

October 3, 2013

TO: Members of the MAG Transit Committee

FROM: Madeline Clemann, City of Scottsdale, Chair

SUBJECT: MEETING NOTICE AND TRANSMITTAL OF TENTATIVE AGENDA

Thursday, October 10, 2013 – 10:00 a.m.  
MAG Office, Suite 200, Ironwood Room  
302 North 1st Avenue, Suite 200  
Phoenix, AZ. 85003

A meeting of the MAG Transit Committee will be held at the time and place noted above. Please park in the garage under the building. Bring your ticket to the meeting as parking will be validated. Bicycles can be locked in the rack at the entrance to the parking garage. Committee members or their proxies may attend in person, via videoconference or by telephone conference call. Those attending video conference must notify the MAG site three business days prior to the meeting. Those attending by telephone conference call please contact MAG offices for conference call instructions.

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 Marc Pearsall or Jason Stephens at the MAG Office. Requests should be made as early as possible to allow time to arrange the accommodation.

Please be advised that under procedures adopted by the MAG Regional Council on June 26, 1996, all MAG committees need to have a quorum in order to conduct business. A quorum is a simple majority of the membership or twelve people for the MAG Transit Committee. If the Transit Committee does not meet the quorum requirement, members who have arrived at the meeting will be instructed a legal meeting cannot occur and subsequently be dismissed. Your attendance at the meeting is strongly encouraged. If you are unable to attend the meeting, please make arrangements for a proxy from your jurisdiction to represent you. Please contact Marc Pearsall at (602) 254-6300 if you have any questions or need additional information.

## TENTATIVE AGENDA

	COMMITTEE ACTION REQUESTED
<p>1. <u>Call to Order</u></p> <p>For the October 2013 meeting, the quorum requirement is 11 committee members.</p>	
<p>2. <u>Approval of Draft September 12, 2013 Minutes</u></p>	<p>2. Approve Draft minutes of the September 12, 2013 meeting.</p>
<p>3. <u>Call to the Audience</u></p> <p>An opportunity will be provided to members of the public to address the Transit Committee on items not scheduled on the agenda that fall under the jurisdiction of MAG, or on items on the agenda for discussion but not for action. 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 Transit Committee requests an exception to this limit.</p>	<p>3. For information and discussion.</p>
<p>4. <u>Transit Program Manager's Report</u></p> <p>Eileen Yazzie, the MAG Transit Program Manager will review recent transit planning activities and upcoming agenda items for other MAG committees.</p>	<p>4. For information and discussion.</p>
<p>5. <u>Designing Transit Accessible Communities Study Final Report</u></p> <p>Alice Chen will present to the Committee. In December 2011, Maricopa Associations of Governments (MAG) initiated a study to help provide member agencies with additional tools and guidelines to provide better transit accessibility for pedestrians and bicyclists. The project will ultimately provide a set of documents that will serve as a pathway for MAG member agencies to build livable and multi-modal</p>	<p>5. For information, discussion and possible action for acceptance of the Designing Transit Accessible Communities Study.</p>

neighborhoods. The study methodology utilized field reviews, stakeholder meetings, and intercept surveys to better focus on the critical concerns of the transit user. The final report is complete and available for member agencies. Please refer to the following MAG website for additional information under Designing Transit Accessible Communities:  
<http://www.azmag.gov/Projects/>

6. Regional Transit Framework Study (2010) Re-Cap

Eileen Yazzie will provide a presentation reviewing the overall structure, analysis, scenarios and costs of the 2010 Regional Transit Framework Study. Attached you will find the executive summary of the study and a re-cap that outlines the process, key work phases, and some outcomes. For the full report, peer review panel information, and stakeholder activities, please go to [www.bqaz.org](http://www.bqaz.org) under MAG Regional Transit Framework Study. Please see Attachment #1 memo and Executive Summary for further information.

7. Regional Light Rail Project Report Cards

Valley Metro Rail will provide an overview of the Light Rail Project Report Cards, which provide an overview of the project, schedule, and current happenings. The Light Rail Project Report Cards will be available at the Transit Committee meeting.

8. Request for Future Agenda Items

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

6. For information and discussion.

7. For information and discussion

8. For information and discussion.

9. Next Meeting Date

The next regular Transit Committee meeting is scheduled for Thursday, November 14, 2013, at 10:00 a.m. in the MAG Office, Ironwood Room.

Adjournment

9. For information and discussion.

**DRAFT MEETING MINUTES**  
**MARICOPA ASSOCIATION OF GOVERNMENTS**  
**TRANSIT COMMITTEE**

September 12, 2013  
Maricopa Association of Governments; Ironwood Room;  
302 N. 1<sup>st</sup> Avenue, Suite 200  
Phoenix, Arizona

**MEMBERS ATTENDING**

*ADOT: Nicole Patrick	*Paradise Valley: Jeremy Knapp
Avondale: Rogene Hill	Peoria: Vice Chair Maher Hazine
#Buckeye: Andrea Marquez	Phoenix: Ken Kessler for Maria Hyatt
Chandler: Dan Cook for RJ Zeder	*Queen Creek: Chris Anaradian
El Mirage: Sue McDermott	Scottsdale: Madeline Clemann, Chair
#Gilbert: Leslie Hart	*Surprise: David Kohlbeck
Glendale: Matthew Dudley for Cathy Colbath	Tempe: Robert Yabes
Goodyear: Cato Esquivel	#Tolleson: Chris Hagen
#Maricopa: David Maestas	Valley Metro: Deron Lozano for Wulf Grote
*Maricopa County DOT: Mitch Wagner	*Youngtown: Grant Anderson
Mesa: Jeff Martin for Jodi Sorrell	

\*Members neither present nor represented by proxy. + - Attended by Videoconference  
# - Attended by Audioconference

**OTHERS PRESENT**

Eileen Yazzie, MAG	Kristen Sexton, Avondale
Marc Pearsall, MAG	Ted Mariscal, Phoenix
Alice Chen, MAG	Mindy Kimball, ASU School of Sustainability
DeDe Gaisthea, MAG	Matt Tsark, Strand
Jorge Luna, MAG	

1. Call to Order

The meeting was called to order at 10:06 a.m. by Vice Chair Maher Hazine. He welcomed everyone in attendance and announced that a quorum was present. He noted that four members were joining the meeting by teleconference; Andrea Marquez of Buckeye, Leslie Hart of Gilbert, David Maestas of Maricopa and Chris Anaradian of Queen Creek. Vice Chair Hazine asked if there were any public comment cards, and there being none, proceeded to the next item on the agenda.

## 2. Approval of Draft August 8, 2013 Meeting Minutes

Vice Chair Hazine asked if there were any comments or corrections to the Draft August 8, 2013 meeting minutes. Hearing none, he called for a motion. Mr. Martin moved to approve the motion, Mr. Kessler seconded, and the motion passed unanimously. Vice Chair Hazine then proceeded to the next item on the agenda.

## 3. Call to the Audience

Vice Chair Hazine stated that he had not received any request to speak cards from the audience and moved onto the next item on the agenda.

## 4. Transit Program Manager's Report

Vice Chair Hazine invited Eileen Yazzie of MAG to brief the Committee with the Transit Program Manager's Report.

Ms. Yazzie noted that she had a few items to present. She noted that the Federal Transit Administration had released its list of the awards for the latest round of TIGER discretionary grants earlier in the week. The MAG Region did not receive any funds, but the Port of Tucson freight facility in Tucson did receive some funding. She noted that some of the MAG Region projects that had been submitted for included the Tempe Streetcar and upgrades to the South Maintenance Facility, but none were awarded. In regards to streetcar awards, the new project in Kansas City did receive a TIGER Grant. Ms. Yazzie then reminded the committee members of the upcoming Arizona Rail Passenger Conference sponsored by AzTA (Arizona Transit Association) in Tucson on November 14-15, 2013. She referred members to their website and the flyer and noted that one of the main features of the conference would be to showcase the new Tucson Streetcar.

She also briefed the committee on the two small, MAG on-call studies featuring rail components: The Regional Bicycle and Pedestrian Rail Crossing Recommendations Study, which features railroad and pedestrian safety improvements in the communities in Chandler, Gilbert and Tempe along the Union Pacific Railroad; and the Hassayampa Valley Rail Corridor Cost Analysis Study which would review new conceptual freight railroad lines between Wickenburg, Buckeye and Gila Bend in the far West Valley. Both were due for completion by Spring 2014. Ms. Yazzie concluded her report by referring the members to the new MAG Committee Quorum guidelines, which stipulates that a member would no longer be counted toward the quorum total after three absences. However, that absent member would again be included towards the quorum count upon their return at a subsequent meeting. The quorum issue had arisen in other committees where quorums were not being met due to consistent absences of a majority of members' representatives. Ms. Yazzie completed her report.

Vice Chair Hazine thanked Ms. Yazzie for her report and moved onto the next item on the agenda.

## 5. Northwest Valley Local Transit System Study - Draft Report Final Acceptance

Vice Chair Hazine invited Mr. Marc Pearsall of MAG to present on the Northwest Valley Local Transit System Study (NWVLTSS) - Draft Report Final Acceptance.

Mr. Pearsall thanked the committee and noted that the item was on the agenda for possible action and that it would make its way to Regional Council by mid-October. He explained that the Northwest Valley Local Transit System Study (NWVLTSS) began as a grassroots effort nearly three years ago. He noted that MAG was initially contacted by the Northwest Valley senior advocacy group Benevilla after the closure of the all-volunteer Sun City Area Transit (SCAT), which left a the Northwest, specifically Sun City, without a public transit option. MAG was commissioned in 2011 to craft a plan to work with local agencies along the corridor, including Glendale, Peoria, El Mirage, Youngtown, Surprise, Maricopa County, Sun City, Sun City West, Sun City Festival, and Valley Metro, to develop a scope of work for the study.

He continued by noting that the NWVLTSS was a sister study to the Southwest Valley Local Transit System Study (SWVLTSS), recently completed by Mr. Jorge Luna of MAG and approved by the TRC at the March 25, 2013 meeting. Mr. Pearsall explained that the two studies had similar goals: to identify where people live and the destinations they most frequented in their daily trips to craft a reasonable transit system. He said that the Northwest Valley had not completed a plan such as this in at least 20 years. As the study revolved around a demand-based approach, he explained that the lack of a standard grid system was a challenge for providing transit services in the Northwest, while another challenge from a local perspective identifying what types of services people desired.

He continued by noting that MAG's Project Management Team (PMT), consisting of the communities of the Northwest Valley, Maricopa County, Valley Metro and MAG, hired Moore and Associates as the consultant for the study in spring of 2012. He explained that the project was extensive in its public involvement timeline between September 2012 and May 2013, noting that 33 public meetings were conducted, involving neighborhood groups, non-profits, churches, and senior centers. Topics included frequency of potential service and who would manage the program. The consultants maintained an extensive online presence and conducted field intercept surveys, in addition to the 2200 surveys and various public meetings. He noted that the potential cost of the transit improvements did not seem to surprise the residents; the community was excited about the idea of transit, but understood that no funding was identified. He explained that the study was a blueprint for how the community could move forward with providing transit service. He also added that MAG was continuing to work with the PMT on guiding principles that had been drafted by Maher Hazine of Peoria, on how to identify funding, and how to work with Valley Metro to provide service moving forward.

Mr. Pearsall then described the demographics of the Northwest Valley. The population of respondents was primarily baby boomers and retirees, but there were also students and younger families mixed in. Newer residents to the area had expressed a general frustration about the lack of decent transit in the area, having moved to the region from other parts of the nation where transit service was available, even in suburban areas. Marc then displayed maps which showed where people in the Northwest Valley live and work. The data shown in these maps validated ideas that came out of the NWVLTSS. Community trips and demographics were shown on a graph showing where Glendale & Peoria residents lived and worked. As an example, Mr. Pearsall also pointed out

that a large number of people who live in El Mirage and Surprise commute along the east/west corridor generally represented by SR-101. The commute patterns bolstered the idea that basic connections such as neighborhood circulators and extended east/west bus service are a fundamental foundation of transit in the community. He said that communities with aspirations of higher levels of transit, such as commuter rail or light rail, it was essential to start with basic bus service, a strong underlying bus service could build ridership and bolster the case for adding those enhanced services.

Mr. Pearsall concluded by displaying three maps of recommendations for the region (short-term, mid-term, and long-term), explaining that the suggestions displayed were beginning discussion points, not final service plans. He broke down the service recommendations maps (draft) of near-term recommendations (zero to five years); plus mid-term recommendations (five to ten years); and, long-term recommendations (10 to 15+ years). He said the study assisted local agencies to use the recommendations; in order to further the local needs decision-making processes, where appropriate. He thanked Benevilla, which was the driving force for getting the study started. He also noted that they had thoughtfully used their grassroots effort from 2010 to present in order to team with Sun Health to create the premise of Northwest Connections. While working toward these longer-term recommendations, communities in the Northwest Valley have worked to expand dial-a-ride services with Discount Cab. Additionally, a new program called Connect 60+ was created as a one-stop shop for allowing retired and elderly adults to connect with each other, particularly for home-bound people who feel isolated. He added that the NWV Transportation Stakeholders group would continue to promote those services.

Mr. Pearsall noted that the next step for the study was the development of guiding principles at the direction of MAG's partner cities. Marc planned to meet with seven municipalities to discuss what they want out of a guiding principles and partnering agreements. Vice Chair Hazine thanked Mr. Pearsall for his report and asked if there were any questions or comments. Mr. Cook offered brief comment and Chair Clemann and Vice Chair Hazine thanked MAG, the member agencies and Moore & Associates for their work on the study. Vice Chair Hazine asked if there were any further questions or comments. Hearing none, he called for a motion. Chair Clemann moved to recommend approval, Mr. Dudley seconded, and the motion passed unanimously.

Vice Chair Hazine again thanked Mr. Pearsall and moved onto the next item on the agenda.

#### 6.- Job Access Reverse Commute Coordination – Lead Agency Change

Vice Chair Hazine requested that Ms. Chen present an update to the Job Access Reverse Commute Coordination – Lead Agency Change agenda item.

Ms. Chen stated that the item was on the agenda for possible action. She explained that on March 27, 2013, the MAG Regional Council approved the Regional Programming Guidelines for Federal Transit Formula Funds. She said that Under Section 300 of the Guidelines, the programming priorities included allocation for funding for Job Access Reverse Commute (JARC) related activities. Also, Under Section 703 of the Guidelines, it was recommended that the City of Phoenix, the regional designated grant recipient, that they continue as the lead in the JARC application process,

coordinating with MAG Human Services staff and the MAG Elderly and Persons with Disability Transportation Program (EPDT) Ad Hoc Committee.

She further explained that the Fiscal Year 2013 application process was completed in July 2013. The MAG EPDT Ad Hoc Committee held a debrief meeting on August 22, 2013. It was recommended at the debrief meeting, that given the MAG Transit Committee member's backgrounds regarding JARC criteria, that MAG staff, working with the Transit Committee assume the lead for future JARC applications. She described the current language of the criteria. She then explained 703. Job Access Reverse Commute (JARC) - 2. City of Phoenix would lead the JARC evaluation process coordinating with the MAG Human Services Division. Applications would be a coordinated effort between MAG Human Services Division and the City of Phoenix with final approval from MAG Regional Council.

Ms. Chen then reviewed the proposed revised language for the criteria: 703. Job Access Reverse Commute(JARC) - 2. City of Phoenix MAG would lead the JARC evaluation process coordinating with the MAG Transit Committee and MAG Human Services Division. Applications would be a coordinated effort between MAG Transit Committee and MAG Human Services Division and the City of Phoenix with final approval from MAG Regional Council.

Ms. Chen completed her presentation and advised that she or DeDe Gaisthea of MAG were happy to answer any questions. Vice Chair Hazine thanked Ms. Chen for her presentation and asked if there were any questions or comments. Brief comments were contributed by Mr. Dudley, Ms. Hill and Mr. Lozano regarding grants and operations funding. Mr. Cook and Mr. Dudley discussed JARC and agreed with the new language and the coordination efforts.

Vice Chair Hazine asked if there were any further questions or comments. Hearing none, he called for a motion. Mr. Yabes moved to recommend approval, Mr. Kessler seconded, and the motion passed unanimously.

Vice Chair Hazine again thanked Ms. Chen and moved onto the next item on the agenda.

#### 7. Regional Competitive Grants - Project Priority Listing and Funding Allocation

Vice Chair Hazine requested that Ms. Chen present an update to the Regional Competitive Grants - Project Priority Listing and Funding Allocation agenda item.

Ms. Alice Chen explained that again on March 27, 2013, the MAG Regional Council approved The MAG Regional Programming Guidelines for Federal Transit Formula Funds. She noted that under Section 701 of the Guidelines document, it was recommended that any unprogrammed funds in the Phoenix-Mesa Urbanized Area be utilized through a competitive evaluation process.

She continued by explaining that the process began in February 2013 and that eight projects were submitted for consideration of funding. The Evaluation Committee met on April 24, 2013 to review staff presentations and recommend a list of priority projects. At the April 24, 2013 meeting, there were no available funds to be programmed towards the projects submitted. She then noted that on

August 21, 2013, MAG Regional Council approved the deletion of a duplicate Transit Life Cycle Program (TLCP) Project which made available \$3,989,281 in FY2013 funds. The Evaluation Committee met on August 12, 2013 to discuss funding of the projects with the new source of revenue.

Ms. Chen then explained that projects were recommended for funding priority, utilizing the evaluation criteria worksheet developed by the working group and approved by the Transit Committee. She noted that the working group recommended: 1) Partial funding in the amount of \$2.5 million for the project ranked first, the South Transit Facility Refurbishment. The project was submitted to FTA USDOT for the Transportation Investment Generating Economic Recovery (TIGER) discretionary grant program in early 2013. She said that the awards for TIGER had not been announced and given the uncertainty of the TIGER grant, the committee recommended setting-aside \$2.5 million for this project, pending FTA decision. She said that the funds would be “freed up” if the project is awarded TIGER funding or made available for the project if it is not awarded TIGER funding. She also noted that the funding awards for TIGER grants were eventually announced on September 5, 2013. The South Transit Facility Refurbishment project did not receive any funds and therefore the recommendation is to move forward with awarding \$2.5 million to City of Phoenix for the South Transit Facility Refurbishment.

Ms. Chen further explained that 2) Funding the full requested amounts for projects were ranked numbers two through six: 2-HASTUS 2013 Upgrade, 3-EVBOM - Building systems and CO/O2 sensors, 4-Tempe Route 56 Bus Stop Improvements, 5-Chandler Shelter Procurement and Installation, 6-EVBOM - CNG Pump Expansion. She noted as well: 3) Fund the minimum requested for project ranked number 7-Crosscut Canal Bridge - Pathways to Transit and; 4) The balance of funds, \$37,163 was made available to City of Chandler for the ranked 8-Park and Ride Parking Canopies. She noted that the amount was below their minimum requested amount and therefore the city declined the funds. She concluded that the funds would remain unprogrammed pending future needs. She completed her presentation and advised the members to refer to the attachments for the recommended priority listing and funding amounts and noted that she or Teri Kennedy were happy to answer any questions.

Vice Chair Hazine thanked Ms. Chen for her report and asked if there were any questions or comments. Mr. Kessler and Ms. Chen added a clarification regarding the CNG pump project, and discussion continued regarding use of the remaining \$37,000 and to which municipality it should be released to. Mr. Martin, Mr. Lozano, Mr. Cook and Mr. Yabes discussed East Valley transit investments. After at length discussion, Chair Clemenn noted that she would support the surplus \$37,000 being provided to the Tempe project, but advised that greater care be taken in next year’s by MAG staff in the ranking and vetting process, as to prevent a similar current funding situation for projects in the future. Vice Chair Hazine asked if there were any further questions or comments. Hearing none, he called for a motion. Ms. Clemann moved to recommend approval, Mr. Dudley seconded, and the motion passed unanimously.

Vice Chair Hazine again thanked Ms. Chen and moved onto the next item on the agenda.

#### 8. Request for Future Agenda Items

Vice Chair Hazine asked the members of the Committee if there were any issues that they would like added as future agenda items. Hearing no further comments, Vice Chair Hazine proceeded to the next item on the agenda.

#### 9. Next Meeting Date

Vice Chair Hazine thanked those present and he announced that the next meeting of the MAG Transit Committee would be held on Thursday, October 10, 2013 at 10:00 a.m. in the MAG Office, Ironwood Room.

There being no further business, Vice Chair Hazine adjourned the meeting at 11:21 a.m.

# **ATTACHMENT #1**

**Agenda Item 6**

## Re-Cap - Regional Transit Framework Study Process & Analysis

### October 2013

#### 1. Public Involvement

1.1. **Initial Scoping meetings** – 3 throughout the Valley

1.2. **Focus Groups** –

- Regular Transit Users & Disabled Community
- Non-Riders Users

1.3. **Telephone Survey –Non-Riders**

1.4. **Peer Regions**

- Reports on Peer Region Services
- TPC Panel discussion
- Peer Review of MAG Transit System

#### 2. Analysis & Performance Standards

2.1. **Analysis of Travel Demand** by 24 Transit Influence Zones (TIZ); this included analysis of population, housing, and employment projections with horizons of 2006, 2019, and 2030. This was overall travel, not just transit use, but looking at travel patterns.

2.2. **Planning Level Transit Performance Standards & Indicators:** Utilizing the information from the focus groups and surveys of the Transit Users and non-transit users; the peer agency reports; Valley Metro Annual Market Study-2005; Valley Metro Rider Satisfaction Survey-2006; and the travel demand analysis, the Planning Level Service Performance Standards and Indicators were developed.

2.3. **Problem Definition:** Eleven regional transit deficiencies were identified through analysis and stakeholder input:

- Transit Demand Exceeding Capacity
- Limited Service Expansion
- Capital Deficiencies
- Safe & Convenient Services
- Project Eligibility for Discretionary Funds
- Unserved Undeveloped Areas
- Unserved Growth Areas
- More Broadly Dispersed Employment
- Congested Roadways
- New Transit Investments Require Funding
- Economic Competitiveness

The region was divided into sub areas and the deficiencies were mapped. These deficiencies were met under 4 transit needs categories, which began the process of outlining the frameworks :

- New/Expanded Transit Improvements
- New Service Corridors
- Higher Speed Travel Opportunities
- New Revenue Sources



**2.4. Analytical Model for Considering Additional Transit Service Options.** This analysis includes a summary of the RTP service as well as more analysis on the deficiencies.

- It analyzed the regional growth pattern and transit propensity. This was the early stages of the Sustainable Transportation-Land Use Integration Study (sT-LUIS). It looked at the variables of different demographics like % of population with mobility limitations, % of population w/Income under \$20K, etc.
- Included analysis of travel demand based on TIZ (see 2.1)
- Evaluation/Selection criteria was used from the Planning Level Transit Performance Standards & Indicators (see 2.2).
- Identified Service Typologies that included the type of potential transit service and rated against: regional mobility benefits, ability to attract new markets, capital costs, operating and maintenance costs, and implementation lead time.
- CONCEPTUAL Scenarios were developed at the end.

### **2.5. Existing Transit Services and Deficiencies**

- This includes an overview and characteristics of the existing and planned transit service in the MAG region.
- This also includes the service standards set based on 2.2 and 2.4.
- Analysis on existing ridership performance and deficiencies (this includes facilities), including relationship to population, employment, and land use patterns.
- The focus group input was also included again.

## **3. Transit Modeling Scenarios**

3.1. This includes the screening/criteria from 2.2 and 2.4, the 2026 MAG RTP funded services.

### **3.2. Develops the outline of the 3 scenarios**

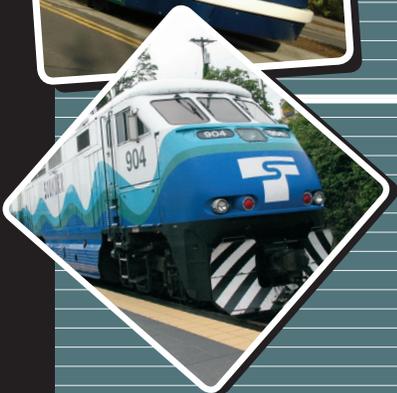
- Scenario 1- Basic Mobility – does not add any new service before 2027; it continues the ‘basic mobility’ theme from 2027 to 2030. Not much new service is added; no change in revenue stream
- Scenario 2 - Enhanced Mobility – Assumes additional funding source starting in 2015. This funding increase is equal to 1.75 times the current regional annual sales tax allocated to transit. This would be comparable to our regional peers. This includes a mix of service increases in frequency and changes in mode type, as well as capital facilities.
- Scenario 3 - Transit Choice - Assumes additional funding source starting in 2015. This funding increase is equal to 3.75 times the current regional annual sales tax allocated to transit. This would be comparable to our regional peers. This includes a mix of service increases in frequency and changes in mode type, as well as capital facilities; it emphasizes new HCT and premium-quality services.

## **4. Cost Analysis**

4.1. **Detailed cost analysis by route** is run on each scenarios for all types of; every route, miles, # of trips, frequency level, capital costs, fleet, replacement schedule, etc.

## **5. Final Framework Report**

# MAG Regional Transit Framework Executive Summary



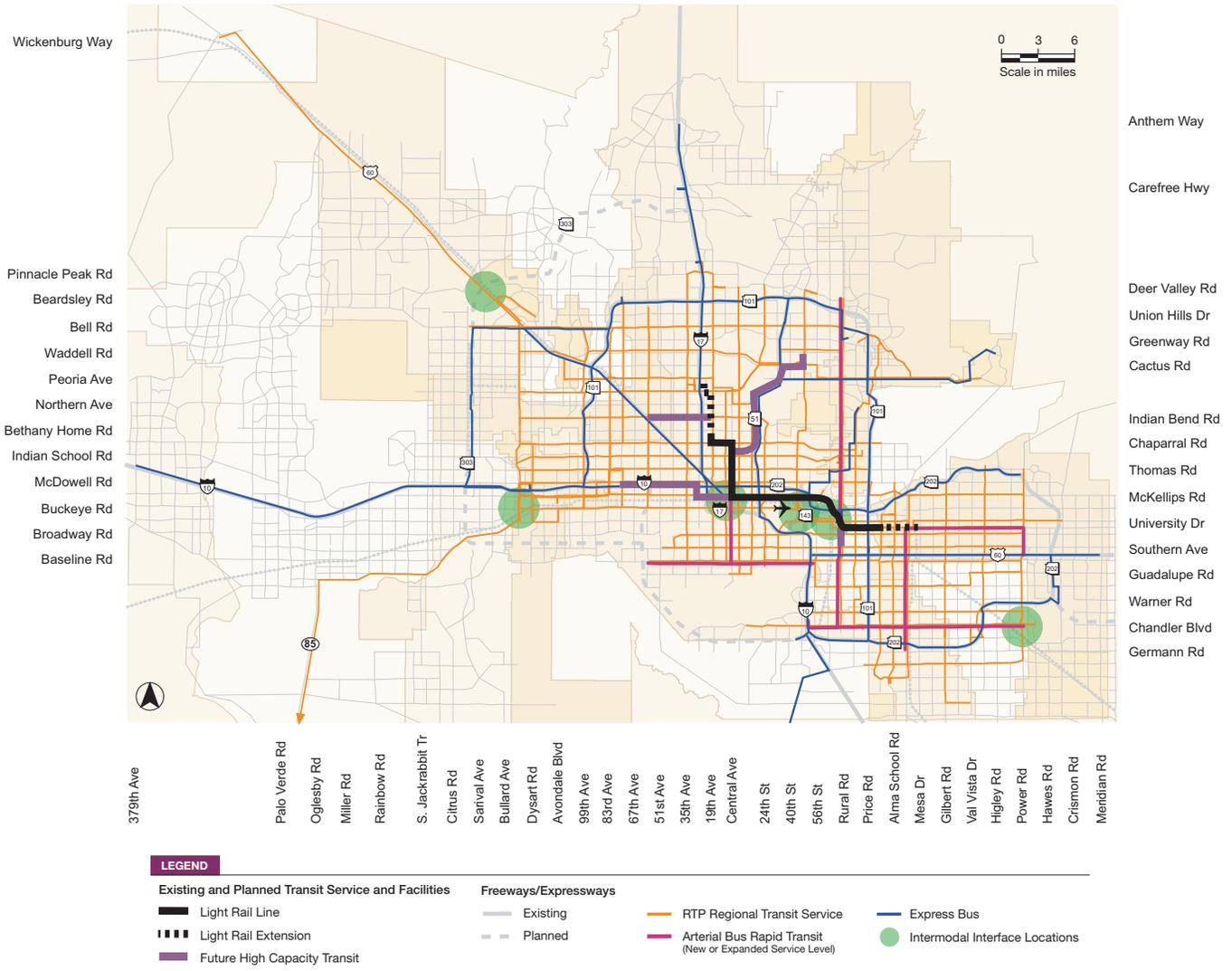
# Project Background and Process

Nearly 700,000 new residents were added to Maricopa County between 2000 and 2006. The U.S. Census Bureau estimates the county's population to be approximately 3.8 million people today, but regional forecasts indicate that Maricopa County may be home to 6.1 million by 2030. Significant development is predicted on the edge of the existing urban area and beyond, where few or no transit services are currently planned. Despite a Regional Transportation Plan (RTP) — with transit funded by the same half-cent sales tax that pays for freeway expansion — and financial support from local communities, additional public transit funding will be required to keep up with growth. An approach embracing all modes of transportation, including

public transit, is essential to address the region's growing transportation demand.

The MAG Regional Transit Framework (RTF) identified and prioritized needs for regional transit improvements to supplement the existing RTP through 2030, with consideration for longer range transportation needs through 2050. The analysis of land use, socioeconomic (population and employment) conditions, existing and planned transit service, and infrastructure, along with input from transit riders and nonriders, enabled MAG to identify transit needs, deficiencies, opportunities, and constraints. Three scenarios for transit services and facilities were then developed to address future travel needs.

## MAG 2030 Planned Regional Transit System



## Review of Peer Regions

To understand how the transit system in the MAG region compares to others, six similar (peer) regions were reviewed. Peer regions were selected based on their location, size, transit system characteristics, land use patterns, and other factors. The six peer regions were: Atlanta, Dallas, Denver, Salt Lake City, San Diego and Seattle.

### Population and Population Density

REGION	2006 UZA Population	2000 UZA Land Area	Population per Square Mile
Atlanta	4,051,000	1,963	2,064
Dallas	4,809,000	1,529	3,146
Denver	2,316,000	585	3,959
Salt Lake City	945,000	231	4,094
San Diego	2,722,000	782	3,479
Seattle	2,875,000	954	3,015
Average <sup>1</sup>	2,531,143	1,007	2,932
MAG Region	3,228,000	779	4,040

Source: National Transit Database  
<sup>1</sup> Average does not include MAG Region

### Population and Population Density

Total population and its density affect the performance of and need for public transportation. In comparing the urbanized area (UZA) of the peers, the MAG region ranks third (of seven) in population and second in population density.

### Peer Region Transit Services

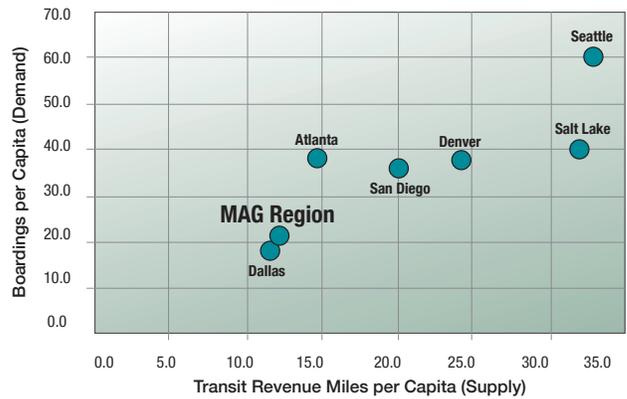
All of the peer regions, including the MAG region, operate bus and vanpool service. Each operates light rail or (in Atlanta) heavy rail service. The primary difference between light and heavy rail is the number of people that they can carry, both are designed to operate frequent, all-day service. In addition to these modes, commuter rail is a service designed to have a limited number of stops over long distances, and to connect suburbs with busy activity centers during peak periods. Atlanta, Denver and the MAG region currently lack commuter rail service.

### Transit Supply and Demand

Knowing how many people use transit, and how much transit service is available, is important for understanding the differences between regional transit systems. Transit supply is a measure of the number of miles operated by all transit modes (buses, trains, etc.) in a region. Transit use, or demand, is a measure of the number of passengers boarding transit in a region. In general, data from the peer regions indicates that as transit revenue

miles (supply) per capita increase, passenger boardings per capita (demand) also increase. This pattern does not directly account for other variables such as land use and development patterns, traffic congestion, vehicle ownership rates, and parking costs.

### 2006 Transit Boardings & Miles of Service

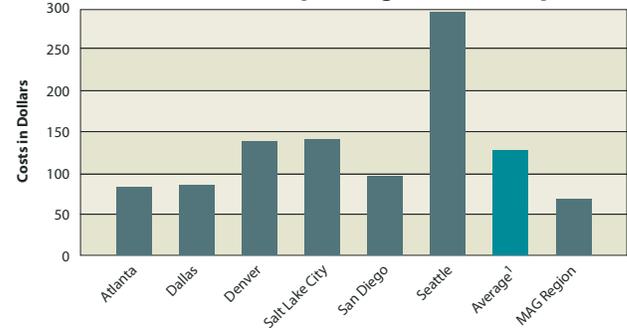


Source: National Transit Database

### Investment in Transit

Regional investments in transit service vary greatly. On average, the peer regions invest approximately \$130 per person per year. The MAG region invests just over \$71 per year.

### 2006 Transit Operating Costs Per Capita



## Public Involvement

MAG and its partners, Valley Metro Rail (METRO) and Valley Metro, conducted a comprehensive public outreach process geared towards both transit riders and non-riders. Its goal was to reach a broad range of citizens to obtain feedback on Maricopa County's current transit system, and on the types of regional transit service that the community would like to see. The process involved a series of focus groups and a telephone survey of Maricopa County residents who were not regular public transit riders. Public feedback helped to identify future transit needs and played a key role in defining regional transit deficiencies for the RTF.

## Regional Transit Problem Definition

The RTF was intended to identify improvements designed to attract new transit riders and improve transit service for existing customers. To accomplish this, it was necessary to understand the factors that affect the decision to use transit, as well as the relationships among transit, land use, local plans and policies, and other transportation planning efforts. Through research and stakeholder input (such as the focus groups and telephone survey), the MAG study team identified the following regional transit deficiencies:

- Transit demand exceeding capacity (in areas and corridors with high demand for service), causing overcrowding
- Insufficient service expansion (as funded and programmed in the twenty-year RTP)
- Capital deficiencies (i.e., insufficient infrastructure, facilities and vehicles)
- Unmet needs for convenient services
- Unserved sparsely developed areas (with a need for rural or inter-community service)
- Unserved growth areas
- Route patterns not well suited to support broadly dispersed employment, which makes conventional transit service less efficient and more costly to provide
- Congested roadways (slowing transit service, making it less efficient and less appealing)
- Insufficient support for economic competitiveness (which is becoming more dependent on good public transit)
- Lack of funding for new transit investments

In general, deficiencies of the public transportation system in Maricopa County fall within three overlapping categories: service area coverage, passenger convenience, and funding.

### Service Area Coverage

Most long-term population growth is projected to occur in areas outside the Loop 101 and 202 freeways—areas that currently have little or no transit service. While the RTP provides for some expansion to these areas, geographic coverage will still be limited, as will hours and frequency of service. Addressing future transit needs on the periphery of the metropolitan area will require consideration of both residential and employment concentrations.

### Passenger Convenience

Regional focus groups and the survey revealed many forms of inconvenience that discourage transit ridership among those who have other travel options, including long waits at transfer points, safety and security concerns (e.g., lighting, safe crosswalks, visibility), lack of amenities at many transit stops, absence of real-time arrival information, overcrowding, roadway congestion, and inadequate park-and-ride capacity. The RTP addresses only some of these issues at a limited number of locations.

### Funding and Seamless Service

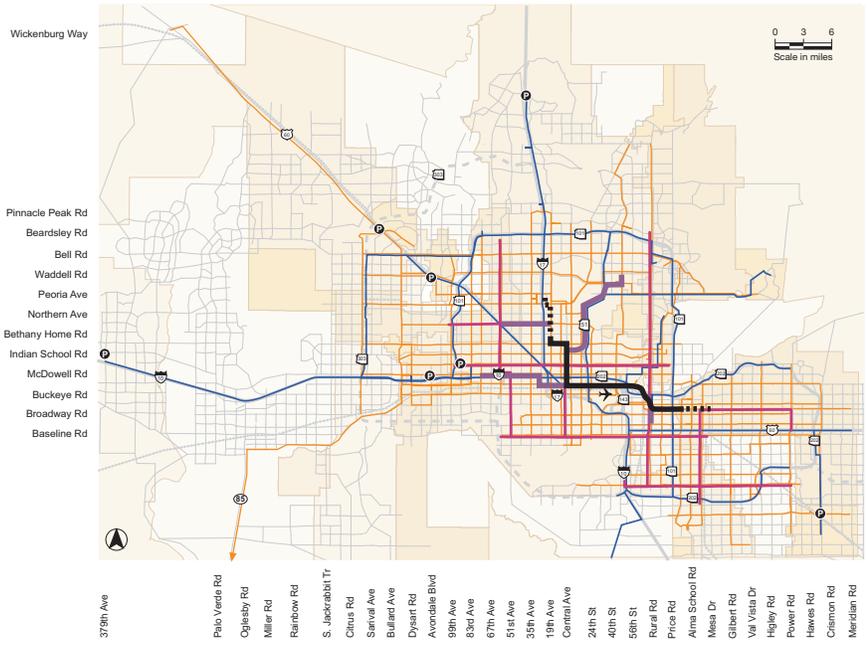
Not only is transit funding in Maricopa County modest compared with many peer regions, it also comes from a mix of regional and local sources. As a result, the level of service will continue to vary from one community to another, even when the RTP improvements have been fully implemented. A truly seamless and consistent regional system would require funding beyond the level provided through the RTP.

The analysis of transit deficiencies led the MAG study team to identify four categories of regional transit needs around which the recommended scenarios were developed: (1) new and expanded transit services, (2) new service corridors, (3) higher-speed travel opportunities, and (4) new revenue sources.

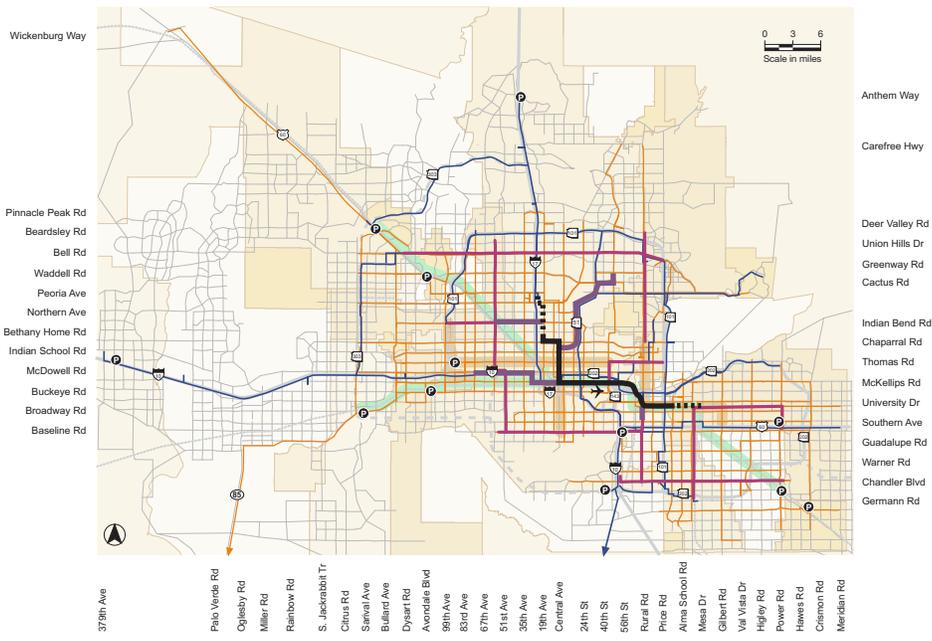
## Year 2030 Transit Scenarios

Three regional transit scenarios were developed for 2030 to provide options for improving transit service in the MAG region. The scenarios build on the transit enhancements identified in the MAG RTP (funded through proposition 400 and local sources) and are based on a defined level of financial investment. New enhancements beyond those already defined in the RTP include improvements to existing transit service, expansion of transit service to new areas, and the inclusion of new transit service options (e.g., express bus, arterial bus rapid transit, high-capacity transit).

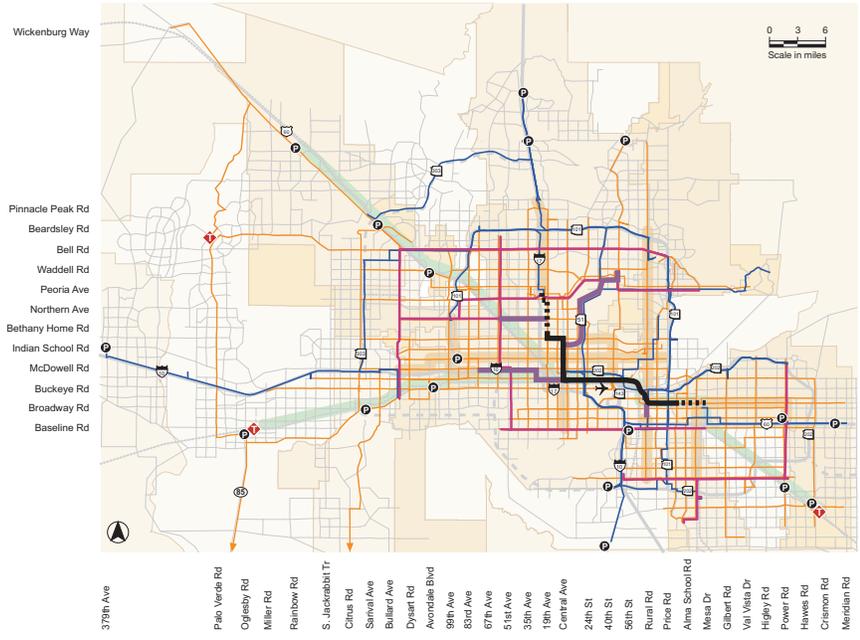
**Scenario I - Basic Mobility**



**Scenario II - Enhanced Mobility**



Scenario III - Transit Choice



LEGEND

Existing and Planned Transit Service and Facilities

- Light Rail Line
- Light Rail Extension
- Future High Capacity Transit
- Express Bus
- Regional Supergrid and Connector Bus
- Arterial Bus Rapid Transit
- Emerging Transit Corridors Beyond 2030
- Park-and-Ride Facility
- Transit Center
- Intermodal Interface Locations

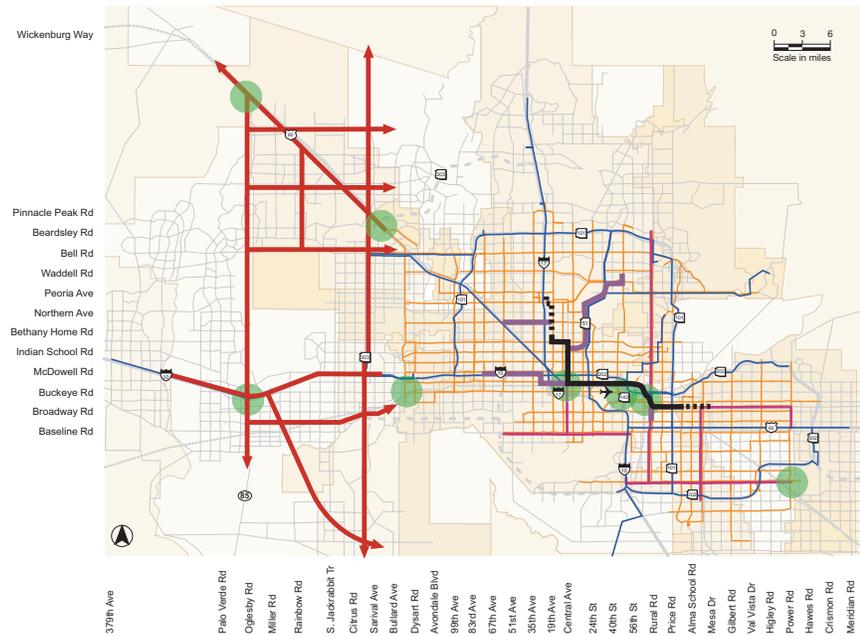
New High Capacity Transit

- All-day Service
- Peak Service

Freeways/Expressways

- Existing
- Planned

Beyond 2030



Scenario	Investment Level	Philosophy	Characteristics
<b>I: Basic Mobility</b>	Lowest (extend existing sources)	Continuation of RTP <ul style="list-style-type: none"> <li>Minimal service expansion with same types of services and programs as currently programmed in the RTP</li> </ul>	<ul style="list-style-type: none"> <li>Expands service to new areas</li> <li>Improves service levels within a limited number of high demand transit corridors</li> <li>Many deficiencies not addressed</li> </ul>
<b>II: Enhanced Mobility</b>	Moderate (comparable to peer regions level)	Concentrated Expansion <ul style="list-style-type: none"> <li>Moderate service expansion</li> <li>Moderate increase in service area</li> <li>Improved frequencies to meet standard service levels</li> <li>Higher speed options (express bus, arterial BRT &amp; HCT)</li> <li>Activity centers outside urbanized area primarily connected through frequent, limited stop express services</li> </ul>	<ul style="list-style-type: none"> <li>Expands regional transit service levels</li> <li>Improves transit travel speeds in highest priority corridors</li> <li>Deficient service levels improved</li> </ul>
<b>III: Transit Choice</b>	Higher (comparable to Seattle level)	Growth Expansion <ul style="list-style-type: none"> <li>Most aggressive service expansion</li> <li>Comparatively greatest increase in service area</li> <li>Improved frequencies to meet standard service levels</li> <li>More high-speed options in urban/non-urban area</li> <li>Activity centers outside urbanized area connected through frequent, limited stop express services and Supergrid bus</li> </ul>	<ul style="list-style-type: none"> <li>Expands regional transit service levels</li> <li>Provides a more comprehensive regional transit system</li> <li>Improves transit travel speeds in many more corridors</li> <li>Nearly all deficiencies are addressed</li> </ul>

Investment Options	Scenario I	Scenario II	Scenario III
Local Transit Service Improvements	---	●	●
Basic Expansion of ADA Paratransit Service	●	●	●
Regional Paratransit Service	---	●	●
Regional Connector – New Routes	---	---	●
Supergrid - Route Extensions	●	●	●
Supergrid - Increased Frequency	---	●	●
Express – New Routes & Increased Frequency	●	●	●
Express – Two-way All-day Service	●	●	●
Arterial BRT – New Routes	●	●	●
Arterial BRT – Increased Frequency	●	●	●
HCT Peak Period – New Routes	---	●	●
HCT All Day – Route Extensions	---	●	●



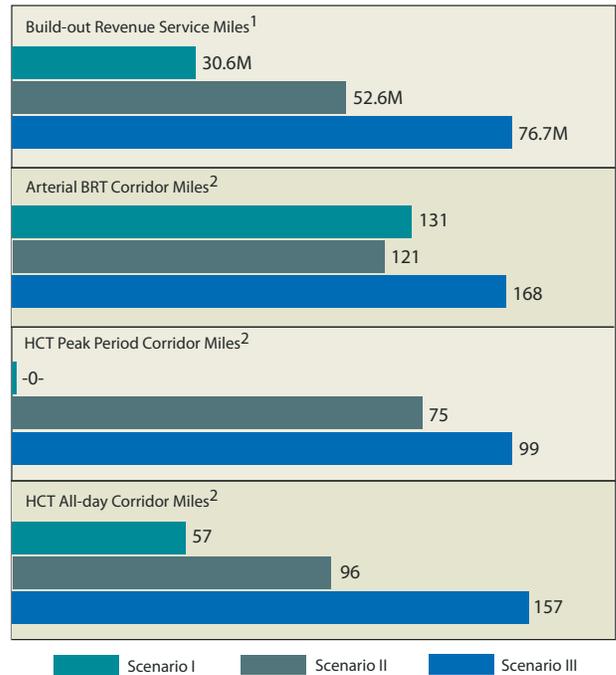
Descriptions of each transit mode in the transit service scenarios are provided below. Photos of similar services are displayed in the column to the left.

- A** ADA Paratransit (dial-a-ride) – Curb-to-curb shared ride service for eligible persons with disabilities who are unable to travel alone by bus.
- B** Regional Connectors—Intercity buses connecting outlying communities with activity centers.
- C** Supergrid—Bus service on major arterial streets serving major activity centers with consistent levels of service operating across jurisdictional boundaries.
- D** Express Bus—Services using the regional freeway system and HOV lanes to connect park-and-ride lots with major employment centers.
- E** Arterial Bus Rapid Transit (BRT)—Arterial bus service that operates faster than supergrid routes, by making a limited number of stops and taking advantage of features such as traffic signal priority.
- F** High-Capacity Transit All-Day—Frequent, all-day rail or bus service that typically operates in a dedicated guideway and stops for passengers only at designated stations.
- G** High-Capacity Transit Peak-Period—Long-distance rail (i.e., commuter rail) or bus service operating in a dedicated guideway, making infrequent stops, and operating primarily during the morning and afternoon peak periods.

The transit service scenarios provide the community with three separate visions for the future. The first scenario (Basic Mobility) includes minimal service expansion with the same types and levels of service provided today and currently programmed in the RTP. The purpose of this scenario is to illustrate what could be accomplished in the region if all current transit revenue sources are extended through 2030.

The second scenario (Enhanced Mobility) assumes that the region funds transit service at a level comparable to the peer regions average, providing for improved bus service frequencies, expanded express bus service with some routes operating all day, expanded arterial BRT service, the construction and operation of new high-capacity transit corridors, and a seamless regional ADA paratransit program. This scenario provides a greater emphasis on concentrating transit services in areas with the greatest population and employment densities. Low-density areas are connected to activity centers and other regional transit services through direct express routes and other services.

### Comparison of Scenarios



<sup>1</sup> Includes all regional transit modes (local services not included)  
<sup>2</sup> Includes all corridor miles operated including original RTP funded corridors

Scenario III accomplishes all of the elements in Scenario II, but includes additional high-capacity transit corridors and a larger network of supergrid bus routes to serve more areas of the region with high-quality transit service. This scenario assumes that the regional transit program would be funded at a level comparable to the Seattle region. The Seattle region invests approximately four times more in transit than the Phoenix region (adjusted for population).

## Funding

The Regional Transit Framework scenarios were developed based on the region’s needs and deficiencies, as well as other considerations including regional connectivity and integration with other transportation modes. Expenditures or costs were another factor in determining the transit services and capital investments identified for each scenario.

Expenditures represent estimated costs associated with implementing, developing or purchasing the transit elements defined in each scenario (see below). Since the framework establishes a guide for future regional planning, not a financially constrained implementation plan, potential revenue sources are not specified.

## Transit and Sustainable Development

Maricopa County’s investment today in transit is an important element in shaping the region’s future travel behavior. Focus groups, telephone survey respondents, the general public and peer regions expressed support for transit investment to provide a convenient system that supports economic development and provides mobility choices. To attain these goals in other regions, transit districts are working with municipal agencies to develop a foundation for successful transit investments through better land use integration. They recognize that the relationship between regional land use development and transit service is a key to building and sustaining ridership. Transit authorities have promoted zoning regulations that implement desired land use patterns around transit stations, and are working with their communities

to enhance transit connections through bus, bike and pedestrian facilities. These agencies have also considered parking strategies and their effect on transit use.

### Transit-Supportive Land Use

Transit use is strongly dependent on development density and land use. Typically, concentrated, mixed-use development produces higher residential and employment densities, which boost transit ridership. In particular, downtown employment centers, especially ones with limited or costly parking, generate a strong transit ridership base.

Transit Oriented Development (TOD) is defined as compact mixed-use (e.g., residential, office, retail, entertainment) development, located within an easy walk of a transit station or stop. By focusing compact development around transit stations, transit-supportive developments capitalize on public investments. The typical components of transit-supportive development near a station include moderate to high-density development, a mix of land use types, parking behind buildings or on the street, plazas or public spaces, and public art.

### Activity Centers

Activity centers can produce significant transit ridership. An activity center can be a recreational or sports facility, a major shopping destination, or an entertainment venue. Structured parking is often built next to the site along with other uses. At some locations, parking is shared between uses to allow more intense land use. The combination of limited parking and activity center demand can mean higher transit ridership to these locations.

### Parking and Transit

In addition to station proximity and transit service quality, parking policies influence ridership. An ample and easily accessible supply of parking, such as that found in many suburban office parks, encourages auto use and reduces attractiveness to transit riders. Conversely, the concentrated uses and limited and costly parking supply found in many major downtowns leads to higher ridership. The decreased amount of land dedicated to parking not only generates transit ridership, but supports the development of denser land uses.

### Comparison of Estimated Expenditures by Scenario (in 2008\$)

Scenario	Local/Other	Regional	Total	Program Years
RTP Base	\$6.85 billion <sup>1</sup>	\$7.15 billion <sup>2</sup>	\$14.00 billion	2008 – 2028
Scenario I	\$0	\$2.05 billion	\$2.05 billion	2027 – 2030
Scenario II	\$2.90 billion	\$8.15 billion	\$11.05 billion	2015 – 2030
Scenario III	\$3.80 billion	\$17.70 billion	\$21.50 billion	2015 – 2030

<sup>1</sup> RTP local/other supported by fares, local sales tax, general funds, etc. (local taxes/gen fund = 69.3% of local/other category)

<sup>2</sup> RTP regional services supported by regional sales tax and federal funds (Prop 400 sales tax = 59.5% of regional category)

Source: MAG Study Team, 2009

## Relationship to Statewide Transportation Planning Framework Study

The MAG RTF identifies future transit needs for the entire county. The same concerns for meeting future travel demand are shared by communities across the state. To address the issue statewide, other framework studies have been completed throughout Arizona. The MAG RTF will join these studies as input into a statewide multi-modal transportation planning framework. This coordinated planning framework process is known as Building a Quality Arizona (bqAZ).

## Regional Transit Program for the Future

Developed through a demand-based approach, the regional transit framework scenarios provide a blueprint for a better coordinated and integrated regional transit system. Implementation of the concepts in these scenarios would transform the current regional transit system to one that more effectively and efficiently addresses travel needs throughout the region. To advance the transit service scenarios beyond a mere blueprint, the region must reach consensus on the future transit vision, identify resources and develop a detailed implementation strategy.

### FOR MORE INFORMATION

Visit [bqaz.org](http://bqaz.org) and select “MAG Regional Transit Framework Study,” or contact Kevin Wallace of Maricopa Association of Governments, phone: 602-254-6300  
e-mail: [kwallace@mag.maricopa.gov](mailto:kwallace@mag.maricopa.gov)



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