

TEMPE SOUTH HIGH CAPACITY TRANSIT STUDY BRIEFING TO THE MAG TRANSIT COMMITTEE

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The purpose of the study is to evaluate high capacity transit improvements in the Tempe South Corridor Study Area shown in Figure 1. Two projects in the study area were included in the Regional Transportation Plan (RTP) as part of the 57 miles of high capacity transit plan that would be funded by Proposition 400, which included a voter-approved half-cent sales tax. They include: 1) a two-mile High Capacity Transit connection centered on Rural Road; and 2) a bus rapid transit (BRT) project along Scottsdale/Rural Roads connecting Scottsdale, Tempe, and Chandler. Both would connect with the 20-mile LRT Starter Line which began operating in late 2008.

Alternatives Considered

Since its initiation in late 2007, the Tempe South corridor study has evaluated a range of transit technologies (e.g., BRT, commuter rail, light rail transit [LRT], and modern streetcar) as well as several major north-south corridors including: 1) the Union Pacific Railroad—Tempe Branch; 2) Mill Avenue/Kyrene Road; 3) Rural Road; and 4) McClintock Drive. A two-tiered alternatives development process was used to evaluate alternatives. The first phase, or Tier 1, included a conceptual level evaluation that analyzed the advantages and disadvantages of the initial long list of potential alternatives to address the transportation needs of the corridor. The initial alternatives were subject to a “fatal flaw” screening at the Tier 1 phase; the most feasible alternatives were identified and retained for further analysis in the second phase, or Tier 2, of the analysis. The Tier 2 evaluation criteria were more quantitative in nature and considered factors such as ridership potential, capital costs, land use and economic development impacts, traffic issues, major environmental factors, conceptual engineering, and community goals and desires. The study began with a total of 11 transit options using the previously mentioned range of technologies and alignment routes within the study area. As a result of the alternatives analysis process and considerable public/stakeholder input throughout project development, two high capacity transit alternatives are being further evaluated: 1) Mill Avenue Modern Streetcar and 2) Rural Road BRT. Recommendations for the Tempe South corridor study will include both a Locally Preferred Alternative (LPA) that defines a specific route and transit mode for the project moving forward for federal funding consideration, and recommendations to advance other projects when additional funding becomes available.

Federal funding will be sought through the Federal Transit Administration’s (FTA) Section 5309 discretionary grant program. Specifically, funding will be sought from the Small Starts portion of the program for capital projects costing less than \$250 million and seeking less than \$75 million in funds.

Changes in Federal Evaluation and Recent Study Activities

METRO has continued to evaluate the streetcar project relative to FTA Small Starts criteria. Whereas, the federal eligibility criteria for Small Starts funding for the past several years focused almost solely on cost effectiveness of a project, the recent federal policy shift to support projects that enhance community livability is likely to enhance the project's potential for eligibility. Tasks undertaken to support demonstration of eligibility are summarized in Table 1.

Table 1: Recent Activities to Support Small Starts Funding Eligibility

Activity	Description
Transportation Model	<p>Develop small area model—Purpose to help identify and quantify riders and markets for streetcar not generally included in regional travel demand models. Examples include shorter neighborhood-oriented transit trips and trips using bicycles or walking which now may use the streetcar.</p> <p>Combine regional and small area model tools—to propose how streetcar operations could work with other transit services in the corridor.</p> <p>Regional model testing—to determine ridership changes due to varying assumptions such as distance riders walk to and from stations; average streetcar speeds; and transfer opportunities between streetcar and other corridor transit services.</p> <p>Special events—Determine impact of special events on daily ridership.</p> <p>Assess Land Use Assumptions in regional model—Working with MAG to adjust projections in the model to more accurately reflect anticipated projects expected to be built by 2015. Also includes identification of opportunity sites for redevelopment.</p>
Cost Benefit Analysis	<p>Quantified costs and benefits of a rail investment on 2 alignment options: 1) Mill Avenue—Rio Salado Parkway to Southern Avenue; and 2) Mill Avenue/Apache Boulevard—Mill from Rio Salado to Apache, and Apache from Mill to Dorsey/Apache LRT Starter Line Station. A stakeholder workshop was held in mid-January to identify upcoming plans, projects, and possible land use impacts. Early results show a positive return on investment for the Mill Avenue modern streetcar. Majority of expected benefits would result from community economic development effects that are produced to the added density, livability, and attractiveness of the neighborhoods near the route.</p>
Project Funding	<p>Although consensus is to advance both Mill Avenue Streetcar and Rural Road BRT, recent changes to regional transportation funding have deferred capital and operating funding for the Tempe/Chandler segment of Rural Road BRT beyond 2026. However, capital funding for modern streetcar still remains for the initial phase from Rio Salado/Mill to Southern/Mill. Project cost is approximately \$160 million (year of expenditure dollars) - which includes regional and federal funding (including \$75 million from the Small Starts program). Process to secure federal funding is competitive and, therefore, uncertain. Operations funding, a Tempe expense, will be approximately \$3 million annually, and cost would be offset by fare revenue and restructuring of underlying redundant bus service.</p>
Ash Avenue Alignment	<p>Staff has been requested to evaluate the potential to operate modern streetcar on Ash, instead of Mill, between Rio Salado and University. Ash Avenue parallels and is one block west of Mill. This option has been presented to Tempe city staff and the Community Working Group and will be presented to the community as a potential alignment option in planned public meetings. Over the summer, additional technical analysis will occur and will consider issues such as cost, ridership, cost/benefit analysis, land use and economic development impacts, neighborhood access, construction impacts and parking impacts. The results of the analysis will be presented to the community later this year.</p>

Project Schedule

- May 2010 – City Council passed Resolution No. 2010.59 reaffirming their commitment to advance both Mill Avenue streetcar and Rural BRT to position both projects for greatest opportunity for future funding, but recognizes that the region has deferred Rural BRT until after 2026. The resolution directs the City Manager to continue to ensure that City staff works to carry out the Council's direction to commitment to the modern streetcar project.
- June 2010 – public meetings on recently completed technical analysis and introduction of Ash Avenue alignment options; additional stakeholder outreach.
- August/September 2010 – additional community and stakeholder meetings on Tempe South Corridor Study recommendations including LPA.
- August/September 2010 – Study recommendations including LPA considered by Tempe Transportation Commission, City Council Transportation Committee and City Council.
- Fall/Winter 2010 - regional board actions on LPA and study recommendations.
- January 2011 - FTA request to enter Small Starts Project Development.
- July 2011 - FTA approval to enter Small Starts Project Development.
- 2017 (FY 2016) – Operations.

Figure 1: Tempe South Study Area

