MARICOPA ASSOCIATION of GOVERNMENTS

302 North 1st Avenue, Suite 300 ▲ Phoenix, Arizona 85003
Phone (602) 254-6300 ▲ FAX (602) 254-6490
Email: mag@mag.maricopa.gov ▲ Website: www.mag.maricopa.gov

June 20, 2007

TO: Members of the Commuter Rail Stakeholders Group

FROM: Kevin Wallace, Transit Program Manager

SUBJECT: MEETING NOTIFICATION AND TRANSMITTAL OF TENTATIVE AGENDA

Thursday, June 28, 9:00 a.m.
Mesa Convention Center
263 North Center Street, Building B, Palo Verde Ballroom
Mesa, Arizona 85211

A meeting of the MAG Commuter Rail Stakeholders Group will be held at the time and place noted above. **A map with directions to the Mesa Convention Center is enclosed. Signs will be provided to direct you to the meeting room. For those using transit, Valley Metro/RPTA will provide transit tickets for your trip.**

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 Kevin Wallace at the MAG Office. Requests should be made as early as possible to allow time to arrange the accommodation.

The Commuter Rail Stakeholders Group includes stakeholders from throughout the planning area, including cities and towns, business organizations, transportation advocates, and others. This is the second in a series of four meetings in which the Stakeholders Group will identify key issues, purpose and needs, along with goals and objectives for commuter rail. A facilitator will guide the group through an analysis by sub-regions of of opportunities for passenger rail service. In concert with this group, MAG's consultant team will develop an action plan and an implementation strategy.

Thank you for your participation in this program. If you have any questions, please contact Kevin Wallace, MAG Transit Program Manager, at (602) 254-6300 or by email at kwallace@mag.maricopa.gov. You may also find additional information about the Commuter Rail Strategic Plan on the MAG website at http://www.mag.maricopa.gov/project.cms?item=7338.

c: Members of the MAG Regional Council
Members of the MAG Management Committee
MAG Intergovernmental Liaisons

URS
COMMUTER RAIL
Strategic Planning Consulting Services

MARICOPA ASSOCIATION of GOVERNMENTS

TENTATIVE AGENDA

Commuter Rail Stakeholders Group

Thursday, June 28, 2007

9:00 a.m-12:00 a.m.

Mesa Convention Center
263 North Center Street, Building B
Palo Verde Conference Room
Mesa, Arizona 85211

---

1. **Welcome and Introductions**
2. **Presentation of Purpose and Key Issues**
3. **SWOT Process Explanation**
4. **SWOT Analysis in Small Groups by Corridor**
5. **Reconvene Large Group**
6. **Discuss Next Steps**
7. **Adjournment**

MAG COMMUTER RAIL STUDY
GUIDELINES FOR COMMUTER RAIL
RIGHT-OF-WAY, TRACK and STRUCTURES, CONFIGURATION and CONSTRUCTION
May 29, 2007

PURPOSE: The purpose of this document is to identify the general guidelines and requirements for right-of way, track and structures, configuration and construction. Upon agreement of these guidelines they will be further developed to identify potential areas for typical facilities such as stations, parking and typical cross sections for a typical tangent corridor right-of-way.

RIGHT-OF WAY:

Track Corridor: The track corridor shall be wide enough to accommodate the following items:

a. Track design to Class 6 and Class 7
b. Maximum grade 1%, Maximum curve 1-1/2% for 79 mph. A lesser rail curvature can be used if tilt train technology is used for high speed trains up to 150 mph.
c. Two- main line tracks; Track centers at 16'-0"
d. In double track areas provide passing sidings for freight trains length to be determined by maximum length of freight trains operated in this area.
e. Picacho Peak to Tucson corridor – Three-main line tracks.
f. All commuter rail and intercity rail corridors - One-future track – Track centers 16'-0"
g. 15'-0" wide gravel service roads for maintenance of track and signals on both sides of the tracks.
h. 15'-0" wide area on both sides of the right-of-way for underground and overhead utilities. (Underground utilities can be under the service road.)
i. At Grade Crossings and switches and turnouts. As additional 15'-0" wide by 20'-0" long area for maintenance of highway railroad crossing gates, signal system, power operated switches and crossovers.
j. Right-of-way to accommodate high-speed (150 MPH) trains and resultant curvature of tracks.
k. Grade separate all highway/rail grade crossings in areas where rail speed is above 79 mph.
l. Provided coded track circuits for all tracks to permit bi-directional train operation on all tracks.

Terminal Train Storage Facilities: The terminal train storage facilities shall be sized to accommodate the following items.

a. Staff support facility for train crews and maintenance staff.
b. Nominal maintenance facility to address light and running repairs.
c. Shop track with a one train car maintenance facility capable of accommodating diesel engine.
d. Track spacing to accommodate paved walkways used by electric service carts and support facilities fire protection, potable water, sewer connections and drainage.
e. Number of storage tracks to support initial and nominal growth for train storage.
f. One storage track for reserve equipment.
g. One storage track for out of service equipment.
h. At least one track with switches on both ends to permit drill moves around a train.
i. Yard lighting
j. Area for direct truck to locomotive fueling.
k. Parking for train crews and maintenance staff assigned to the yard.
l. Fenced and secured train storage yard area.

Wayside Station Areas: The station areas shall be of sufficient length and width to accommodate the following items:

a. Additional length and width of right-of-way to accommodate two-side or center platforms to serve a four car train length of train with additional length reserved for future addition of two-cars per train. Each car is estimated to by 90-feet long. Side platforms, minimum of 12’-0” wide and center platforms .minimum of 24’-0” wide.
b. Provision for overpass or underpass.
c. Provision for elevators as needed.
d. Landscape areas
e. No station facilities at wayside stations
f. At-grade parking lots to accommodate proposed ridership with significant area reserved for future at grade parking and he ability to convert to parking garage if needed.
g. Security for parking lots
h. At least two entrances and exits of the parking lot and station area.
i. Accommodate a station layout to serve autos, buses, taxis, vanpool, industrial catering, ADA requirements and pedestrians.

Outlying Terminal Stations: Same as wayside stations with the following additions.

a. To be determined.

Maintenance-of-Equipment Facility: Provide the following items**:**

a. Provide area for a railcar and diesel locomotive equipment maintenance shop facility capable of supporting all light, running repair and major component change-outs. Provide capability to expand the maintenance facility to accommodate the proposed build-out fleet.
b. Provide supporting area in the maintenance facility to accommodate the administrative support, train operations support, welfare facilities etc.
c. Provide adequate area to provide parking for employees assigned to the site, as well as agency vehicles.
d. Provide for future expansion

Maintenance-of-Way Facility: Provide the following items:

a. Provide area for a maintenance-of-way and structures shop facility capable of supporting track, structures, station maintenance, landscape maintenance, fare collection equipment, signal and communication systems etc. Provide capability to expand the maintenance-of way facility to accommodate the proposed rail system.
b. Provide supporting area in the maintenance-of-way facility to accommodate the administrative support, storage, shop and welfare facilities etc.
c. Provide adequate area to provide parking for employees assigned to the site, as well as agency vehicles.
d. Provide for future expansion.

The maintenance-of-equipment and maintenance of-way can be located on the same site and could be housed in a combined facility designed to be expanded to serve the future rail system build-out.

Note: As soon as more definition of the proposed system plan and potential build-out is determined conceptual layouts of stations, terminal areas, maintenance facilities can be developed and right-of-way requirements can be developed.

S/Roger/48052/MAG Commuter Rail ROWGuidelines

MAG COMMUTER RAIL STUDY
BNSF and UPRR
TRAIN COUNTS/SPEED AND
RAIL/HIGHWAY GRADE CROSSING SUMMARY
May 29, 2007

DATA SOURCES: The following information was provided by the Arizona Corporation Commission (ACC) and is based on information provided by the BNSF and UPRR railroads including the railroads timetables. While this information is the latest available, the ACC advised that it may not reflect actual train operations as the railroads are constantly modifying their operations and does not report each change as they occur. Additionally, the railroads do not keep track of local freight service. Local train service was estimated by the ACC staff.

TRAIN COUNTS AND SPEED:

BNSF:

Ash Fork to Phoenix	- MP 401.2 to 193.7 - 10 Trains per Day, 49 MPH, Not including various, permanent speed restrictions.
Ennis Branch	- MP 0.0 to MP 9.0 - 1 Train per Day, 10 MPH

UPRR:

Chandler Industrial Lead	- MP923.6 to MP 943.2 - Local freight service two trains per week on Wednesday and Saturdays, 25 MPH.
Tempe Industrial Lead	- MP 0.0 to MP 9.7 - Local freight service operates on a 24 hour basis, 20 MPH
Phoenix to Buckeye	-MP 907.0 to MP 822.3 - Local freight service to end of line MP 822.3. Track embargoed MP 822.3 to MP 802.8. Local freight service to Hyder is provided. The West end of the Phoenix Subdivision is operated as the Roll Industrial Lead from Wellton (MP770.8) to MP 802.8. Local service on the Roll Industrial Lead is provided. Note that Wellton, east of Yuma, is the location of the junction of the Phoenix Subdivision with the “Sunset Route” main line.

Phoenix to Picacho	- MP 907.0 to MP 979.7 - 12 Trains, 6 North and 6 South, 60 MPH, 20 MPH through Tempe. Not including various permanent speed restrictions.
Picacho to Yuma	- MP 938.4 to MP 732.7 - 45 to 50 Trains per day, 79 MPH Passenger, 65 MPH Freight, 75 MPH Express Freight

RAIL HIGHWAY GRADE CROSSINGS:

BNSF:

Phoenix to Wickenburg	-	Public Overpass Crossings	=	9
MP 195.19 to MP 132.38		Public Crossing Under RR	=	5
		Public Crossing	=	132
		Private Crossing	=	40
		Private Crossing Under RR	=	2
		Total		**188**
Ennis Branch	-	Public Overpass Crossings	=	1
MP 0.2 to MP 12.43		Private Crossing	=	20
		Public Crossing	=	34
		Total		**55**

UPRR:

Chandler Industrial Lead	-	Public Crossing	=	26
MP 923.99 to MP 942.89		Private Crossing	=	01
		Total		**27**
Tempe Industrial Lead	-	Public Crossings	=	18
MP 915.83 to MP 924.62		Public Pedestrian Crossing	=	1
		Private Crossing	=	6
		Total		**25**
Phoenix to Buckeye	-	Public Overpass Crossings	=	2
MP 907.02 to MP 874.32		Public Crossing Under RR	=	2
		Public Crossing	=	81
		Private Crossing	=	8
		Total		**93**
Phoenix to Picacho	-	Public Overpass Crossings	=	7

MP 907.02 to MP 979.90 =	Public Crossing Under RR	=	13
MP 936.70	Public Crossing	=	125
	Private Crossing	=	33
	Total		**178**
Tucson to Picacho -	Public Overpass Crossings	=	6
(Gila Subdivision)	Public Crossing Under RR	=	4
MP 987.7 to MP 979.90 =	Public Crossing	=	31
MP 936.70	Private Crossing	=	6
	Total		**47**
Litchfield Industrial Lead -	Public Crossing	=	3
MP 889.3 to MP 892.2	Private Crossing	=	3
	Total		**6**

S-Roger - 48052-NSF-UPRR-Train Counts/GrXings.doc
RWM

URS
COMMUTER RAIL
Strategic Planning Consulting Services
7720 North 16th Street, Suite 100, Phoenix, AZ 85020

Meeting Notes
Commuter Rail Strategic Plan
Commuter Rail Stakeholder Group
May 1, 2007
10:00 a.m.
MAG Office

Attendees:
There were approximately 55-60 stakeholders that attended the Commuter Rail Stakeholder Group meeting. Refer to the attached sign in sheets for attendees.

The purposes of the CRSG meeting was to provide an overview, to identified stakeholders, on the Commuter Rail Strategic Plan Project, strategic plan development process, MAG plans for commuter rail, discussion of Project issues and purpose statement, discussion of commuter rail operating requirements and coordination, and a description of the sub-area planning for SWOT analysis.

Key Comments from Stakeholders

- Freight traffic on the UP Railroad mainline between Tucson and California is at maximum capacity and it will only increase.
- Each of the railroad lines in the Phoenix area has different freight rail traffic densities.
- A question was raised about weather air quality, noise pollution and grade separation had been analyzed.
- Young people relate to environmental benefits, therefore include reduction in pollutants, less usage of natural resources etc.
- Add environmental benefits to the key reasons to consider commuter rail.
- Use positive instead of negative statements in the describing of project issues and purpose.
- The EPA designation of Maricopa County as a non-attainment area is a real problem
- Consider making the rail lines attractive for use by both freight railroads and commuter rail.
- Convenience is important for commuters.
- The cost of both capital improvements and commuter rail operations will be a challenge.
- Downtown Phoenix, ASU campus will provide multiple possibilities for mobility.
- Need to provide a true commuter rail option that people will utilize and see as convenient.
- Look into private and public funding.
- Look into unique funding sources such as value capture.
- Use an established cost benefit analysis to assess cost effectiveness.
- Commuter rail can help mold future centralized land use and therefore dispersed development can positively guided by commuter rail.
- Look into purchasing RR branch lines

- Investigate the alternatives of public vs. private ownership (railroad ownership) of the rail lines for commuter rail use.
- Determine a methodology to address possible reverse commutes
- Commuter rail has the potential for sustainable economic and social benefits.
- Use simpler languafe and fewer acronyms in the project issues and purpose statement.
- ADOT is the central point of contact for the Railroads.
- The scheduled 3rd CRSG meeting on June 28th has a conflict with the Municipal League Convention and has been rescheduled for September 12, 2007.

Action Items

- Add cost to the list of challenges.
- Provide a definition for sustainability.
- Make project issues and purpose more positive and reader friendly.
- Remove negative terms i.e. potential/risk assessment
- Include air quality, grade separation, and peak hour in CRSG presentation
- Include environmental impacts to “key reasons to consider” slide
- Relate to environmental benefits; therefore include reduction in pollutants, less usage of natural resources etc.
- Expand on funding resources i.e. value capture (slide “Critical Challenges”)
- Include sustainable economic and social developments (slide “Key Reasons”)
- Simplify language to use for talking points
- Spell out Acronyms
- Provide more detail on sub-area map by separating the map into the identified corridors for future meetings.

AGENDA ITEM #2
MAG Commuter Rail Strategic Plan Purpose and Key Issues
June 2007

Project Purpose: Develop strategies for implementing commuter rail service in Maricopa County and northern Pinal County.

Key Reasons to Consider Commuter Rail Service

- Continued strong growth of population and employment throughout the metropolitan area.
- Travel demand growth and increasing congestion in the primary travel corridors of the region.
- Need to provide a range of travel choices in the primary travel corridors.
- Desire to reinforce local and regional land use plans and development opportunities.
- Availability of existing railroad alignments in the primary travel corridors.
- Increase in the cost of fuel and travel.
- Promote sustainability by reducing air pollutants and usage of natural resources.
- Promote sustainable economic and social developments.
- Reinforce centralized land uses.

Critical Challenges to Implementation of Commuter Rail Service

- Possible conflicts with current and planned freight railroad operations.
- Rapid development of land uses foreclosing opportunities for alignments and stations.
- Physical and geographic constraints limit locations for new alignments.
- Coordination with jurisdictional interests and policies.
- Availability and competition for regional, state and federal funding and resources.
- Cost of building and operating a commuter rail system.

Requirements for Successful Implementation of Commuter Rail Service

- Determine where commuter rail would be cost-effective to serve peak regional travel demand. By using analytical tools including cost benefit studies.
- Define options for shared and joint use of railway corridors and infrastructure.
- Develop working relationships and agreements with railroad owners and operators for alignments, stations and operations.
- Identify environmental impacts.
- Identify safety/ownership/liability issues.
- Develop system to integrate with other transportation system elements; LRT system; Bus and BRT system; highway and road network.
- Generate public and agency support for commuter rail service.
- Develop political support and leadership.
- Identify potential funding options and necessary legislative measures.
- Define an acceptable operating, administration and governance organization.

DRAFT

MAG COMMUTER RAIL

Newsletter #1

JUNE 2007

Strategic Plan Development - The results of the CRSG workshops and related Working Papers will be synthesized into a comprehensive plan document that can be used for presentations to the MAG Regional Council and other participating entities. These products will consist of:

- Draft and Final Commuter Rail Strategic Plan document.
- Commuter Rail Plan Executive Summary in pamphlet format.
- CD of each of the Plan documents.
- Presentation to MAG Regional Council for adoption.

What Is the Project's Schedule?

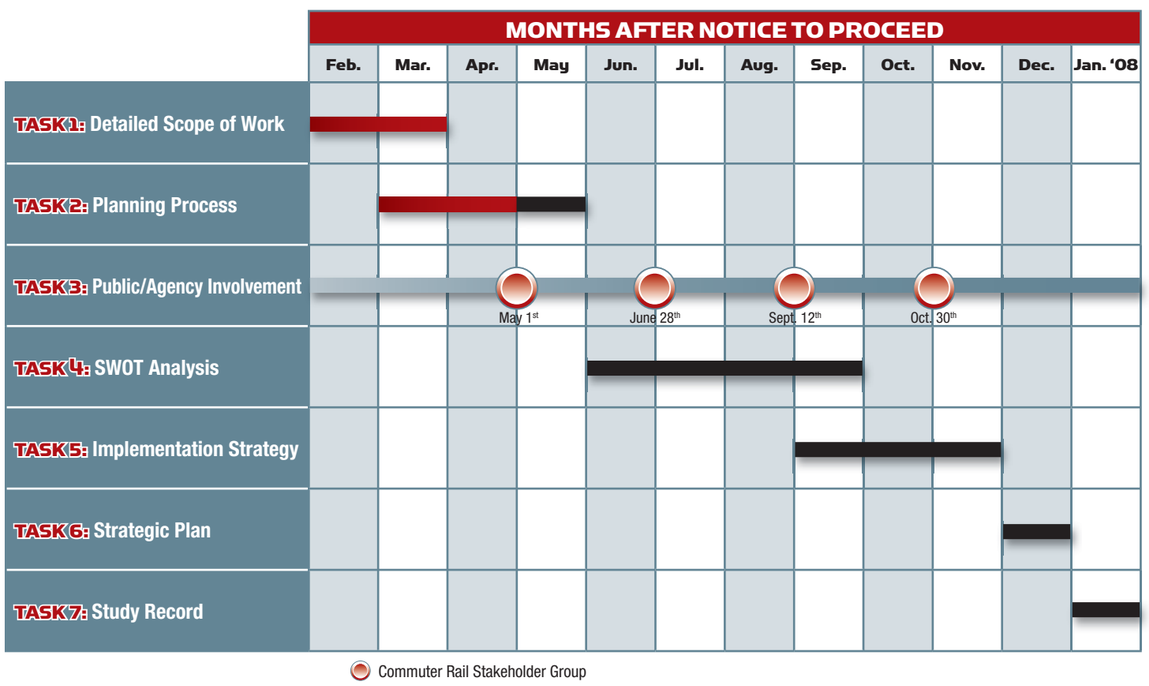
The Commuter Rail Strategic Plan process started in February 2007, and will conclude in January 2008. Throughout this process there will be four CRSG meetings.

CRSG Meeting #1 - Identify Key Issues.

CRSG Meeting #2 - Analyze Strengths, Weaknesses, Opportunities, and Threats (SWOT) issues.

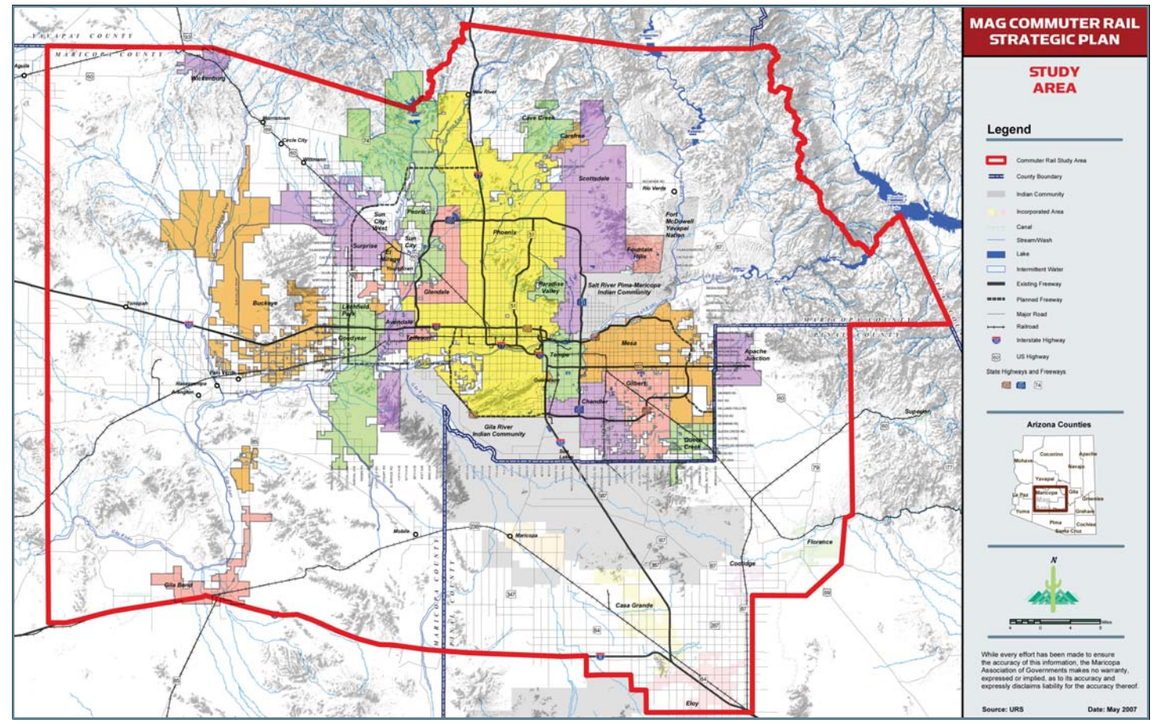
CRSG Meeting #3 - Prioritize key issues and translate SWOT analysis into an action plan.

CRSG Meeting #4 - Develop an implementation strategy.



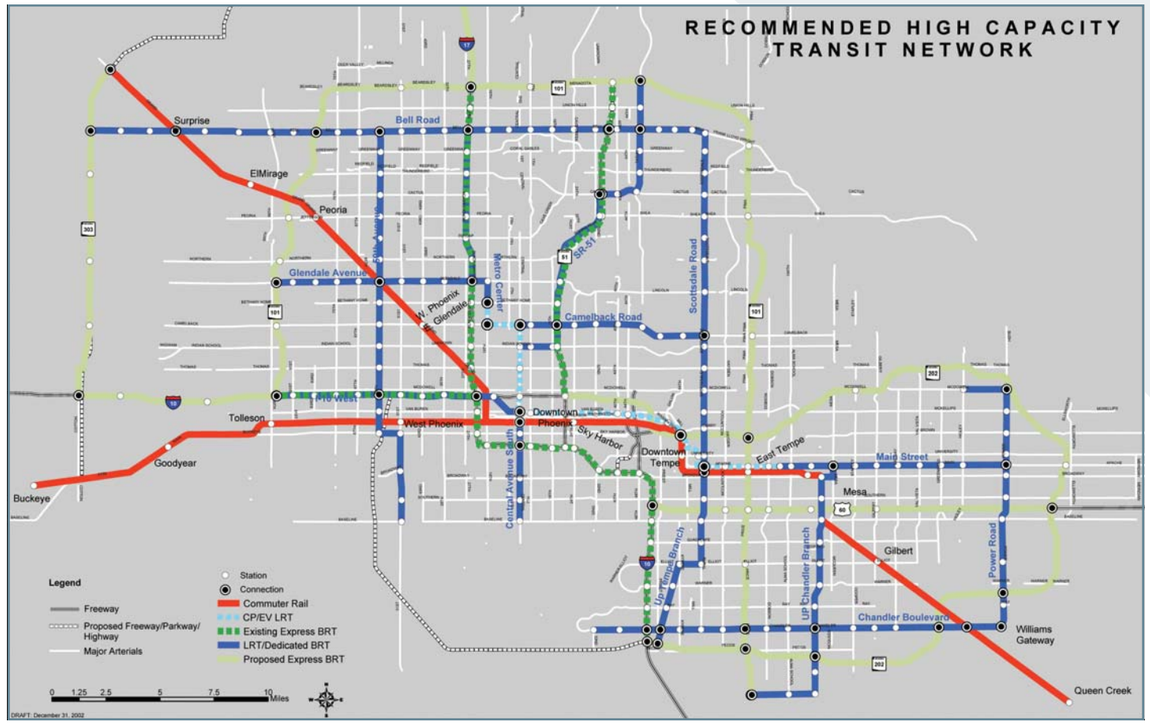
MAG COMMUTER RAIL STRATEGIC PLAN

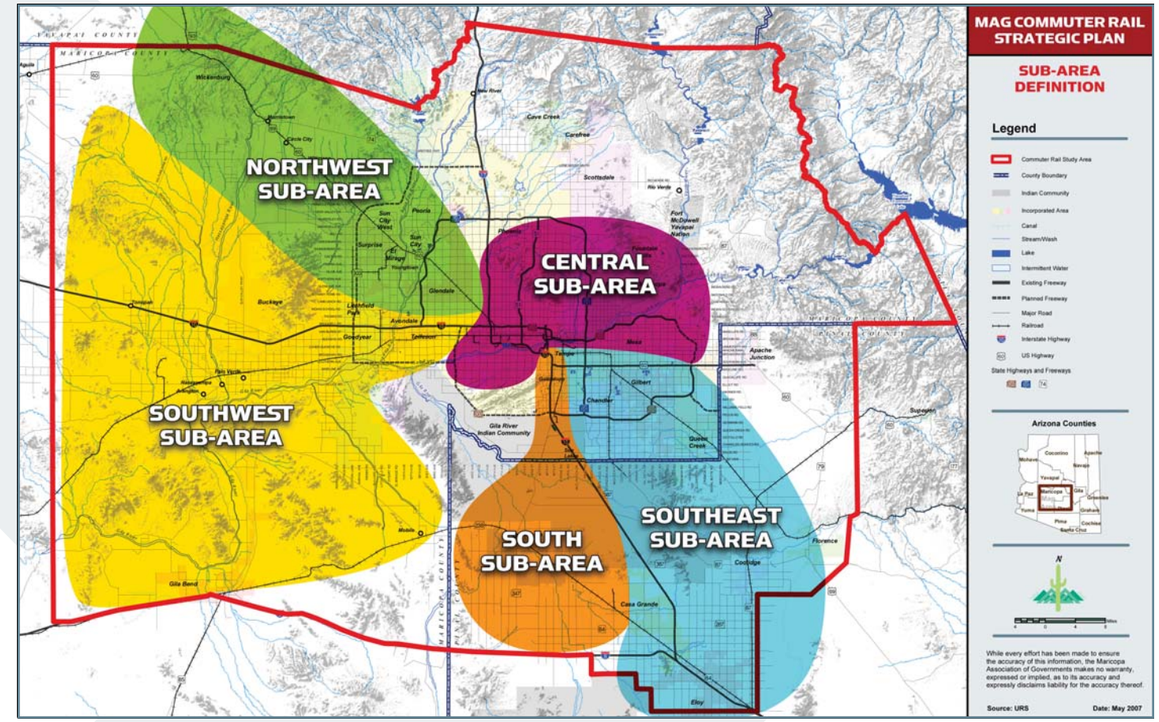
The Maricopa Association of Governments is conducting the Commuter Rail Strategic Plan (CRSP) for Maricopa County and northern Pinal County.



What Are the Project's Goals?

- Assess local and regional support for commuter rail.
- Identify and evaluate issues related to implementation, such as funding, governance and administration, environmental issues, land use and sprawl, capacity constraints, and other issues.
- Develop a methodology for evaluating potential commuter rail corridors.
- Establish and gain consensus for an implementation strategy and plan.





What Are the Project's Objectives?

Summarize previous studies - The MAG 2003 High Capacity Transit Study provides a strong foundation for the Strategic Plan. Concepts to consider in the update of the Commuter Rail Strategic Plan will include:

- The current Regional Transportation Plan and associated socioeconomic projections.
- The results of the Proposition 400 vote and infrastructure investments.
- Other system planning efforts for public transit, the highway system, and land development.
- An assessment of travel demand patterns from MAG forecasts.
- Identification of other potential rail corridors not included in the Regional Transportation Plan.

Analyze Existing and Planned Transportation Systems - Information on the existing and planned transportation networks will be collected and documented to develop an initial Opportunities and Constraints Assessment. The assessment will include:

- Travel demands in primary corridors.
- Operational considerations.
- Physical constraints.
- Development patterns and opportunities.

Collaborate with other agencies - One of the primary elements of the project's public involvement is the work of the Commuter Rail Stakeholders Group (CRSG). The CRSG consists of representatives of public and private agencies and entities involved in past studies and those that should be involved in future activities. The CRSG is scheduled to meet four times throughout the project to provide comments and help shape major recommendations. The CRSG has helped define subareas that will focus stakeholder involvement and create a sense of community building and linkages. The figure above depicts the location of all five subareas.

Conduct SWOT Analyses - A detailed assessment of Strengths, Weaknesses, Opportunities and Threats will be developed for each of the five subareas in the study, allowing stakeholders from every part of the subarea to begin examining major issues from a corridor or localized standpoint. The primary outcome of the SWOT analysis will be a conceptual commuter rail system strategic plan framework that describes:

- Physical locations, opportunities and constraints.
- Operational requirements and railroad requirements.
- Intermodal system interface points such as the highway system, public transit system and freight network.
- Potential opportunities for new rail corridors.

OVER >

Directions to Mesa Convention Center and Mesa Amphitheatre

We are located on the southeast corner of University Drive and Center Street

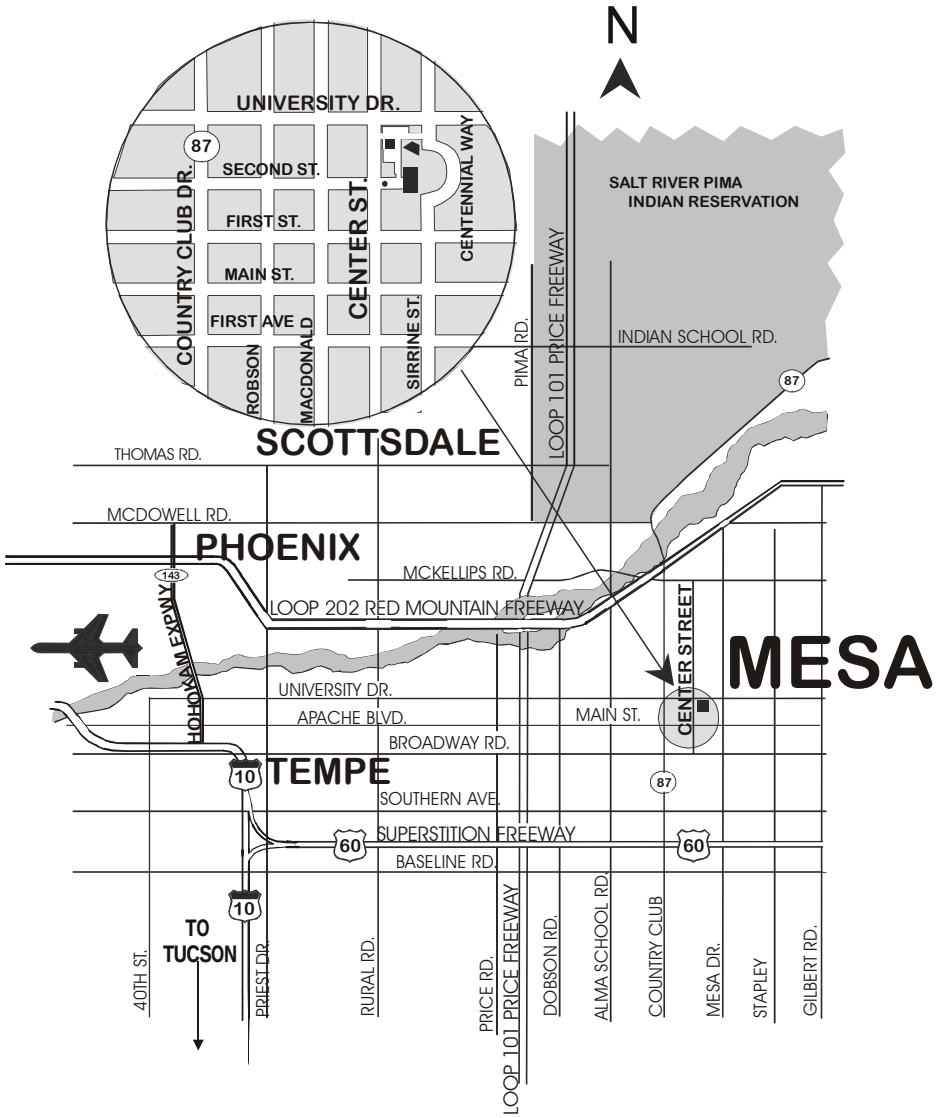
From the North-
I-17 South to I-10 East
I-10 East to the 202 Loop East
202 Loop East to Country Club
Country Club South to University, turn left
University East to Center, turn right
We are immediately on your left.

From Central Phoenix-
I-10 East to the 202 Loop East
202 Loop East to Country Club
Country Club South to University, turn left
University East to Center, turn right
We are immediately on your left.

From the East-
US 60 West towards Mesa
(the Superstition Freeway)
To Country Club, turn right
Country Club North to University, turn right
University East to Center, turn right
We are immediately on your left.

Mesa Convention Center

263 N. Center Street
Mesa, Arizona 85201
(480) 644-2178
www.MesaConventionCenter.com
www.MesaAmp.com



From the Northeast-
101 Loop South to 202 Loop East
202 Loop East to Country Club
Country Club South to University
University East to Center, turn right
We are immediately on your left.

From Tucson-
I-10 West to US 60 East towards Mesa, Tempe, Apache Junction (the Superstition Freeway)
US 60 East to the Country Club exit, turn left onto Country Club
Country Club North to University, turn right
University East to Center, turn right
We are immediately on your left.

From Payson-
Highway 87 South (it will become Country Club in Mesa),
Country Club South to University, turn left
University East to Center, turn right
We are immediately on your left.

CITY OF MESA
Great People, Quality Service!