Meeting Notes

Meeting Date: **November 12, 2009**

Subject: **Commuter Rail Stakeholders Group Meeting**

Introduction

Marc Pearsall, MAG, initiated the meeting by reviewing the meeting format and introducing Rick Pilgrim of the MAG Study Team, who outlined the agenda and gave the presentation:

- Schedule and Overall Project Progress
- Ridership Forecasting Update
- Peer City Review
- Vehicle and Maintenance Facility Recommendations
- Next Steps
- Q & A

Schedule and Overall Project Progress

Rick Pilgrim reviewed the schedule for the Commuter Rail System Study, Grand Ave Corridor Development Plan and Yuma West Corridor Development Plan. The System Study examines five corridors, including Grand Ave and Yuma West. There are three options on the East side of the Valley and two options on the West side of the Valley. Final reports will be drafted in January and submitted to the MAG Committees beginning in February or March.

Rick reviewed the ownership of the railroad tracks. The Burlington Northern Santa Fe (BNSF) Railroad owns the track along the Grand Ave corridor, and the Union Pacific (UP) Railroad owns the tracks along the Yuma West, Southeast, Chandler and Tempe corridor. Rick also presented several possible future extensions for commuter rail that go beyond the existing railroad tracks. Since commuter rail is designed to be used on longer distances, it can be an effective transit option for areas that light rail is not (beyond 30-mile trips).

Ridership Forecasting

Rick Pilgrim presented the results of the first two rounds of base model runs, which include examinations of the individual corridors as stand-alone systems, as well as examinations of several interlined options that have one or multi-corridor alternatives.

Individual Corridor Model Runs

The Grand Ave Corridor runs from Wittmann to Central Phoenix and has projected 2030 total daily boardings of 2,830. It is noteworthy that the highest station boardings are at

mid points along the corridor, indicating intra-corridor travel in addition to commuters doing to downtown Phoenix.

The Yuma West Corridor runs from Buckeye to Central Phoenix and has projected total daily boardings of 1,420. Ridership on this corridor is spread out among all the stations. Ridership is lower than Grand Ave, partly because the corridor is less developed, and partly due to geographic constraints.

The Tempe Corridor runs from West Chandler to Central Phoenix and has projected total daily boardings of 950. The West Chandler station has the highest boarding figure, and downtown Tempe is higher than downtown Phoenix.

The Southeast Corridor runs from Queen Creek to Central Phoenix and has projected total daily boardings of 6,450. It is by far the strongest corridor in terms of ridership, with downtown Tempe being the one of the strongest individual stations. However, after discussions with the UP Railroad, it appears that sharing the existing track may be difficult due to the volume of UP freight operations along the corridor.

The Chandler Corridor runs from Sun Lakes to Central Phoenix and has projected total daily boardings of 2,240. Downtown Tempe is again a strong station.

Rick answered a question from the audience about whether the model used in the ridership projections uses existing or planned housing for 2030. The model includes development included in the MAG plans for 2030, which offers a balanced approach of jurisdictions coming together to look at future population and employment.

Another audience member asked if the study looks at the impact of commuter rail on land use, which may increase as the commuter rail line is developed. Rick answered that commuter rail could increase land use, looking at the effect of light rail as an example, so there is some increase expected; however it is not estimated in the study, which takes a conservative examination. The MAG Study Team has suggested to different stakeholder group to start taking station locations into account for future planning to address this issue.

In an effort to compare proposed systems in Maricopa County to systems in other cities, the MAG Study Team calculated the number of boardings per revenue mile, which results in a number that can be compared nationally. The national average is 1.5 boardings per revenue mile. The Southeast Corridor has the highest with 4.2 boardings per revenue mile, the Grand Ave and Chandler Corridors both have 1.6, all of which exceed the national average. The Tempe Corridor and Yuma West Corridor both fall just below the national average with 1.1 and 1.0 boardings per revenue mile, respectively.

The Study Team made several base model run observations after the first round of modeling:

- Southeast, Grand Ave and Chandler corridors are the strongest corridors and rank well in boardings per revenue mile compared to peer cities of Dallas, LA and Seattle.

- There is heavy peak use and low off-peak use in all corridors.
- Overall, strong bus and light rail connections strengthen commuter rail ridership.

Interlined Corridor Model Runs

The Study Team examined several interlined options, creating larger corridors and multi-corridor alternatives and studied the effect on ridership.

One-corridor alternatives include: Grand Ave interlined with Southeast (Wittmann to Downtown Queen Creek- 9,960 total daily boardings and 3.1 boardings per revenue mile) and Yuma West interlined with Southeast (Buckeye to Downtown Queen Creek- 8,540 and 2.8).

Multi-corridor alternatives include: Grand Ave-Southeast interlined with Yuma West-Southeast (11,290 and 2.0), Grand Ave-Southeast interlined with Yuma West-Tempe (15,100 and 2.2), and Yuma West-Southeast interlined with Grand Ave-Tempe (17,960 and 2.6).

The Study Team made several model run observations after the round of interlined modeling:

- Interlining improves ridership and boardings per revenue mile over individual corridors
    - When Grand Ave or Yuma West are interlined with Southeast, ridership increase is under 10%
    - Boardings per revenue mile are improved the most on the Yuma West corridor when interlined with the Southeast corridor.
- There is heaving peak use and low off-peak use in all corridors.
- Grand Ave- Southeast interline is slightly more productive with 20/60 headways than at 30/60 headways (boarding per revenue mile changes from 3.1 to 3.2)

There was a question from the audience inquiring why the boardings per revenue mile figures are so low. Rick Pilgrim answered that the numbers are all above the national average for the interlined scenarios. Since the train runs up and down the same tracks repeatedly throughout the day, this accounts for the boardings per revenue mile figures being lower numbers. Commuter rail is considered a premium service with higher fares, but also has a higher farebox recovery rate than other modes of transit.

Another question asked whether travel time is taken into consideration in the study. Rick answered that it is- it is used to compare travel time using automotive alternatives to determine if there is a reduction when using commuter rail.

The next steps in the ridership forecasting process are:

- To review the highway network relative to commuter rail service line for comparison purposes
- Optimize bus routes as feeders into the commuter rail line
- Perform base corridor ridership sensitivity tests
- Estimate potential ridership for extensions
- Finalize the ridership analysis

Rick also showed a map of where there are possible commuter rail extensions in addition to the five corridors being studied. The Study Team is still running models and looking at the possibility of incorporating extensions into the study. Even if they are incorporated, it is unlikely that the extensions will be operational in 2030, but could possibly be ready by 2050 to start service. Planning on the extensions needs to start early to save land for the needed right-of-way. Rick also noted that ADOT is looking at potential rail service between Tucson and Phoenix.

Peer City Review

Rick Pilgrim briefly discussed some of the peer city systems that are being used for comparisons. These cities are similar to the Maricopa County area with respect to a commuter rail system. The peer city/region comparisons are:

- Altamont Commuter Express (ACE) – San Jose-Stockton, CA
- Coaster – San Diego-Oceanside, CA
- Front Runner – Salt Lake City-Ogden, UT
- Metrolink, San Bernardino Line – Los Angeles-San Bernardino, CA
- Music City Star – Nashville-Lebanon, TN
- New Mexico Rail Runner Express – Santa Fe-Albuquerque-Belen, NM
- Sounder, North Line – Seattle-Everett, WA
- Sounder, South Line – Seattle-Tacoma, WA
- Trinity Railway Express (TRE) – Dallas-Ft. Worth, TX

Vehicle and Maintenance Facility Recommendations

Rick Pilgrim presented the vehicle technology recommendation. Locomotive hauled coaches (LHCs) are powered by one diesel-electric locomotive engine, which pulls the train in one direction and pushes the train in the other. A cab car with operating controls is put on one end of the train and a locomotive at the other end. LHCs can run with 2 to 12 cars with a seating capacity of 140 passengers in each double-deck passenger car. LHCs are Federal Railroad Administration-compliant, meaning they meet federal requirements for crashworthiness and can share tracks with freight trains and operate concurrently with freight traffic. LHCs are used extensively in commuter rail systems throughout the US using off-the-shelf proven technology.

Rick also presented information on LHC clean diesel technology. There are new EPA clean diesel standards. The Maryland Area Regional Commuter (MARC) Rail System introduced new fleets of "green" locomotives that can reduce emissions over current fleet. Several commuter rail systems throughout the US are also testing the use of alternative fuels.

The Study Team is also examining commuter rail maintenance facility (CRMF) options. A CRMF facility would repair, maintain, clean, fuel and store commuter rail vehicles. A facility near downtown Phoenix would make the most sense with so many corridors in the system.

There is also a need for layover facilities that are smaller than a maintenance facility. These would be used for vehicle storage and minor vehicle cleaning and inspection. Layover facilities at the end of the line would store at most half of the fleet so they are ready for the morning runs. They could also be used at other points along the corridors. Several potential locations for layover facilities were shown on the system map. These facilities are being taken into account in the cost estimating work being done.

Next Steps

The next steps in the study are to:

- Finalize ridership forecasting, including the interlining scenarios, base corridor sensitivity tests and extensions
- Finalize the ranking of the corridors
- Finalize the Corridor Development Plan Draft Reports for Grand Ave and Yuma West
- Develop the System Study Draft Report

Q & A

Audience members were given the opportunity to submit written questions to Rick Pilgrim on provided cards. Rick provided the answers below.

Q: What are you doing to ensure that ADA (Americans with Disabilities Act) is followed so people with disabilities can use the train?
Jackie Ricker, Arizona Bridge to Independent Living (ABIL)
A: Having ADA-compliant trains and facilities is essential in the design process of the commuter rail system. Plans will be made to ensure accessibility, such as level boarding and proper restroom facilities. All trains on a commuter rail system are subject to ADA requirements.

Q: Bikes are an important part of transportation. Make sure you put sections to store the bikes – not seating area – just an area for bikes. What are your plans?
Jackie Ricker, ABIL
A: There are no specific plans yet, but the various different commuter rail cars that are available do have space to store bikes.

Q: When costs are forecasted (i.e., construction, vehicles, etc.) will you also delineate costs (potential) for right of way?
Jeanne Sapon, Sundt Construction
A: Yes; it is easy to overlook those costs, but it is a part of the railroad negotiations. There are many ways to deal with right of way (ROW)- sometimes the railroad is willing to build within their existing ROW, and sometimes not. It will likely depend on how the track is shared or if new construction of a second track is required.

Q: Re: Grand Ave Line- Should we first run to 303 in Surprise and then later look at running to Wittmann?
Ron Aames, City of Peoria
A: This is a great idea. Starting commuter rail service in stages is often easier for funding; once service begins and the successes are visible, it is easier to get more funding for additional service.

Q: Instead of using very outdated rails, can you use the Disney version of trains instead of building antiquated, unreliable and dangerous systems. Disney style can be raised off the ground and will avoid vehicle intersections.
Jackie Ricker, ABIL
A: Commuter rail is proven technology with a reasonable cost (10-20 million per mile as compared to heavy rail at 100 million per mile or light rail at 60 million per mile). Another type of rail would be 50 million or more per mile and less cost effective.

Q: Because of the distance to travel, will you put a car with 1) kennel area so pets can travel at a fee, 2) sleeper car/reclining chairs, 3) food car? If you're going to do this make it great!
Jackie Ricker, ABIL
A: There are opportunities available. Amtrack is a potential operator. Commuter rail is generally an amenity-oriented service.

Q: Regarding Grand Ave- Is there a "rule of thumb" that there should be a mid-day run even if the ridership is low?
Bob Maki, City of Surprise
A: Yes, you don't want to leave people stranded in the middle of the day. A mid-day trip may be a bus at first until ridership builds enough to support the cost of a train running mid-day.

Q: How can it connect to existing or future light rail?
Anonymous question
A: We will make it as easy as possible to connect to downtown events in Phoenix and Tempe, as well as to light rail- connections are important to make a commuter rail system feasible.

Q: Most of the routes shown do use BNSF track through Central Phoenix. A year or two ago, BNSF removed one of their tracks without Central. East of Central is pretty tight. Can new track be added past Chase Field?
Gene Holmerud, Coalition of Arizona Bicyclists
A: This will be a challenge. The Study Team engineers are looking at the issue, and how to possible integrate with Union Pacific (UP) versus creating a second track, which will double costs.

Q: Not shown is a northeast extension. Was Scottsdale considered and why is it not included in the concept?
Mike Cartsonis, Litchfield Park, AARP
A: There are no railroad tracks to Scottsdale, and no way to get there. It would require urban light rail or bus transit to connect.

Q: Does travel time model take into consideration the rest of the trip after getting off commuter rail? For example, I can take trip in my car to a business directly, whereas I have to transfer to another mode once I get off commuter rail.
Anonymous question
A: Yes, total travel time is calculated. A commuter rail system will need good circulators to support it.

Q: I-10 collector-distributor project may provide another option for accessing downtown Phoenix if rail can be accommodated within the corridor.
Stuart Boggs, RPTA
A: If we can't follow the UP track, it might be worth consideration to join with the Broadway curve project and take a multi-modal approach.

Q: Ridership is highest in the Southeast corridor- we should keep the pressure on UP because of the ridership potential.
Jay Smyth, Southwest Rail Corridor Coalition; verbal question
A: The Southeast corridor would be a great option, however the MAG Study Team wants to be clear on the constraints that currently exist with UP.

Q: Is Warren Buffet a commuter rail fan?
Verbal question
A: It will be interesting to see if there are any changes with BNSF with Mr. Buffet as the new owner. He is a good businessperson who already had a big stake in the railroad; he is just now taking over the rest. BNSF realizes that there is more than freight to the railroad business.

Commuter Rail Stakeholder Meeting #3 Sign-in
November 12, 2009

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Commuter Rail Stakeholder Meeting #3 Sign-in
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