



SCOTTSDALE/RURAL ROAD ALTERNATIVES ANALYSIS (AA)

**Maricopa Association of Governments
Transit Committee Meeting**

**December 9, 2010
1:30 pm**



Study Sponsors



Study Objectives



- Explore faster, more convenient and reliable transit options to serve this corridor
- Identify a preferred transit investment for implementation by 2016
- Prepare a funding plan to compete successfully for federal transit funds
- Begin planning for longer-term options that may involve a larger investment



Technical Advisory Group

Purpose: Review study materials, provide technical advice, and participate in community outreach

Participants:

- **Regional Public Transportation Authority (RPTA): Study sponsor and lead agency**
- **City of Scottsdale**
- **City of Tempe**
- **Valley Metro Rail**
- **Maricopa Association of Governments**



Study Location and Duration



- **Primary Study Corridor (major focus of effort)**
 - Rural Rd and Scottsdale Rd from the light rail starter line to Shea Blvd, slightly over 11 miles
 - Includes Goldwater Blvd/Drinkwater Blvd couplet through downtown Scottsdale
- **Secondary Study Corridor**
 - Scottsdale Rd from Shea Blvd to Frank Lloyd Wright Blvd, an additional 4 miles
- **Study began in February 2010 and concluded in December 2010**

Study Location Map



- Frank Lloyd Wright Blvd
- Greenway Rd
- Thunderbird Rd
- Cactus Rd
- Shea Blvd
- Doubletree Ranch Rd
- Indian Bend Rd
- Lincoln Dr
- McDonald Dr
- Chaparral Rd
- Camelback Rd
- Indian School Rd
- Thomas Rd
- McDowell Rd
- McKellips Rd
- Brown Rd
- University Dr
- Apache Blvd
- Broadway Rd

Study Background



- Previous studies and the MAG Regional Transportation Plan (RTP) have consistently identified this as a critical corridor for “higher-capacity transit”
- It is the third corridor scheduled in the RTP for arterial BRT service
- The MAG Regional Transit Framework confirmed strong transit demand in this corridor



Purpose of the Project



- Address current and forecast travel demand in the Scottsdale Rd/Rural Rd Study Corridor
- Improve and expand mobility options for north-south travel
- Connect large and diverse activity centers
- Promote planned urban growth and development patterns
- Lay the foundation and build demand for future high-capacity transit



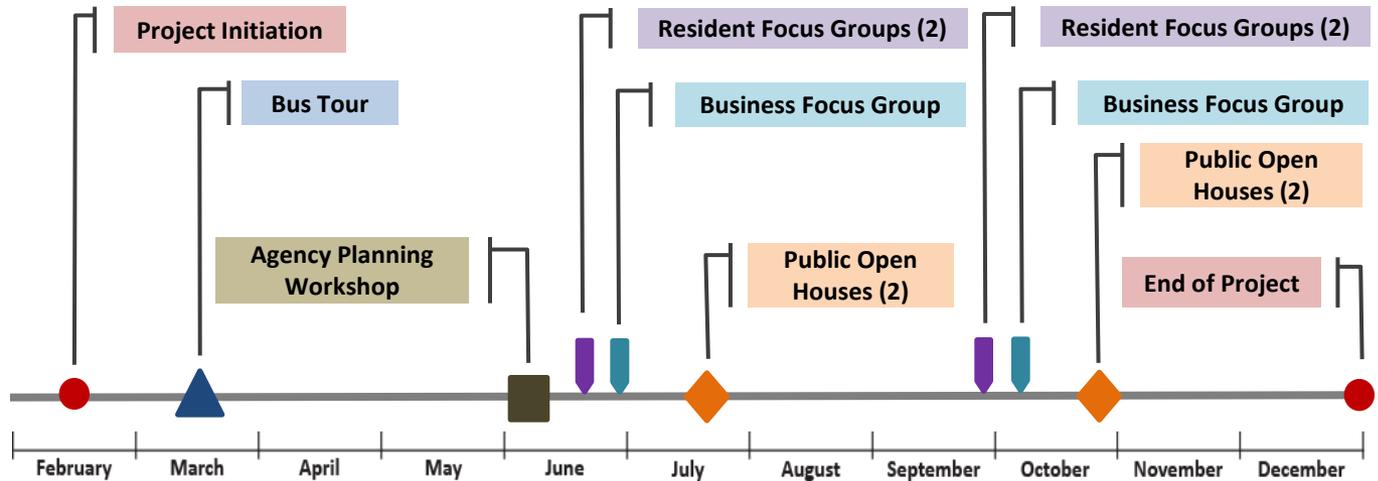
Need for the Project



- Few other options exist to mitigate transportation deficiencies
- Strong north-south travel demand has been demonstrated in this corridor
- Socioeconomic conditions and travel markets are conducive to higher-capacity transit

Recent plans and studies have identified a need for this type of service

Community Participation Timeline



Alternatives Evaluated



- 1: Limited stop bus—no bus priority or special amenities**
- 2: BRT sharing general traffic lanes throughout the corridor**
- 3a-c: BRT sharing restricted “BAT*/HOV” lanes with right turning vehicles and HOVs where appropriate**
 - In Downtown Scottsdale, (a) through (c) represent distinct alignment options**
 - *BAT = Business Access and Transit**
- 4: Exclusive median transit lanes, where feasible**

Downtown Scottsdale Alignments Considered

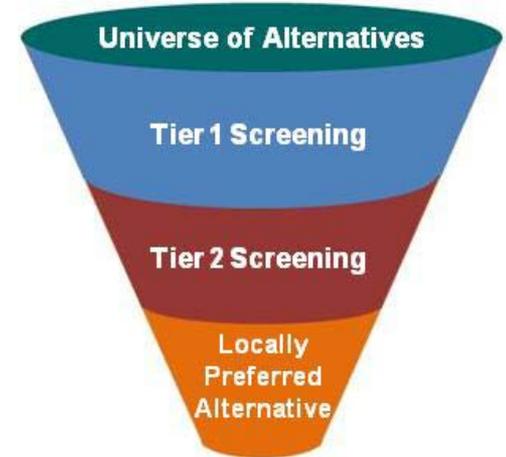


- i. **Scottsdale Rd, sharing the curb lanes with mixed traffic (Alts. 1, 2, 3a)**
- ii. **Drinkwater Blvd, with a BAT lane northbound and a shared lane southbound (Alt. 3b)**
- iii. **Split service between Drinkwater Blvd and Scottsdale Rd. Operate northbound on Drinkwater in a BAT lane, and southbound on Scottsdale Rd in a shared lane (Alt. 3c)**
- iv. **Goldwater Blvd, with a BAT lane southbound and a shared lane northbound (Alt. 4)**

Evaluation Process

- **Two-level screening and evaluation process**
 - Tier 1 Screening – largely non-quantitative assessment of alternatives
 - Tier 2 Screening – more comprehensive and quantitative, supplemented with more non-quantitative measures
- **Evaluate the alternatives for project benefits, community impacts, cost-effectiveness, land-use and economic development benefits, and implementation**

Screening Process



Evaluation Criteria



TIER 1

- **Transit service provided**
 - Frequency: BRT and local
 - Transit capacity (peak hour seats)
- **Transit travel time**
- **Roadway level of service**
- **Right-of-way and business access**
- **Financial feasibility**

TIER 2

Tier 1 Criteria plus:

- **Cost-effectiveness**
- **Community support**
- **Land use and economic development**
- **Implementation**

Tier 1 Conclusions



- **Alternative 1 (limited stop bus) is the least beneficial to transit riders**
- **Alternatives 2, 3(a-c) and 4 all provide about the same benefit**
- **However, Alternative 4 has greater negative impacts than the other BRT alternatives**
- **Further evaluation is required before Tier 4 can be ruled out**
- **Conclusion: proceed with Tier 2 evaluation of all six alternatives**



Tier 2 Conclusions



- **BRT (Alts. 2 through 4) can:**
 - Substantially reduce today's travel time
 - Attract more riders to corridor transit services
- **The marginal benefits of Alt. 4 are outweighed by its costs, impacts, and longer lead time**
- **Alt. 3 has drawbacks compared with Alt. 2:**
 - Small benefit relative to other impacts
 - BAT/HOV restrictions entail enforcement cost
 - Some public perception of inefficient lane use

Tier 2 Conclusions (contd.)



- **Scottsdale Rd or Drinkwater Blvd is the best route through Downtown Scottsdale**
- **Scottsdale Rd may be the best downtown alignment for shared lane BRT because of:**
 - **User expectations (this has always been the north-south transit corridor)**
 - **Easier transfer between BRT and local buses sharing the corridor**
- **But feasibility of Scottsdale Rd alignment in downtown Scottsdale requires further study**
- **Split alignment has few clear advantages and significant drawbacks**



Study Recommendations

Locally Preferred Alternative --

Alternative 2: BRT sharing general traffic lanes throughout the corridor

Options through downtown Scottsdale and station locations will be reviewed and refined in the follow-up Design Concept Report (DCR) and FTA Grant Application



Next Steps

- **Submit Final Report (mid-December)**
- **Prepare Draft Executive Summary and submit final version (mid-December)**
- **Complete formal review and approval process for AA**
 - **Scottsdale Transportation Commission and City Council (beginning December 16, 2010)**
 - **Tempe Transportation Commission and City Council (February and March 2011)**
 - **MAG Transit Committee and MAG Regional Council (following adoption by City Councils)**



Next Steps



- **RPTA initiation of DCR and Very Small Starts* (VSS) Grant Application: spring 2011**
- **Final Design**
- **Construction**
- **Operation of Service (planned for FY 2015)**

***assumes ridership threshold is met**



Questions

Documenting Current Transit Ridership to Prove VSS Eligibility (FTA 2007)



- **Project Sponsors must:**
 1. **Conduct a detailed count of existing riders in the corridor**
 2. **Estimate the number of existing riders that will benefit from the VSS project (must be at least 3,000 in the corridor on an average weekday)**
 3. **Submit documentation of these steps to FTA**
- **There is no service on nearby streets that can count toward the 3,000**
- **Rt 72 counts were conducted November 10 and will be reviewed this month**

Documenting Current Transit Ridership to Prove VSS Eligibility (contd.)

Why does VSS require the counts?

To ensure that the project produces enough travel benefits to be “cost-effective,” without the need for detailed travel forecasts or other complicated analysis to prove the project is justified

What if Rt 72 has fewer than 3,000 Average Weekday Riders?

1. Consider extending the corridor to capture more riders
2. Consider applying for Small Starts instead
 - a. The 3,000 minimum ridership does not apply
 - b. *But* cost-effectiveness and travel forecast requirements are more rigorous than VSS
3. Consider postponement of the project beyond 2015
4. Substitute programmed formula funds (Sec. 5307) if VSS grant application is not successful



TAG Members



- **Regional Public Transportation Authority (RPTA):**
Study sponsor and lead agency
 - Stuart Boggs, Project Manager
 - Janet Strauss
- **City of Scottsdale**
 - Teresa Huish
- **City of Tempe**
 - Greg Jordan
 - Dawn Coomer
 - Robert Yabes
- **Valley Metro Rail**
 - Wulf Grote
 - Jim Mathien
- **Maricopa Association of Governments**
 - Kevin Wallace
 - Marc Pearsall

