considerations will need to be evaluated to determine the specific segments or corridors that require the application of limited access to maximize the efficiency and effectiveness of a managed lanes network.

A regional preference for utilizing near-continuous access allows the region to focus subsequent efforts to identify system-based options for resolving various operational and enforcement issues associated with access to managed lanes. Preliminary options include the expanded use of technology and operational treatments that can positively affect compliance. Altogether, developing a near-continuous access managed lane system is possible – and desirable – but these issues must be addressed as planning and design of the managed lanes system proceeds.

Near-continuous access is currently utilized on managed lanes facilities in Salt Lake City, Utah, and Minneapolis, Minnesota, as depicted in Figure 3-3.

Figure 3-3 Sample Near-Continuous Access Managed Lanes



A: I-15 (Salt Lake City)



B: I-35W (Minneapolis)

4.0 LANE SEPARATION

Three different approaches for separating managed lanes from adjacent general purpose lanes are typically used on facilities in the United States.

- Painted line/buffer separation (as found on HOV lanes throughout California, and priced managed lanes facilities including I-15 in Salt Lake City and SR-167 in Seattle)
- Traffic channelizer separation (as found on SR-91 in Orange County, California, I-10 in Houston, and I-95 in Miami)
- Barrier separation (as found on I-15 in San Diego and I-25 in Denver)

All HOV lanes in Arizona currently exhibit painted line/buffer separation approach of employing pavement markings to communicate the HOV lane(s) next to adjacent

general purpose traffic lanes. Solid single or double white (with chevrons) pavement markings are standard in Arizona. The 2009 Manual on Uniform Traffic Control Devices (MUTCD) updated the pavement markings guidance as they pertain to Line and Buffer Separated managed lanes (including both HOV lanes and priced managed lanes). The guidance is as follows:

- Prohibited access segments consist of double-solid white lines on either side of the buffer and chevron markings if the buffer is wider than 4 feet.
- Discouraged access segments consist of two solid white lines. The MUTCD is silent on the desired width of the discouraged-access segment.
- Permitted (open) access segments should consist of either single or double wide broken lines without buffer.

All three conditions are shown in Figure 4-1 and Figure 4-2 below.

Figure 4-1 Controlled Access Buffer-Separated Lane Markings (2009 FHWA MUTCD)

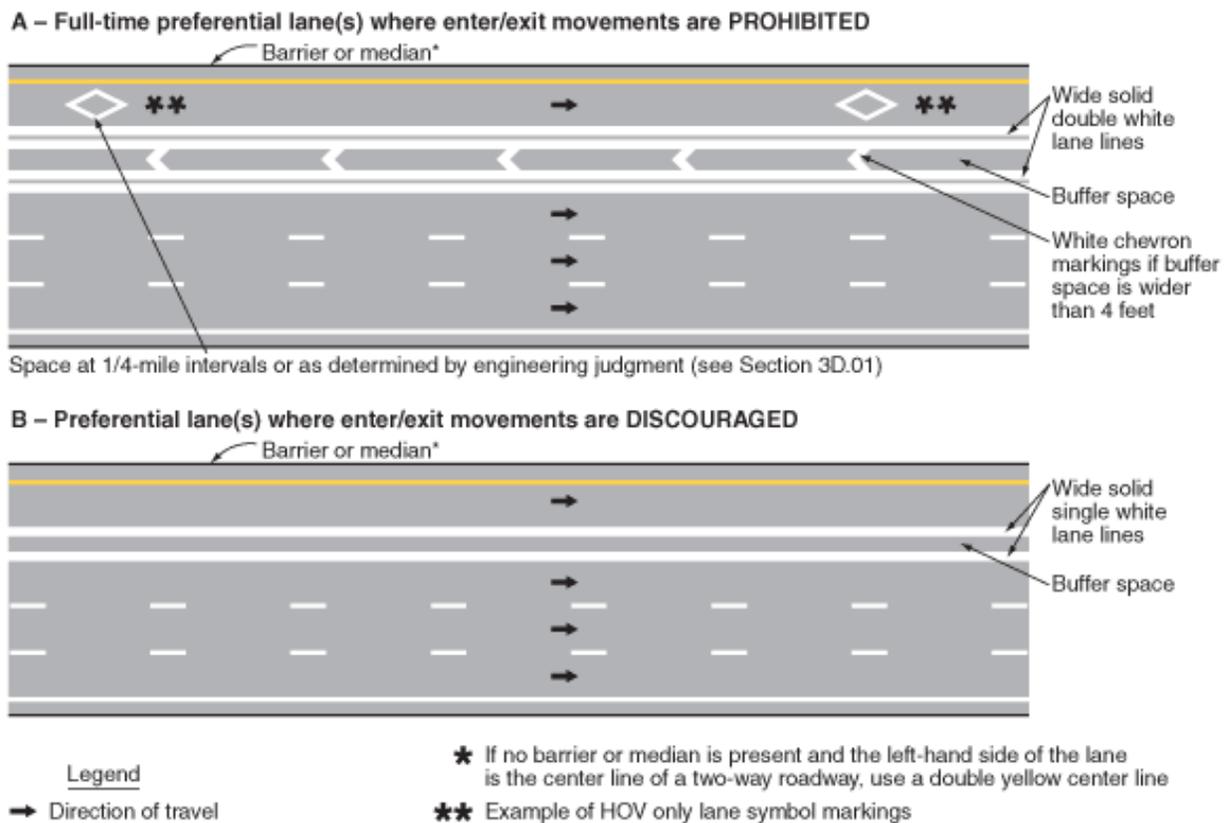
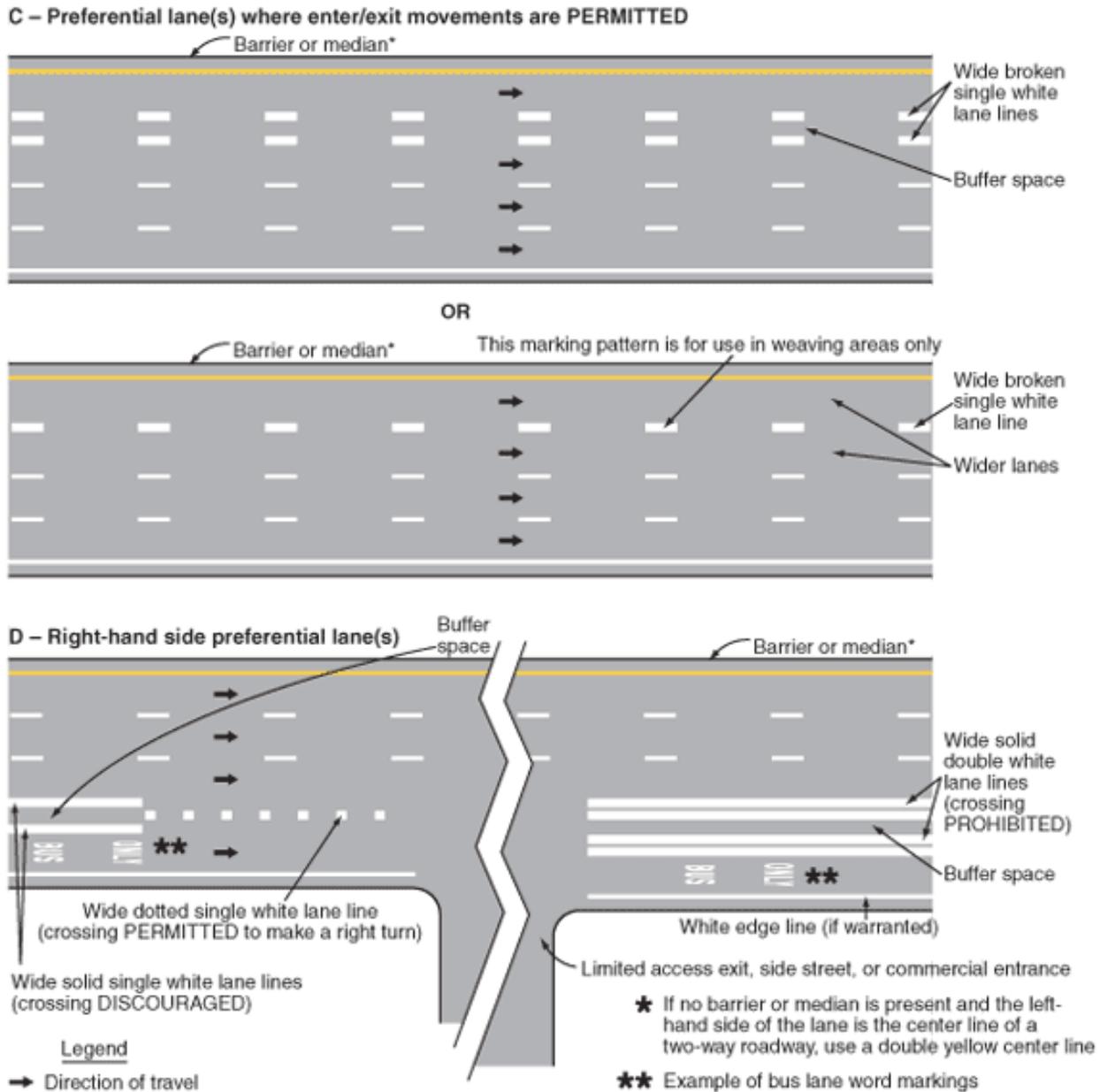


Figure 4-2 Open Access Buffer-Separated Lane Markings (2009 FHWA MUTCD)



For the MAG region, a continuation of the current HOV lane separation techniques is generally recommended in conjunction with the implementation of managed lanes. This approach would continue to primarily utilize a combination of painted line and painted buffer lane separation. Barrier separation would continue to be the preferred separation technique where elevated segments (including DHOV) or contraflow traffic conditions are involved.

It is recommended that ADOT begin the process of modifying the existing HOV lane marking to reflect the recently adopted provisions of the MUTCD. Specific

modifications involve the use of wide broken striping to designate continuous access, as illustrated previously in Figure 4-2. Modifying lane marking to be consistent with MUTCD will be critical to ensure limited access can be clearly demarked and enforced should managed lanes implementation in the region result in the use of near-continuous or limited access treatments. Similarly, ensuring lane markings reflect MUTCD requirements will ensure managed lanes facilities in the MAG region and consistent with applications elsewhere in the nation.

5.0 HOURS OF OPERATION

HOV lanes in Maricopa County currently operate part time. Occupancy restrictions on the lanes are in effect Monday through Friday between 6:00 AM to 9:00 AM, and 3:00 PM to 7:00 PM. During all other periods and during weekends the HOV lanes effectively operate as general purpose lanes and are open to all traffic.

As one of several tools available for managing traffic, implementing a consistent policy for hours of operation for a managed lane facility should complement other demand management strategies such as occupancy restrictions, tolling policy and access treatments. In the context of a managed lanes network spanning a metropolitan area, efforts should also be made to ensure that policies such as hours of operation are consistent to promote familiarity and support of the managed lanes concept. Any expansion to the hours of operation coupled with the introduction of pricing will require extensive public outreach and further analysis to explore potential impacts to traffic.

For the MAG region, it is recommended that the hours of operation expand from the current part-time hours of operation with the introduction of pricing to ensure time savings and reliability benefits throughout a greater portion of the day. Initially this approach could include expanded peak period hours of operation (e.g., 5:00 AM to 10:00 AM; 2:00 PM to 7:00 PM) as a means to maintain part-time operations while affording greater ability to manage HOT demand during the shoulders of the peak period. This approach could also be accompanied by establishing system performance thresholds that would trigger further incremental expansion of hours of operation to ultimately achieve daytime hours of operation (e.g., 5:00 AM to 9:00 PM) across the system. This approach could also include consideration for implementing weekend hours of operation that would extend the ability to manage HOT demand during weekends when recreational and special event traffic in the MAG region can create congestion at certain times in specific corridors (e.g., recreational traffic on southbound I-17 on Sunday or holiday Monday afternoons; sporting or concert event traffic near University of Phoenix Stadium, Sun Devil Stadium, downtown Phoenix, spring training baseball stadiums).

6.0 OCCUPANCY REQUIREMENTS

HOV lanes in Maricopa County currently operate part time. A uniform HOV 2+ (two-or-more persons per vehicle) minimum occupancy policy is enforced during these operational times.

Due to the high level of interconnectivity across the existing regional HOV system, it is recommended that a uniform minimum occupancy requirement for HOT facilities be applied in the MAG region to ensure consistency across corridors and to minimize driver confusion. However, due to the clear differences between HOT and HOV lane operations, it could be possible to utilize a different uniform occupancy requirement for all regional HOV facilities compared to regional HOT facilities. For the MAG region, it is recommended the existing carpool minimum occupancy requirement of two or more persons per vehicle (2+) be maintained during the initial deployment of HOT operations to ensure existing carpool users continue to be rewarded for their beneficial travel behavior. To continue to promote carpool, vanpool and transit modes as the highest priority for using managed lanes, it is recommended that eligible carpools be permitted to utilize managed lanes facilities without a requirement to pay a toll. In light of continuous advances in technology and associated reductions in costs to acquire tolling related equipment, it is recommended that all managed lanes users be required to carry a transponder with switchable settings to self-declare carpool status, like the example depicted in Figure 6-1 which is being developed for projects in Los Angeles, California. The requirement for all managed lanes users to carry a switchable transponder simplifies the process of delineating and enforcing eligible carpools from other users, while also ensuring sufficient flexibility to adjust policies over time.

Figure 6-1 Example Switchable Transponder



Image source: LA Metro

The recommended approach for managed lanes occupancy should also be supplemented by establishing system performance thresholds that would explore further incremental changes in minimum occupancy requirements (i.e., increases in minimum occupancy to 3+) for both HOV and HOT facilities, and commensurate changes in HOV tolling policy specifically on HOT facilities (i.e., HOV 3+ no-toll; HOV 2 discounted toll). Initial system design considerations and requirements for all managed lanes users to utilize a switchable transponder will ensure the flexibility to facilitate changes in occupancy requirements without the need for significant design or technology changes.

7.0 PRICING METHODS

Phoenix's HOV lane system currently permits certain vehicle types during specified periods of the day (morning and afternoon peak periods), wherein other vehicle types are restricted from the lanes. The current system has approximately 375 lane miles, with more under development. Existing permitted users include carpools with two or more occupants, vanpools, motorcycles, and buses.

For the implementation and operation of priced managed lanes, additional permission would be granted to single- and/or low-occupancy vehicles (SOV/LOV) – depending upon either HOV 2+ or HOV 3+ definition for the corridor – that do not meet the prevailing occupancy requirements and carry an active transponder/account, or otherwise meet established criteria for paying tolls. Nationally, initial priced managed lane applications involved existing HOV facilities with demonstrable underutilization. However, more recent proposals have examined the potential of implementing priced managed lanes in more constrained conditions, including in conjunction with increasing the occupancy requirement where overutilization is degrading the performance of the HOV facilities, or as a means of providing higher returns on investment from the provision of new capacity.

As both revenue generation and demand management attributes are incorporated within any pricing scheme, the challenge is how to balance the effects of each objective within the pricing system. As with any management system, capabilities and limitations of the pricing system will have consequential effects on achieving the pricing objectives. Consistent application of any tolling program is important to customer understanding and as an equitable means of adopting and implementing a tolling policy. Overall, the business rules must anticipate all scenarios, and apply them consistently. For the managed lanes these may include:

- Balancing the needs of revenue generation and demand management within the toll algorithm;
- Establishing differential toll rates by vehicle class and occupancy
- Determining minimum toll rates for uncongested conditions, maximum toll rates for saturated conditions on general-purpose lanes, maximum toll rates for incidents on the managed lanes; and
- Determining toll rates for downstream segments from point of entry (e.g., charged the prevailing toll per segment or the “entrance toll” locked in at point of vehicle entry to system).

Operational and system parameters affect the customer's use of the pricing system. There are multiple points of contact with the customer:

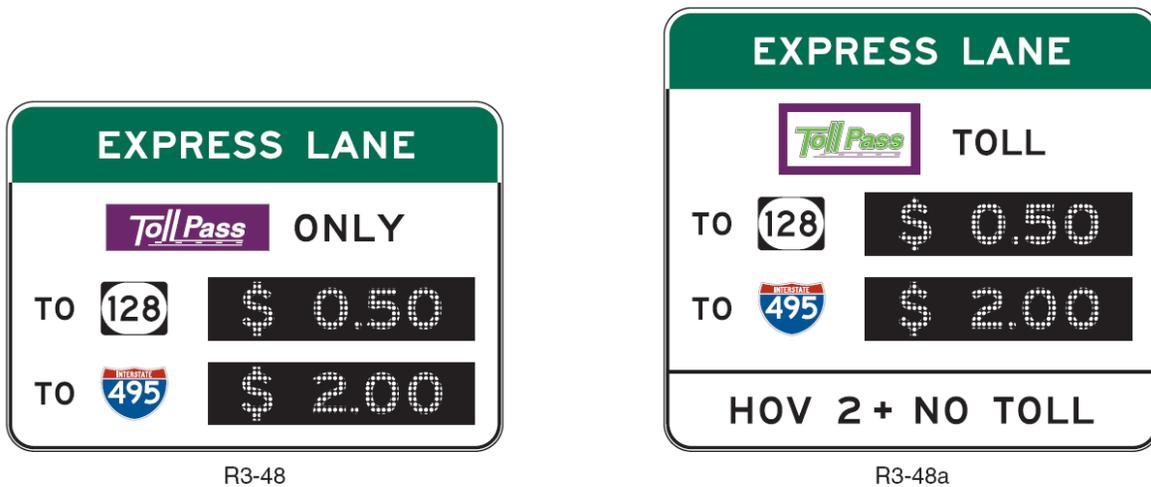
- Hours of Operation. When are the managed lanes open and accepting customers?

- Exemptions. Exemptions and discounts can be offered by vehicle occupancy, class, or other qualifications. All *operational* priced managed lanes offer free access to at least HOV 3+. In order to provide exemptions or discounts, it is necessary to determine a declaration mechanism.
- Communication of Price. In order to make an informed decision concerning use of the priced managed lanes, the customer must understand the price for making his or her trip. The more complicated the system of pricing (e.g., per mile pricing), the more difficult it will be for the customer to estimate the trip cost.
- Lock in of Price. After communicating the price, the customer must have reliance the price will not change once he or she has committed to use of a managed lane toll segment or facility.
- Overrides. In certain cases, conditions will deteriorate rapidly within the managed lane facility. In this situation, refunds or toll negation may be necessary as travel time reliability is jeopardized. Furthermore, diversion of general purpose traffic into a managed lane may also be necessary during periods of incident response.

Fixed-schedule variable and dynamic pricing provide the ability to price managed lanes relative to the level of congestion with segments of each facility, although options and tradeoffs exist. Fixed-schedule variable pricing provides predictability for users because the toll schedule is published in advance, although the use of fixed-schedule pricing precludes the ability to adjust tolls to manage demand in real-time based on prevailing traffic conditions. In contrast, dynamic variable pricing can better adjust toll to reflect for real-time demand but reduces the ability for drivers to be aware of the toll rate in advance of their travel.

A consistent customer experience on the managed lane system will be informed by a combination of interactions with the customer. As it pertains to pricing, applying a consistent pricing algorithm (particularly in the case of dynamic pricing) and pricing interval are critical. In terms of the pricing interval, per-mile, per-segment, and per-facility, are each workable options, but come with benefits and challenges. Calculating tolls on a per mile basis is typical, especially on dynamic pricing facilities that utilize automated tolling algorithms to calculate tolls. Per-segment pricing is generally applied as the most effective option for communicating toll rates to customers, as illustrated in Figure 7-1. Per-segment pricing can also be used in conjunction with per-facility pricing for full length trips on multi-segmented facilities.

Figure 7-1 Segmental Toll Rate Regulatory Signs for Managed Lanes (MUTCD 2009)



8.0 ACTIVE TRAFFIC MANAGEMENT AND MANAGED FREEWAYS

Since the 1990's, Phoenix area agencies have been engaged in a variety of traffic management and ITS endeavors, including the following:

- Freeway Management
- Incident Management
- Traveler Information
- Arterial System Operations
- Managed Lanes

Active Traffic Management (ATM) utilizes various ITS technologies to manage traffic flow and lane use. The key differentiator of ATM from other ITS applications is the approach to **dynamically** manage and control traffic using and integrating the following strategies:

- **Speed Harmonization/Lane Control:** utilizing regularly spaced, over lane speed and lane control signs to dynamically and automatically reduce speed limits in areas of congestion, construction work zones, accidents, or special events to maintain traffic flow and reduce the risk of collisions.
- **Queue Warning:** utilizing either side mount or over lane signs to warn motorists of downstream queues and direct through-traffic to alternate lanes, effectively utilizing available roadway capacity and reducing the likelihood of collisions related to queuing.
- **Hard Shoulder Running:** using the roadway shoulder (inside or outside) as a travel lane during congested periods to alleviate recurrent (bottleneck) congestion for all or a subset of users such as transit buses. Hard shoulder

running can also be used to manage traffic and congestion immediately after an incident.

- **Junction Control:** using lane use control, variable traffic signs, and dynamic pavement markings to direct traffic to specific lanes (mainline or ramp) within an interchange area based on varying traffic demand, to effectively utilize available roadway capacity to reduce congestion
- **Dynamic Re-routing:** changing major destination signing to account for downstream traffic conditions within a roadway network or system.
- **Traveler Information:** providing estimated travel time information and other roadway and system conditions reports allowing travelers to make better pre-trip and in-route decisions.

The concept of Managed Freeways builds upon the ITS applications of ATM and the dynamic demand management capability of managed lanes to implement a comprehensive package of strategies to fully manage access to and demand for a freeway facility. Managed Freeways utilize integrated data collection sensors along the roadway and advanced system management tools to monitor and control real time traffic conditions to ensure a more consistent level of freeway performance.

ATM strategies have been successfully implemented in Europe for many years. In the US, both WSDOT and MnDOT have successfully implemented ATM strategies, as depicted in Figure 8-1. Beyond ATM, fully integrated managed freeways are emerging as a strategy for maximizing the efficiency of roadways. The successful deployment of the M1 Freeway Management System in Melbourne, Australia, as pictured in Figure 8-2, has demonstrated the effectiveness of implementing a comprehensive package of strategies to fully manage access to and demand for a freeway facility by combining the ITS applications of ATM and the dynamic demand management capability of managed lanes. The MAG region has previously demonstrated a commitment to implementing advanced traffic management techniques. ATM and managed freeways represent the latest techniques for regional stakeholders and decision makers to consider as they collectively address existing and ongoing travel demand.

Figure 8-1 Example Active Traffic Management



I-35W, Minneapolis, Minnesota

Image source: MnDOT

Figure 8-2 Example Managed Freeway



M-1 Monash Freeway, Melbourne, Australia

Image source: VicRoads

Paying for Predictability

U.S. Managed Lanes Projects Special Report

Building a Highway System for the Next Generation: The social and economic costs of further highway expansion in urban areas are high. A managed-lane (ML) approach allows policymakers to more effectively manage demand provided there are other transport alternatives. As congestion levels rise, Fitch Ratings expects to see more of these projects, coupled with improved transit options as ML projects by themselves may not be able to solve congestion over the longer term.

Driver Response to Pricing Demystified: At the early stage of development, a lack of data presented serious challenges to the financing of managed lane (ML) projects. Existing congestion levels are now better understood based on 16 years of history on the 91 Express Lanes project and data from the Federal Highway Administration (FHWA) and Texas Transportation Institute (TTI), which measure road performance on a regular basis. Recent empirical data also adds clarity on how drivers respond to changing conditions and price.

A Sound Foundation with Some Volatility: ML projects have a robust traffic base to build from, but will prove more volatile than a typical toll road. While urban roads are much more resilient to economic conditions and fuel prices than other types of toll roads, small changes in general purpose lane (GPL) volume leads to bigger changes in travel times, magnifying the impact on MLs.

Conservative Assumptions: Free flow capacity varies by roadway and is heavily influenced by traffic composition. Likewise, ML capture rates can also vary within a project, depending on roadway configuration. To account for these variances, Fitch will utilize conservative capacity thresholds, ML capture rates, and corridor growth rates when constructing base and rating case scenarios. Scenarios will also reflect performance differences by project segment.

Sensitivity Analysis Is Key: When analyzing ML projects, Fitch conducts various sensitivities. Fitch's analysis shows that changes in price and GPL volumes have bigger impacts on projected revenue than changes in capture rates.

Related Research

Fitch Affirms North Tarrant Express Mobility Partners, LLC Revs at 'BBB-'; Outlook Stable, Dec. 16, 2011

2012 Outlook: U.S. Transportation Infrastructure — Stability Likely but Some Downside Exists, Dec. 15, 2011

Fitch Affirms Orange County Trans Auth's (CA) 91 Express Lane Rating at 'A', Dec. 7, 2011

Downshifting: U.S. Transportation Reacts as GDP Growth Flattens, Sept. 7, 2011

Fitch Affirms LBJ Infrastructure Group LLC Rev Bonds at 'BBB-'; Outlook Stable, June 2, 2011

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Urban Highway Expansion Is Becoming Costly and Complicated

Policymakers have dealt with growing urban congestion in phases over the last four decades. Phase I included a significant expansion of the highway system. Phase II focused on adding high occupancy vehicle (HOV) lanes to encourage more efficient use of the highway system given the social and economic cost of expansion.

As traffic volumes increase, policymakers continue to struggle with the cost of expansion versus rising congestion levels. The emerging phase III appears to build on phase II by converting existing HOV lanes into MLs — highway lanes where vehicles with one or two passengers (HOV2+/HOV3+) ride free and cars with a single occupant (SOV) pay a toll set to keep the MLs operating at free flow speeds. In many cases, existing HOV lanes are underutilized. Converting them into an ML configuration adds capacity and makes the asset more efficient for moving vehicles.

Many transportation officials see managed lanes as an increasingly viable option, particularly as state departments of transportation (DOTs) and regional transportation agencies experience declining resources for highway expansion and political appetite for increased transit funding is uncertain. In addition to this, urban street networks are at or above capacity. The Virginia Department of Transportation opted for a self-supporting ML application on Interstate 495 (I-495) with a capital cost of approximately \$2 billion in lieu of a planned expansion of GPLs with a cost of \$4 billion and no toll revenue to cover the additional operating expenses. According to the FHWA, there are many permutations of a ML application, including HOV lanes, value priced lanes, high occupancy toll (HOT) lanes, or exclusive/special use lanes. In this report, an ML project is one that utilizes some form of dynamic pricing on lanes immediately adjacent to free GPLs.

As state DOTs evaluate potential ML projects, each will have its own unique set of policy objectives and challenges that affect potential revenue generation. Some may allow bus rapid transit (BRT) on the MLs. This may be a low-cost public transportation solution that may ultimately move more people, but it will reduce ML capture rates and revenue since buses limit the SOV capacity that the project can sell and will also result in slower ML speeds, thus diluting the value to an SOV. Others may opt for an HOV2+ policy where cars with one passenger are free, again reducing the SOV capacity the project can sell, and possibly making violation enforcement more challenging. Finally, a tolling strategy that maximizes total corridor throughput rather than revenue may also be desired. It is important that project sponsors and lenders recognize that ML projects are not one-size-fits-all, and Fitch will evaluate each project on its own merits.

An ML Application Allows Policymakers to Manage Demand

The capacity of transportation assets is not infinite and each additional vehicle beyond free flow capacity does impose an economic cost. Shaping the price based on usage is an economic concept conceived to alleviate, if not eliminate, the economic loss associated with congestion. This is analogous to the pricing strategy employed by parking garages, airlines, major sports leagues, and even some transit systems. Under this model, high-value trips pay for certainty, while lower value trips either take longer due to congested GPLs or occur in off-peak hours. In the end, the true cost of a trip is revealed.

The primary goal of utilizing this strategy on a public highway is to encourage the most efficient use of a finite resource. Many urban highways operate at or above capacity during prime

Related Criteria

[Rating Criteria for Infrastructure and Project Finance, Aug. 16, 2011](#)

commuting hours, meaning their performance is poor. Given the urban nature of these facilities, adding more capacity can be costly because of right-of-way constraints. In addition, this may not be the most effective policy choice as the new capacity will encourage additional demand that the adjacent urban street network can not handle, resulting in congested conditions reappearing in the near future.

Implementing a pricing framework should result in lower value trips diverting to public transportation, taking longer or occurring in off-peak periods when there is sufficient roadway capacity. Higher value trips will opt for the certainty of the MLs, for a price. This approach has been embraced by DOTs as evidenced by the plethora of projects that have come along over the last several years (see table below). While MLs can provide congestion relief, improved transit options may be required over the longer term to allow economic growth to continue at historical rates.

Managed Lanes Project History

Facility	Location	Year of Opening	Configuration	Pricing Approach
91 Express Lanes	Orange County, CA	1995	2x2	Maximize Throughput and Meet Financial Obligations
I-394	Minneapolis	2005	2 Reversible	Maintain Free Flow
I-25	Denver	2006	2/3 Reversible	Maintain Free Flow
I-15	San Diego	2008	4 with Moveable Barrier	Maximize Total Throughput
I-95	Miami	2008	2x2	Maximize Total Throughput
I-10	Houston	2009	2x2	HOV/Transit Maximization
I-85	Atlanta	2011	1x1	Maintain Free Flow
I-495	Northern VA	Expected 2012	2x2	Revenue Maximization
I-595	Fort Lauderdale, FL	Expected 2014	2x2	Maximize Total Throughput
I-635	Dallas	Expected 2013–2016	2x2	Revenue Maximization
SR 820	Fort Worth, TX	Expected 2015	2x2	Revenue Maximization
US 36	Denver	Under Development	1 Reversible	Maintain Free Flow
I-95	Northern VA	Under Development	3 Reversible	Revenue Maximization
SR-91 Extension	Riverside County, CA	Under Development	2x2	Revenue Maximization

HOV – High occupancy vehicle.

Source: Fitch.

Existing Congestion Levels and Driver Behavior Better Understood

Macro Level Data Provides a Basis for Analysis

For more than a decade, the 91 Express Lanes in Orange County, CA, provided the only empirical evidence for highways supporting the concept of managing demand through price. And, since the project essentially serves as a land bridge, it was not viewed as an ideal comparator when looking at other stretches of congested urban highways with more ingress/egress options. As more projects entered the development stage, many in the marketplace felt that the lack of data presented a serious challenge to the viability of project financing. It has been Fitch's view that a close evaluation of asset performance, coupled with a growing source of data from the FHWA and TTI and empirical data from operating projects does provide information to help understand how drivers will respond to a managed lane configuration. What is less certain is how price-sensitive drivers will be.

Current projections and empirical data indicate pricing multiples of 3x for short distances or short periods of time relative to other tolled assets. However, there may be some relationship between average peak hour ML prices and rates on toll facilities that act as congestion relievers. Average ML rates well in excess of these rates may be difficult to justify. On a

number of toll roads in the U.S., toll rates are at or exceed 30 cents/mile, almost 3x the super peak rate of 98 cents/mile on the 91 Express Lanes.

Since the decision to take a managed lane is driven by price, understanding the value of the service provided (travel time savings and travel time predictability) is critical. The closer peak-hour speeds and travel times are to the free flow condition, the lower the value proposition to the user, which results in lower toll rates, lower revenue, and less public sector value from the investment.

There are a number of ways to evaluate road performance from a macro perspective, including more recent data collected by the FHWA. The FHWA looks at several measures to capture the level of congestion, including the planning time, the planning time index, and, the buffer index. Planning time is defined as the 95th percentile of observed travel times. The planning time index reflects how much larger the planning time, or “buffer,” is compared with “free flow” travel time. The buffer index is the size of the buffer as a percentage of the average travel time, or the 95th percentile minus the average, divided by the average. This data can help analysts understand existing conditions and form a view of the macro picture.

In addition data showing the composition of traffic (heavy goods vehicles [HGVs] versus passenger cars) is important as a higher percentage of HGVs will affect driver behavior, acting to slow traffic. Where HGVs are present, traffic slows due to more limited sight and spacing between lanes that creates a passenger car equivalent (PCE) of 2.0x or greater depending on size of the HGVs and the grade of the road section. The introduction of BRT on a ML project could have the same slowing effect, within the ML, meaning fewer vehicles can be allowed into the ML.

The alignment of the road is also important since grades and curves can lead to lower free flow capacity as drivers naturally slow when going through a curve or driving up an incline. In addition, sections that involve weaving as a result of interchanges or exit ramps to critical arterials also act to lower free flow capacity and lead to queuing. An FHWA report on traffic and congestion reliability states that vehicle merging “has the most severe effect on traffic flow, with the exception of really bad weather.” Likewise, downstream features of the road network, along with future roadway expansion and/or improvements, also need to be evaluated since they can also affect free flow capacity.

On the capacity side, FHWA reports indicate that a straight lane of highway with a posted speed limit of 55 miles per hour (mph) and ideal geometric and traffic conditions is thought to accommodate 2,200 passenger cars per lane per hour (v/l/h). Once roadway alignment, weaving, and HGVs are taken into consideration, the theoretical capacity of most urban highways can fall significantly, especially given the number of exit ramps and interchanges over short distances. In Fitch’s view, 2,200 v/l/h is a conservative measure of capacity when developing volume/capacity ratios for projects with HGVs or a less than ideal configuration. Fitch may use a higher capacity measure for long, straight, and flat segments of road. Most ML facilities preclude the use of MLs by HGVs. Where HGVs are allowed to use the MLs, Fitch will closely analyze the value proposition as HGVs tend to be more price-sensitive.

Empirical Data More Readily Available

Beyond macro level data on general congestion levels, empirical data on other projects is now becoming available. Review of publicly available information on the Interstate 95 (I-95) MLs in Miami-Dade County, FL reveal that high-value trips do respond to congestion by switching to the MLs.

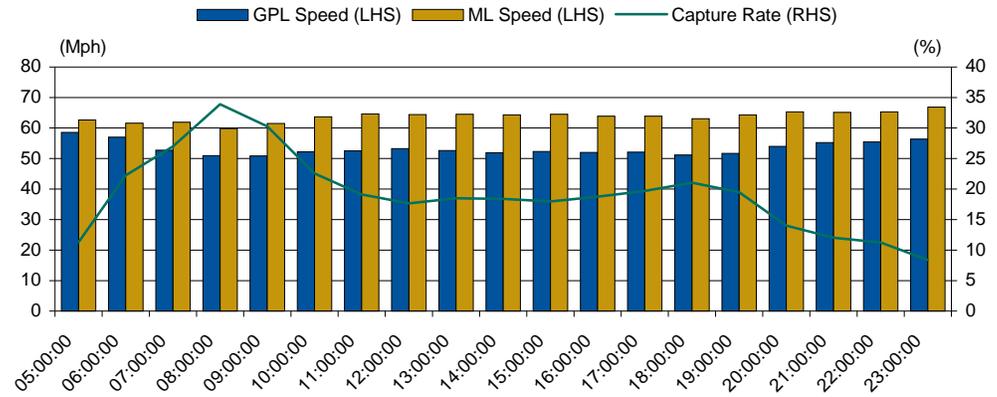
Fitch evaluated count data in 15-minute increments for GPLs and MLs at three locations in the southbound and northbound directions over a 12–14 month period. Data selected was the first full week of each month over the 12–14 month time frame. Fitch also analyzed related GPL and ML speed data and calculated hourly volume-to-capacity (VC) ratios and capture rates. What can be seen in the charts on pages 6–7 is that at GPL speeds below 40 mph, ML capture rates approach and exceed 30%. What is also evident is how different performance can be by segment.

In the northern section, southbound traffic has a VC ratio of between 70% and 80% during the morning peak, with GPL speeds of just over 50 mph and capture rates of between 27% and 33%. In the middle segment, the VC ratio ranges between 113% and 117% during the same time and GPL speeds drop below 40 mph, but the capture rate is nearly identical. At the southern end, the VC ratio ranges between 101% and 123% with GPL speeds of between 47 mph and 62 mph and the ML capture rate still ranges between 29% and 31%.

GPL speed appears to be the most significant driver of behavior. As seen in the charts below, speeds remain at or above free flow conditions despite heavy volumes in the middle of the day. This may be due to different driver behavior during the middle of the day, with less weaving at major exit ramps, allowing for more vehicles at free flow speeds than during the morning and evening peak periods. However, it does indicate that drivers are willing to pay for predictability even when the GPLs are performing, since the ML capture rate does hover at 20% during the nonpeak period between the morning and evening rush hours.

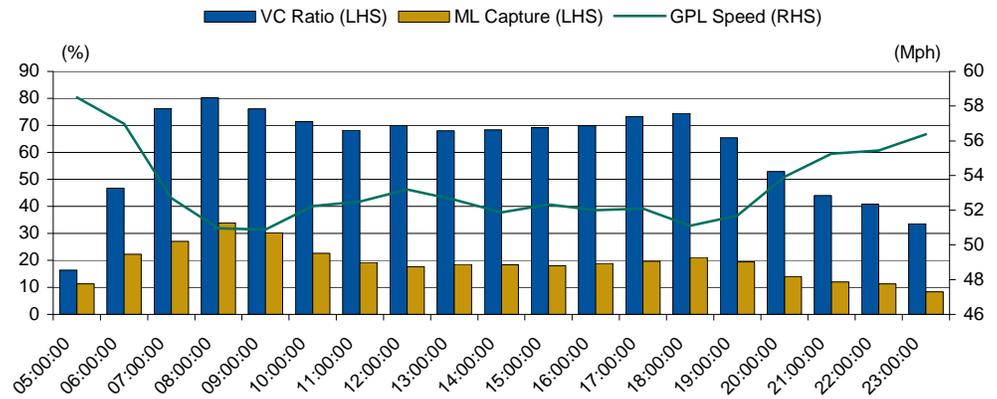
The toll policy embraced by the Florida Department of Transportation (FDOT) is set to maximize throughput of the overall corridor and not maximize revenue; the ML capture rates reflect this. They are also reflective of an “HOV2+ = free” policy. Under a revenue maximization scenario, ML capture rates would likely be lower, particularly in the shoulder and midday period as toll rates would likely be higher than what FDOT currently charges. Most importantly, the data is a second piece of evidence that congestion pricing does change behavior and can be used to manage demand.

Southbound Traffic at Northern End of Project



ML – Managed lanes. GPL – General purpose lane.
Source: Florida Department of Transportation.

Southbound VC Ratio and Capture Rates — Northern End

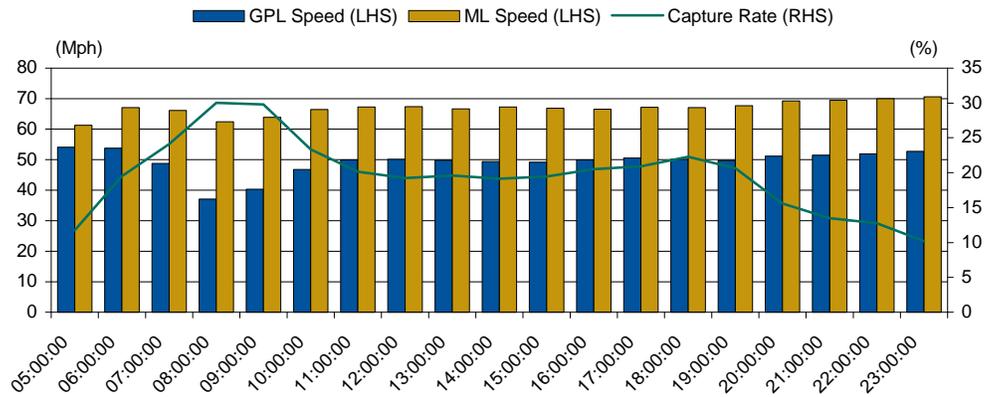


VC – Volume to capacity. ML – Managed lanes. GPL – General purpose lane.
Source: Florida Department of Transportation.

Southbound traffic on the northern end of the project exhibits different characteristics than the middle or southern segments:

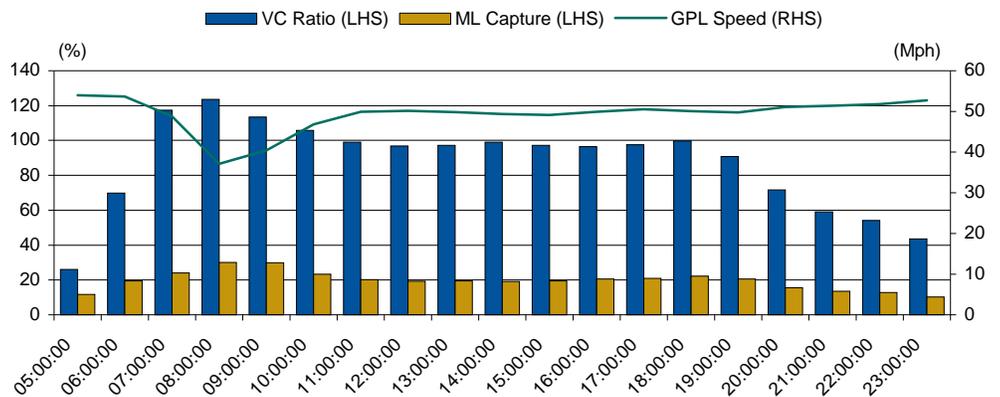
- ML speed consistently at or above 60 mph.
- In the morning peak, capture rates jump despite GPL speeds of 50 mph.
- Despite speeds in the low 50 mph range and reasonable VC ratios, capture rates remain at 20%.

Southbound Traffic at Middle of Project



ML – Managed lanes. GPL – General purpose lane.
Source: Florida Department of Transportation.

Southbound VC Ratio and Capture Rates — Middle Segment

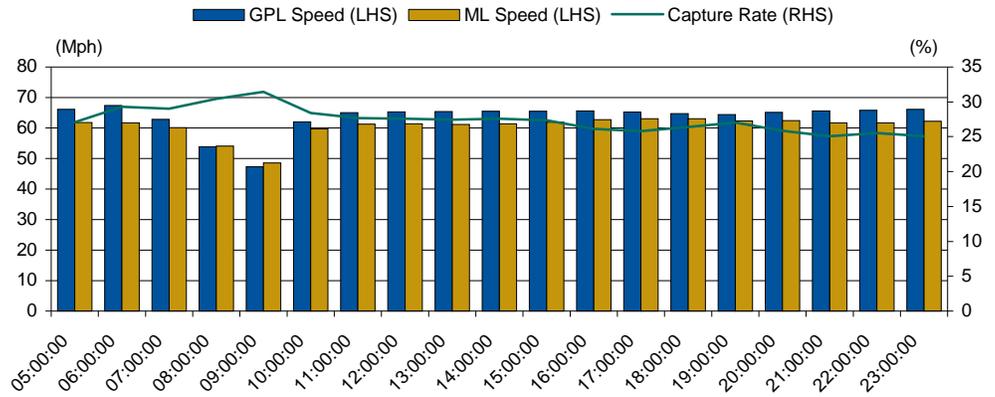


VC – Volume to capacity. ML – Managed lanes. GPL – General purpose lane.
Source: Florida Department of Transportation.

The middle segment is more congested during the morning peak, but ML capture rates are not that different:

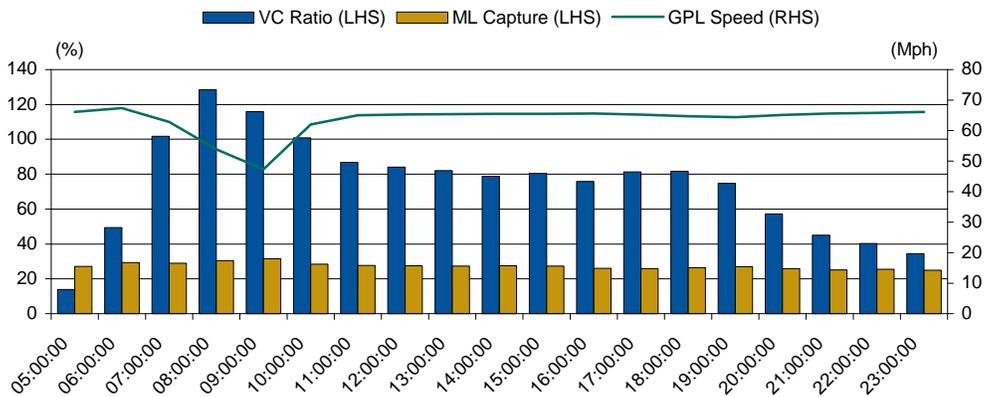
- The VC ratio is approximately 120% in the morning peak.
- GPL speed falls below 40 mph in the morning peak.
- Despite significantly slower GLP speed than in the northern section, ML capture rate does not exceed 30%.
- Similar to northern end, capture rates in the middle of the day stay at approximately 20%, possibly due to HOV usage.

Southbound Traffic at Southern End of Project



ML – Managed lanes. GPL – General purpose lane.
Source: Florida Department of Transportation.

Southbound VC Ratio and Capture Rates — Southern End



VC – Volume to capacity. ML – Managed lanes. GPL – General purpose lane.
Source: Florida Department of Transportation.

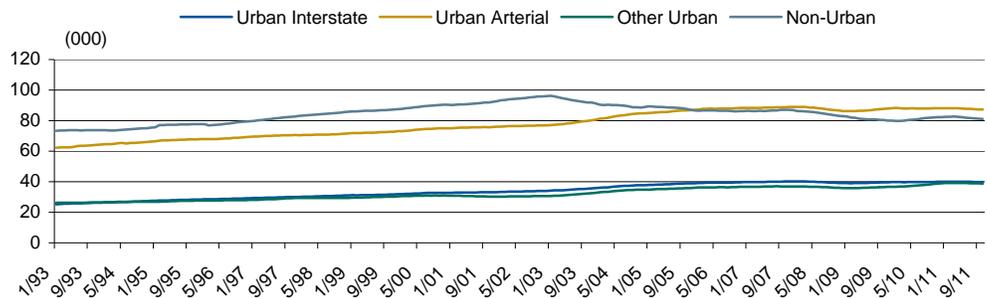
Both ML and GPL peak hour speeds are slower on the southern end, hinting at more congestion:

- The VC ratio hits a maximum of more than 120% in the peak period.
- Both ML and GPL speeds fall below 50 mph during morning peak, triggering the highest capture rates.
- Despite limited difference between GPL and ML performance in the middle of the day, the ML capture remains at 20%.
- Similar to northern end and middle segment, capture rates in the middle of the day stay at approximately 20%.

ML Projects Have Sound Foundation, but Will Be More Volatile

The impact of the global financial crisis and rising fuel costs were particularly harsh in Orange County, CA. Total 91 Express Lanes traffic dropped by 5.5% between 2007 and 2011, but ML traffic dropped by 17.2%, or three times as much. However, ML toll revenue is only down by 12.6% due in part to inflationary adjustments to nonpeak hour toll rates, the MLs ability to capture some GPL traffic at a lower price, and changes in the shoulder hour volume. In 2007, the highest super-peak rate was \$10.25. As of February 2012, it is \$9.75. GLP volume changes do have a significant impact on ML volumes, but drivers will still pay for travel time certainty; it is just a question of price.

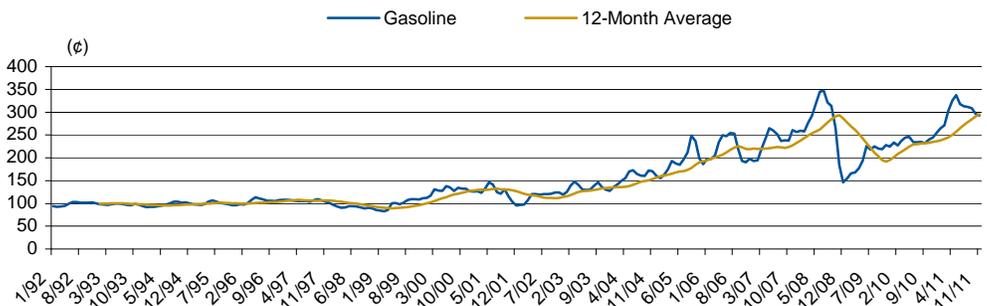
12-Month Moving Average by VMT Component
(1993 to Present)



VMT – Vehicle miles traveled.
Source: Federal Highway Administration.

As seen in the chart above, vehicle miles traveled (VMT) on urban road segments has shown slow but relatively steady growth over time (a CAGR of about 2.5%) and less volatility to high fuel prices and economic conditions. The chart below highlights just how much fuel prices have changed over the last eight years. In particular, the trend in urban VMT components has shown significant resilience relative to non-urban VMT. Meanwhile, according to the TTI, freeway lane miles have grown at a CAGR of only 0.7% between 1992 and 2010, leading to increasing congestion.

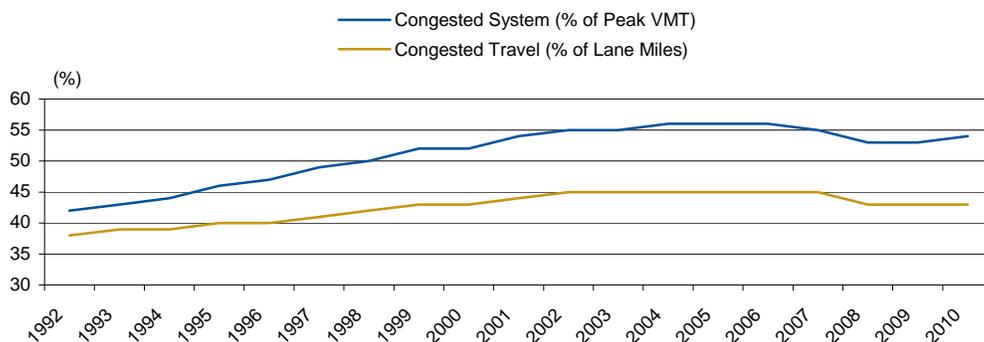
U.S. City Average Price Index for Gasoline



Source: Bureau of Labor Statistics.

The FHWA and TTI have been tracking different measures of congestion over time, with broader measures looking at the percentage of VMT occurring in the peak hours and the percentage of lane miles congested. Data collection on monthly delay hours in 20 U.S. cities began in 2007. While overall congestion levels have dropped from their peak in 2007 (see the chart below), congestion levels have begun to increase again, and Fitch expects this trend to continue as economic growth begins to take hold.

TTI Congestion Measurement



VMT – Vehicle miles traveled.
Source: Texas Transportation Institute (TTI).

Despite the resilience of urban traffic volumes over the past several years, the data from the Florida I-95 project and from the 91 Express Lanes indicate how sensitive ML traffic is to small changes in GPL performance. In the case of the SR-91, a combination of an additional GPL, fuel prices, and the implosion of the subprime lending business resulted in less corridor volume and higher speeds on the GPLs. This 1.6% reduction in total traffic in fiscal 2011 translated to a 9.6% reduction in overall ML volumes.

As shown in the table below, small changes in total volume on the I-95 project between 7:00 a.m. and 8:00 a.m. and between 3:00 p.m. to 4:00 p.m. lead to big changes in overall performance, causing congestion and stimulating ML demand. At 8:00 am, a 5.3% increase in total volume reduced GPL speed by 3.3% and increased the ML capture rate by 25.5%. In the afternoon, a 3.5% increase in total volume reduced GPL speed by 19.5% and increased the ML capture rate by 8.3%.

The key takeaway here is that while urban roads are generally more resilient to economic conditions and fuel prices than other types of toll roads, small changes in volume lead to bigger changes in performance, meaning ML projects will experience significant changes in volume and pricing power. At GPL speeds above 50 mph, capture rates and pricing power is much more limited than at speeds of 35 mph to 40 mph.

Northern End of Project

Time	v/l/h	Cumulative % Change	GPL Speed	Cumulative % Change	ML Capture	Cumulative % Change
Southbound						
07:00:00	1,676		52.7		27.0	
08:00:00	1,765	5.31	51.0	(3.30)	33.9	25.52
09:00:00	1,675	(0.10)	50.9	(3.44)	30.2	11.97
Northbound						
15:00:00	1,788		55.2		25.5	
16:00:00	1,850	3.48	44.4	(19.46)	27.6	8.25
17:00:00	1,790	0.14	34.5	(37.48)	28.2	10.70
18:00:00	1,875	4.86	33.8	(38.83)	28.3	11.14

v/l/h – Passenger cars per lane per hour. GPL – General purpose lane. ML – Managed lanes.
Source: Florida Department of Transportation.

Fitch's Analytical Approach Utilizes Conservative Assumptions

From Fitch's perspective, ML projects are brownfield not greenfield, and therefore, are more dependent on organic economic growth in the urban area, particularly employment. Once a view on economic growth has been formed, Fitch will focus its traffic analysis on understanding the combination of "price" and the point at which GPL speeds and VC ratios trigger drivers to switch to the MLs. As described above, these decision points are influenced by a number of factors, including: road alignment; the percentage of HGVs on the road; the presence of major interchanges; overall economic conditions; planned improvements to the road network; and most importantly, level of service goals and HOV/BRT policy choices. Fitch's analysis will be tailored to each project as these factors can lead to very different revenue profiles and thus need to be accounted for on an individual basis.

The approach to evaluating traffic and revenue sensitivity is somewhat top-down. Fitch starts by analyzing employment patterns in the area, along with overall growth on the facility since employment and urban VMT can be highly correlated. Fitch assumes that future corridor growth will continue, albeit slowly given the trends outlined earlier, and that growth will be influenced by expectations for employment. That said, highways do have capacity limits and Fitch may assume that growth rates in the peak hours slow over time, especially where VC ratios are in excess of 100% and speeds are below 40 mph.

Fitch recognizes that the addition of MLs may increase overall road capacity and can induce some traffic and, thus where there is a strong and clear argument Fitch may reflect a small one-time increase in overall corridor volume when the facility comes online. Fitch will utilize a conservative estimate of highway capacity (i.e. 2,200 v/l/h) when applying capture rates at specific volume to capacity ratios. Capture rates (the percentage of corridor traffic that chooses the ML) at specific VC ratios will be developed on a case-by-case basis, but will be informed by empirical data from other facilities and HOV/BRT policy. Fitch may also assume that HOV3 vehicles utilize the MLs at greater rates over time. It is Fitch's expectation that ML revenue will behave like a derivative, meaning as GPL volume grows, ML revenue will grow at faster rates. Likewise, when the amount of GPL traffic declines, ML traffic and revenue will drop more.

Given this volatility, higher liquidity levels throughout the life of the debt are critical to help support cash flow during periods of economic weakness. All else being equal, an ML project rated 'BBB' needs to have more financial flexibility either in the form of structured liquidity or a highly flexible debt structure than a typical toll road given the potential volatility in annual cash flows. However, if congestion levels truly exist, ML project risk is more a function of finding the right price point.

Sensitivity Analysis Is Key

In thinking about sensitivities, Fitch will look at a 25% or more reduction in price across peak and interpeak periods. Additionally, Fitch will run a shock test during the operational phase to see how the facility responds to a significant reduction in volume (approximating the impact of a network improvement or economic slowdown) with slow growth thereafter. Sensitivities on ML capture rates will also be conducted. The charts below visually demonstrate a hypothetical Fitch traffic analysis.

The "base" assumption is a 4x4 GPL facility with two MLs in each direction and toll policy set to allow free passage for HOV3+. There is no BRT application and HOV usage is limited. Traffic is generally balanced in both directions with strong morning and evening peak periods. Chart 1 below demonstrates how total corridor growth evolves over a 40-year period, and how this growth affects ML growth and market share.

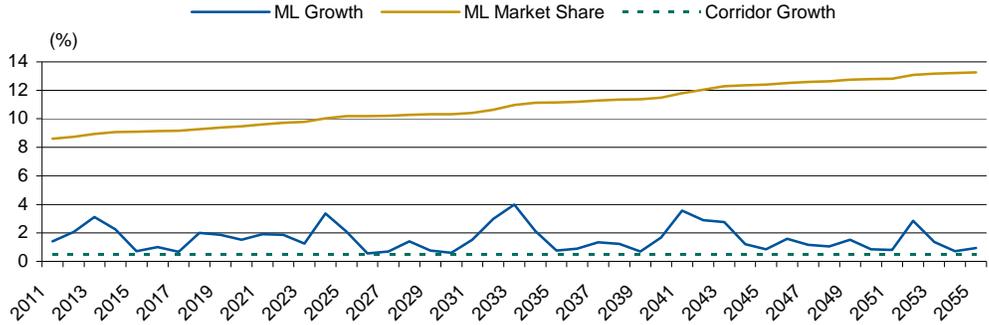
ML Capture Rates

VC Ratio	Capture Rate
5.00	0.00
10.00	0.50
15.00	1.00
20.00	2.00
25.00	2.50
30.00	3.00
35.00	3.00
40.00	3.00
45.00	3.50
50.00	4.00
55.00	5.00
60.00	6.00
65.00	6.50
70.00	7.00
75.00	9.00
80.00	10.00
85.00	10.50
90.00	12.00
95.00	12.00
100.00	15.00
105.00	17.00
110.00	20.00
115.00	26.00
120.00	26.00
125.00	27.00

ML – Managed lanes. VC – Volume to capacity.
Source: Fitch.

The ML Capture Rates table to the left highlights the VC ratios and related capture rates used to develop the hypothetical base scenario and are based on empirical data. A key assumption behind these rates is an assumed toll policy set to maximize revenue. If an HOV2 or a BRT policy is utilized, capture rates for tolled vehicles could be lower.

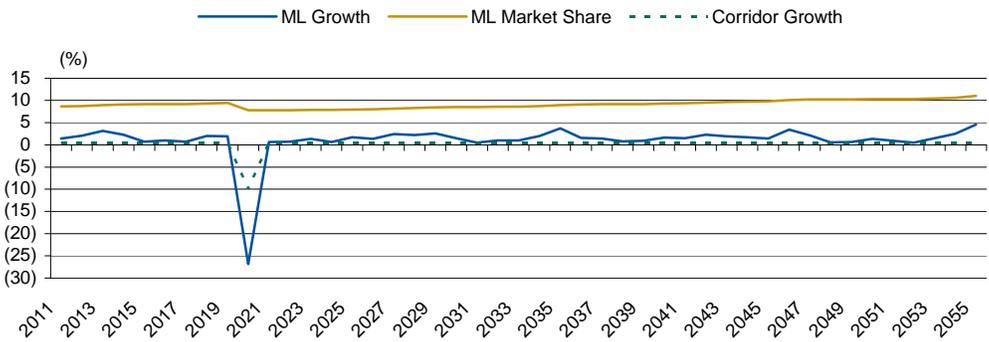
Chart 1: Base Scenario — Managed Lanes vs. Corridor Growth Rates and Market Share



ML – Managed lanes.
Source: Fitch.

Chart 2 reflects the same assumptions as Chart 1, except it demonstrates the impact of a one-time drop in corridor traffic of 10%, approximating a significant change to the network, an economic downturn, or a change in commuting patterns. Chart 3 shows the impact of a 10% reduction in the base capture rate assumptions shown above while Chart 4 shows the gross revenue line associated with the base scenario and three sensitivities: the 10% reduction in growth; the 10% reduction in capture rates; and a 25% reduction in opening year toll rates.

Chart 2: 10% Reduction in Corridor Volume



ML – Managed lanes.
Source: Fitch.

Under the base scenario, total corridor traffic grows at 0.05% and capture rates remain constant throughout the 40-year period. This reveals that over time, the growth on the MLs is much higher than total corridor traffic. However, total projected ML volume never exceeds 14% of total corridor traffic (market share). Eastbound ML market share on the SR-91 reached 13% in 2007, but the addition of another GPL and the impact of the global financial crisis reduced this to 12.8% in 2011.

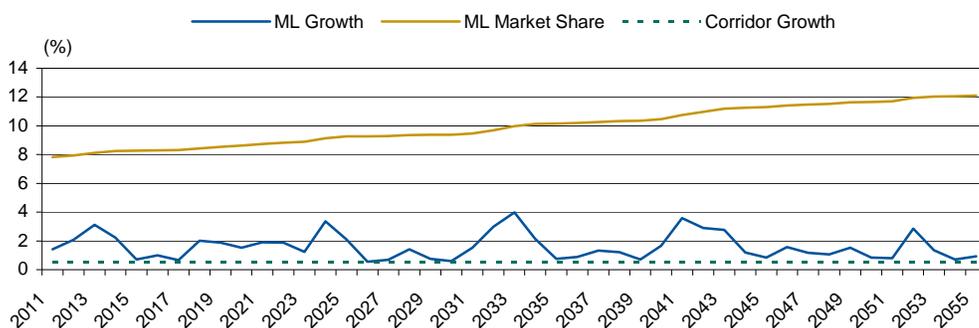
The uneven jumps in ML growth rates indicate periods where the VC ratio triggers the use of the next highest capture rate, meaning that while overall corridor traffic remains the same, more cars are diverting to the MLs. See the table above on the left to see how capture rates change

significantly as the VC ratio moves from 40% to 80% and then again from 100% to 125%. Fitch's approach is conservative in that toll rates simply grow at 1% above inflation, when in reality, rates in peak periods would continually be adjusted higher to maintain free flow conditions in the ML.

Chart 2 below shows the effect of a 10% reduction in total corridor volume in 2020 with all other assumptions remaining the same. The impact of this change results in a more than 25% reduction in ML volume, and ML market share only approaches 10% in 2051. This sensitivity also results in a 48% reduction in revenue from the base scenario. In this situation, management has two options: leave toll rates relatively high and have much less volume, or bring toll rates down significantly to maintain volume. Either way revenue will be greatly reduced.

Chart 3 demonstrates ML sensitivity to changes in capture rates. A 10% reduction in the ML capture rates shown above reduces the ML market share from the base scenario. Essentially, ML market share grows at a slower rate, achieving a market share of nearly 12% by 2051 compared with the base scenario market share of approximately 13%. While the capture rates are not that different, this does result in a 10% reduction in revenue by 2051.

Chart 3: 10% Reduction in ML Capture Rates

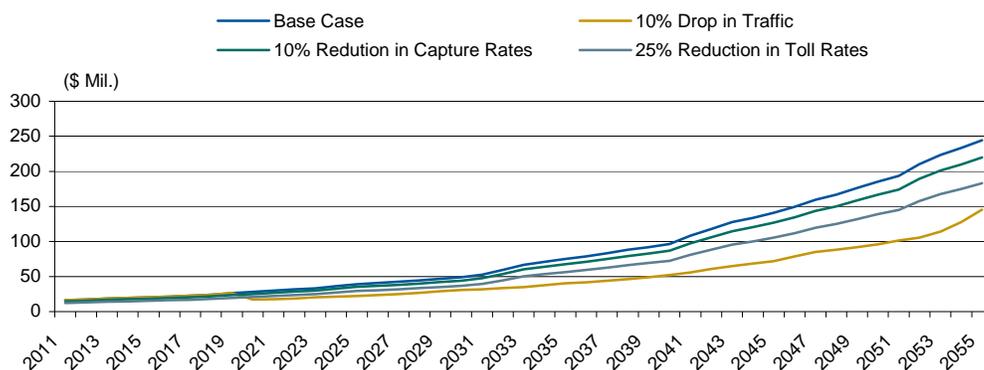


ML – Managed lanes.
Source: Fitch.

The final sensitivity is a 25% reduction in the initial toll rates from the base scenario, with future increases left unchanged. This results in a 25% reduction in revenue in 2051. Chart 4 below shows gross revenue associated with each of the sensitivities. What is clear is that the one-time drop in 2020 corridor volume has the greatest impact on revenue as 2051 revenues would be 48% below the base case. Such a drop in traffic will also result in a drop in pricing power. However, as demonstrated in the VMT data at the beginning of this report, and in other reports published by Fitch, volume on urban roads tends to be much more resilient to economic downturns, meaning that corridor traffic loss is less likely to exceed 10% and should be followed by subsequent growth. However, more fundamental changes in the network due to additional GP lanes, elimination of downstream bottlenecks, and shifts to transit would be permanent.

ML projects aren't the solution to all congestion problems, especially where reversible GPL lanes or transit are cost-effective alternatives. Depending on the situation and long range transportation plan, Fitch may assume a future network change or lower capture rates and pricing power over time to reflect these risks. Where transit and reversible lanes are not viable options, ML capture rate assumptions will be held constant. If BRT and HOV2 policies are utilized, the capture rates and starting place will likely be lower than the hypothetical base case above. Also, Fitch may assume that bus and HOV usage grows over time.

Chart 4: Revenue Scenarios — Assuming Fitch Rating Case



Source: Fitch.

For more information on Fitch's toll road criteria, please see Fitch's Web site at www.fitchratings.com.

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