

VALLEY METRO/Regional Public Transportation Authority

Regional Paratransit Study

Final Report

Prepared by

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with

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EXECUTIVE SUMMARY

In October of 2006, the Valley Metro/Regional Public Transportation Authority (RPTA) contracted with TranSystems Corp., RLS & Associates, Inc. and Gunn Communications, Inc. for a comprehensive study of the area's paratransit services to:

- ◆ *Assess each of the paratransit programs in the region, as well as the taxi subsidy and mileage reimbursement programs, identify ADA and non-ADA operational issues and needs, and propose operational or policy recommendations that serve to reduce or contain costs, improve service levels and meet ADA, non-ADA and other specialized transportation needs.*

- ◆ *Define the operational and administrative characteristics of a regional paratransit program, and identify the potential benefits and corresponding challenges of development of a regional program to the RPTA, its members and system users.*

At a "micro" level, the study developed information and provided recommendations to assist each of the paratransit programs in the region to operate services in the most efficient and effective manner possible. At the "macro" level, the study considered alternative regional service designs and developed a regional service plan for the area that would improve mobility for people with disabilities and satisfy the requirements of the Americans with Disabilities Act (ADA).

In the first phase of the study, conducted between October of 2006 and April of 2007, the major community and county-based paratransit programs were studied. On-site visits were conducted for each program and service data was gathered and analyzed. Detailed reports containing observations and recommendations for each of the eight community-based paratransit programs were prepared and submitted separately to each community and paratransit program.

In the second phase of the study, conducted from April through August of 2007, alternative system designs for a more regional paratransit program were studied and developed. Information was gathered about paratransit services in Dial-a-Ride systems in 11 peer systems. The advantages and challenges of each alternative design were identified and discussed with RPTA staff, member community staff, and at several public meetings. Through this process a preferred regional service design was identified.

The third phase of the study proposes a detailed implementation plan for the consensus regional service design as well as supplemental services and recommends a change in the eligibility process.

RESEARCH AND PUBLIC INVOLVEMENT

A number of sources were used to inform the study. Local studies were reviewed, peer city experience was studied and analyzed, stakeholder input was solicited and incorporated and DAR programs and alternate transportation programs were studied. Regional travel patterns were analyzed and DAR service was compared with fixed route service.

Local Studies

A number of other studies of paratransit services have been conducted by the RPTA and Maricopa County in recent years; these plans were reviewed.

Peer Cities

Information was solicited from 11 peer cities and their experience provided guidance throughout the study. The study found that all 11 peer systems operate paratransit services regionally. It also found that all 11 peers included in-person interviews and/or assessments in their determinations of ADA paratransit eligibility.

Community Participation

Throughout the project the community has been involved at every level. A technical Advisory Committee (TAC) composed of representatives from RPTA member communities and other local jurisdictions met six times during the study to help set the goals and objectives, provide input on study methodology and work tasks, review draft and final products and provide guidance to the study.

Twenty five staff and elected city officials were queried about the perceived strengths and weaknesses of current services. While some were quite satisfied with the current service and wondered if regionalization would reduce quality, many expressed concern about their ability to provide resources adequate to meet the growing Dial-a-Ride demand. Interest was expressed in alternate programs such as taxi and mileage reimbursement.

The need for seamless regional travel was identified by most officials and staff. This was also identified in the RPTA Rider Satisfaction Survey and the Area Agency on Aging Needs Assessment.

A broader Stakeholders Group including representatives from the disability and senior communities, human service agencies and paratransit passengers and transportation professionals met at three key points in the study in three locations, East Valley, West Valley and Central area and more than 50 people attended each of the meetings. The group identified the barriers to Dial-a-Ride use by people with disabilities and older adults. Lack of weekend service, trip denials, unmet trip requests and the need for

additional resources and vehicles were identified. Growing demand was a concern and the need for a more thorough eligibility process was advocated. Expansion of other travel options such as taxi programs and free bus passes were recommended. Coordination, the need for standardized service policies and issues with cross-jurisdictional travel were revealed. The Stakeholders Group studied different service designs and reached consensus on a preferred design. A fourth stakeholders meeting was scheduled to receive feed-back on the final recommendations.

CURRENT DIAL-A-RIDE PROGRAMS

Ten different public paratransit programs are provided within Maricopa County. This includes eight city-based Dial-A-Ride (DAR) programs, the County-based STS Service, and the SCAT non-profit service. Phoenix DAR, Paradise Valley DAR and Southwest Area DAR are all provided by the same operator.

With the cooperation and assistance of staff, each paratransit system listed below was examined on site by two members of the TranSystems study team.

- ◆ East Valley Dial-A-Ride (DAR)
- ◆ El Mirage DAR
- ◆ Glendale DAR
- ◆ Peoria DAR
- ◆ Phoenix DAR
- ◆ Paradise Valley DAR
- ◆ Southwest Area DAR
- ◆ Special Transportation Services (STS)
- ◆ Sun Cities Area Transportation, Inc. (SCAT)
- ◆ Surprise DART

Scheduling and dispatch operations were observed and bus operators were interviewed. Detailed reports were developed on every aspect of service including area served, Dial-a-Ride and Fixed Route service areas, service policies and performance, statistics and performance measures, cost performance indicators, service area gaps, other transportation programs and regional travel and transfers.

Area Served

One program – Special Transportation Services (or STS) – provides service throughout the county. The other programs serve specific cities or groups of communities. Three; East Valley DAR, Phoenix DAR and SCAT, serve groups of communities. El Mirage DAR, Glendale DAR, Peoria DAR, and Surprise DAR serve single communities.

In most cities, general (non-ADA) DAR service is provided throughout all parts of the community. In some communities, though, DAR service is provided only to persons who are “ADA paratransit eligible” and only in areas required by federal ADA

regulations. Transfer points have been established where riders transfer between Dial-a-Ride programs.

Dial-a-Ride and Fixed Route Service Areas

The Americans with Disabilities Act of 1990 (ADA) requires that complementary paratransit service be provided in all areas within $\frac{3}{4}$ mile that have non-commuter fixed route transit, on all of the days and times that fixed route service is available. In addition, small areas that are surrounded by fixed route corridors must be served with complementary paratransit service even if they fall outside the $\frac{3}{4}$ of a mile from fixed routes.

Service Policies and Performance

Service policies as well as performance vary in the Dial-a-Ride programs in terms of eligibility, days and hours of operation, fares, trip purpose, trip reservation policies, vehicle wait times, no-shows and late cancellations, missed trips, PCA and companion policies, rider assistance, service refusal. The lack of standardized policies was cited as an issue by riders and complicates regional travel.

Service Performance Standards also vary among systems. All DAR systems have zero trip denial policies for ADA riders; for non ADA trips the policies vary. Standards for on-time pick-up and drop-off, on-board time and telephone hold time are different among systems. Productivity Goals are formalized in some systems and informal in others.

Statistics and Performance Measures

Throughout the region during the study year, there were a total of 1,078,611 trip requests, 1,067,162 scheduled trips, and 864,791 provided trips. Of the 864,791 provided trips, 48.9% (422,538) were ADA paratransit eligible trips. The remaining 51.1% (442,253) were non-ADA trips.

Vehicle hours numbered 629,394 with 526,037 of these being revenue vehicle-hours. Vehicles were driven a total of 8,960,583 miles, with 7,674,973 of these being revenue vehicle-miles.

Cost Performance Indicators

The region-wide total operating cost per boarding (which includes companions and PCAs) was \$27.61, with a low \$12.08 to a high of \$55.58. Total operating cost per vehicle-revenue-hour averaged \$47.96, with a low of \$31.34 and a high of \$81.19. Average total operating cost per revenue-mile for the region was \$3.29, ranging from a low of \$2.03 to \$6.63.

Service Area Gaps

ADA paratransit service appears to be provided in all areas required by the ADA regulations and in some cases beyond the regulatory requirements.

Service for other, non-ADA populations also is provided in most cities in the RPTA area, but not all. In these communities, there could be a need for DAR service for persons who do not qualify as ADA Paratransit Eligible, but who have limited transportation options.

Supplemental Transportation Programs

In addition to Dial-a-Ride service Taxi User-Side-Subsidy programs provide a travel subsidy directly to the user of service who then selects a for-hire (taxi and van services) vendor to provide the trips. Taxi programs provide time-sensitive, dedicated trips at a reasonable cost and siphon-off from Dial-a-Ride some of their more difficult trips. At the time of the study taxi programs are provided in Phoenix, Scottsdale, Glendale, Surprise and East Valley. These programs were examined, in terms of eligibility, service area, days and hours of service, fares and levels of subsidy, trip purposes, costs and funding.

A lesser-used transportation alternative is a mileage reimbursement program for individuals who recruit a “volunteer” to drive them. Only Mesa currently offers such a program.

Regional Travel and Transfers

Regional travel patterns for the seven DAR programs plus STS were analyzed to identify trip origin and destination pairing for 18,376 trips made during a sample week.

The travel patterns exhibited by DAR and STS riders for this sample week were compared to general public fixed route travel patterns. What emerged is that DAR and STS riders travel out of their local DAR area only 8.2% of the time. General public fixed route riders make regional trips 20% of the time.

These results appear to support rider comments about difficulties experienced making inter-jurisdictional DAR trips. Riders who travel regionally must transfer between each city-based DAR service. Transfer locations have been established to facilitate the transfers. Some systems have a bit of flexibility in the form of a one mile buffer zone.

A number of communities contract with Maricopa County STS to provide non-ADA regional trips.

Even though some accommodations have been made to facilitate travel between DAR areas, significant issues still exist. A number of recent Dial-a-Ride Passenger Surveys have identified dissatisfaction with regional travel.

An analysis of 123 transfer trips was made during the week of September 17-23, 2006. The total travel time and wait time at the transfer location was compared to the travel time if the same trip was taken on the fixed route bus service with the following results:

- ◆ Travel on DAR took longer than on fixed route for 65% of the trips studied
- ◆ 27% of the trips took more than 30 minutes longer than on fixed route
- ◆ When a transfer is made, the extra time required to travel by DAR appears to be due to long wait times at transfer sites
- ◆ 46% of riders who made a transfer waited 31 minutes or more at transfer sites
- ◆ Dial-a-Ride drivers do not wait with passengers at transfer locations

This analysis indicated that regional trips currently may not meet the ADA requirement for comparable service.

REGIONAL DIAL-A-RIDE ALTERNATIVES

Based on the experience of 11 Peer Cities, a broad set of paratransit design alternatives were examined in light of their applicability to the RPTA region and analyzed in terms of their advantages and challenges. Five designs resulted, progressing from today's highly decentralized approach (Option 1) through increments of greater centralization (Option 5 being a single regional provider). The Options were as follows:

Option 1. Current Dial-a-Ride Structure with Regional Service Policies

Option 2. Modified Dial-a-Ride Structure with Regional Service Policies

- Three Sub-regions (East, West, Central), each with a single service provider
- Creation of buffer zones for cross-regional trips—transfers only for longer trips
- Administration by RPTA
- Local option for types of service to be provided in that community

Option 3. Centralized Reservation and Scheduling with Decentralized Operations

- Central Call Center for all ADA trips and optionally for non-ADA trips
- Standardized policies for ADA trips
- Region-wide ADA service for seamless trips across city boundaries
- Vehicle operation and dispatch by service providers contracted to the Call Center; some dedicated vehicles for regional trips
- Administration of the call center by a contracted broker or RPTA
- Management by a contracted broker of alternate service such as taxi programs

- Option to operate non-ADA service separately from the regional service
- Option 4.** Centralized Reservations, Scheduling and Dispatch, Decentralized Operations
- Regional Call Center to handle reservations, scheduling and dispatch
 - Dedication of most vehicles to the trips assigned by the call center
 - Option to operate non-ADA service separately from the regional service
 - Call center administered by a single entity
 - Contracting with service providers by RPTA
 - Service providers would be assigned trips by the call center
 - Both ADA and most non-ADA policies would be standardized
- Option 5.** Single Regional Provider
- All service, including operations reservations and scheduling provided by a single provider
 - Administration by RPTA, including service quality monitoring, eligibility determination and customer service

REGIONAL DIAL-A-RIDE PREFERRED SERVICE DESIGN

The five DAR options were presented to the Technical Advisory Committee who narrowed the field to Options 2, 4 and 5. Option 4 was the unanimous choice of the Stakeholders.

Characteristics of Option 4 include:

- Centralized dispatch for all “dedicated” services (that is drivers who are only performing trips for the RPTA program)
- Provision of service by three contracted service providers who would run their operations based on daily run manifests provided by the Call Center.
- Separate contracts and vendors for the Call Center and the service providers.

Implementation of the regional service is recommended to occur in two phases;

- Phase 1, ADA paratransit service would be regionalized throughout. In addition, non ADA service provided by East Valley Dial-a-Ride and Phoenix would be regionalized.
- Phase 2, non-ADA service in the West Valley will be coordinated through the Call Center. However the communities could also continue their separate services for non-ADA trips and use the coordinated service for regional trips. (The full report of this study details the implementation process).

COSTS AND FUNDING OF PREFERRED SERVICE DESIGN

RPTA additional administrative costs are estimated to be \$923,600 in the first year of the regional program. This cost would be the same for either the Phase I service or the full regional service. Proposition 400 funding is an option for funding these administrative costs. After year one, it could be expected that these costs would increase by about 3% per year.

Call center startup costs for the Phase I design are estimated at \$1,714,000 and at \$1,885,400 for the full regional service. Unallocated Proposition 400 funding for this one-time start-up cost is an option.

A range is provided for the annual call center operating costs for the first year. For the Phase I design, the cost range is estimated to be between \$2,509,100 and \$2,574,603. For the full regional service, the range is estimated at between \$2,844,295 and \$2,918,313. After the first year, it could be assumed that annual call center operating costs would increase at a rate of about 5-10% per year in the near future. Initially, these costs would be allocated to member communities along with provider operating costs. It is recommended, though, that the RPTA explore the option of using federal Section 5309 capital funding to cover 80% of the call center costs. Federal capital funding can be used to fund "Mobility Manager" services. In our opinion, the regional call center, which would coordinate the provision of ADA, senior and general public paratransit costs, would qualify as a "Mobility Manager." If this were done, only 20% of the call center costs would then be allocated to member communities.

Annual service provider costs for the first year are estimated at between \$27,037,289 and \$30,639,475 for the Phase I design. Service provider operating costs are estimated at between \$30,669,566 and \$34,845,500 for the full regional service. It is proposed that all of these costs be allocated to member communities based on the amount of service received by resident. As is currently done, member communities would use several different available funding sources to cover these costs. This would include fares collected from riders and credited to each member community, LTAF funding, Proposition 400 funding that has been allocated to the member communities, T2000 funding, city general fund monies and other funding deemed appropriate by each member community.

In the first year of the proposed regional program (2010), the total call center costs and service provider costs are estimated to be \$31,400,000. The estimated cost of continuing current Dial-a-Ride programs in the same year is \$29,400,000.

Finally, an estimated \$3,420,000 in capital costs are expected in the first year for the Phase I design and \$3,720,000 is estimated in year one for the full regional service. As is currently done, these costs would be funded with 80% federal S.5307 funding. The remaining 20% would be allocated to member communities – again based on the amount of service delivered to residents.

As Table 1 indicates, a total of \$2,637,600 would be required for Phase I in the first year from unallocated Proposition 400 funding to cover the added RPTA administrative costs as well as the call center start-up costs. After the first year, the additional RPTA administrative costs would need to continue to be covered by Proposition 400 funding. Assuming that administrative costs increase 3% per year from FY2010 through FY2026, the total amount of unallocated Proposition 400 funding needed through FY2026 is estimated to be \$21,835,302. At the time of this writing, the RPTA has indicated that about \$64 million of the expected Proposition 400 funding remains unallocated.

Table 1. Summary of Year One (FY2010) Costs and Proposed Funding for Phase I Design and Full Regional Paratransit Service

	Phase I Service Design	Full Regional Service
RPTA Administrative Costs	\$923,600	\$923,600
Proposed Admin. Funding:		
Unallocated Proposition 400	\$923,600	\$923,600
Call Center Start-Up Costs	\$1,714,000	\$1,885,400
Call Center Start-Up Funding:		
Unallocated Proposition 400	\$1,714,000	\$1,885,400
Call Center Operation Costs	\$2,509,100 - \$2,574,603	\$2,844,295 - \$2,918,313
Call Center Operation Funding:		
Member Communities	\$2,509,100 - \$2,574,603	\$2,844,295 - \$2,918,313
Service Provider Operations Costs	\$27,037,289 - \$30,639,475	\$30,669,566 - \$34,845,500
Member Communities	\$27,037,289 - \$30,639,475	\$30,669,566 - \$34,845,500
Capital Costs	\$3,420,000	\$3,720,000
Capital Funding:		
Federal S.5307 Capital	\$2,736,000	\$2,976,000
Member Communities	\$684,000	\$744,000
Total (All Costs)	\$35,603,989 - \$39,271,678	\$40,042,861 - \$44,292,813
Funding:		
Federal S.5307 Funding	\$2,736,000	\$2,976,000
Unallocated Proposition 400	\$2,637,600	\$2,809,000
Member Communities (Prop 400 allocations & other local funds)	\$30,230,389 - \$33,898,078	\$34,257,861 - \$38,507,813

ADDITIONAL RECOMMENDATIONS

In addition to recommending that paratransit be regionalized, the study recommends the following additional services.

ADA Eligibility Determinations

An in-person process for determining eligibility for ADA service is recommended. This will ensure that people who are certified meet the criteria for ADA service and will help to identify people whose mobility options can be enhanced through supplementary programs including travel training.

An accurate assessment of ADA eligibility is a component in facilitating seamless travel between jurisdictions. Improved regional travel will likely increase demand for service. In order for this improved regional travel to be affordable, it's important that it be provided to those who, because of their disability, are unable to use fixed-route transit.

Furthermore, more thorough eligibility determination will ensure that federally-required ADA service policies are met and that resources remain for communities to provide non-ADA service to seniors and other transit dependent people who do not qualify for ADA service.

Supplemental Transportation

In addition to implementing a regional paratransit service, we strongly recommend that the RPTA and its members expand travel options to people with disabilities, older adults and other transit dependent people including:

- Travel training to facilitate greater use of the fixed-route service
- Free fixed route bus and rail fares for people who are certified ADA eligible through an in-person assessment process
- Expansion of taxi programs throughout the region
- Paratransit to fixed route feeder systems

CONCLUSION

Implementation of the regional paratransit service plan identified in this study, along with the additional recommendations for in-person eligibility determination and supplemental programs, will provide improved service quality and better mobility for riders. Such service will bring the paratransit program for the region into a more comparable status with the current fixed route bus service.

Introduction

In October of 2006, the Valley Metro/Regional Public Transportation Authority (RPTA) contracted with TranSystems Corp., RLS & Associates, Inc., and Gunn Communications, Inc. for a comprehensive study of the areas paratransit services.

The goals of the study were to:

- ◆ **Assess each of the paratransit programs in the region, as well as the taxi subsidy and mileage reimbursement programs, identify ADA and non-ADA operational issues and needs, and propose operational or policy recommendations that serve to reduce or contain costs, improve service levels and meet ADA, non-ADA and other specialized transportation needs.**
- ◆ **Define the operational and administrative characteristics of a regional paratransit program, and identify the potential benefits and corresponding challenges of development of a regional program to RPTA, its members and system users.**

At a “micro” level, the study developed information and provided recommendations to assist each of the paratransit programs in the region with operating services in the most efficient and effective way possible. At the “macro” level, the study considered alternative regional service designs and developed a recommended regional service plan for the area.

In the first phase of the study, conducted between October of 2006 and April of 2007, the eight major community and county-based paratransit programs were studied. On-site visits were conducted to each program and service data was gathered and analyzed. Detailed reports containing observations and recommendations for each of the eight community-based paratransit programs were prepared. **These reports have been submitted separately to each community and paratransit program.**

In the second phase of the study, conducted from April through August of 2007, alternative system designs for a more regional paratransit program were studied and developed. Information was gathered about paratransit services provided in 11 peer systems. The advantages and challenges of each alternative were identified and discussed with RPTA staff, member community staff, and at several public meetings. A preferred regional service design was identified.

The study involved the community from the outset and throughout every phase of the project. Participants in the process were kept informed throughout the study and were

invited at every phase to provide ideas and oversight. Public involvement was facilitated through the development of two working groups.

A Technical Advisory Committee (TAC) was formed at the start of the study. The TAC included representatives from all RPTA member communities and other local jurisdictions. This included intergovernmental relations representatives, transportation and transit department representatives, planning department representatives and key staff from local DAR operations. The TAC also included representatives from the Maricopa Association of Governments, and RPTA staff. Local jurisdictions and other agencies represented on the TAC are shown in the table below. The TAC met six times throughout the study to help set the study goals and objectives, provide input on study methodology and work tasks, review draft and final products, and provide overall guidance and input.

Regional Paratransit Technical Advisory Committee

Local Jurisdictions	
City of Avondale	City of Mesa
City of Chandler	City of Peoria
City of El Mirage	City of Phoenix
Town of Gilbert	Town of Queen Creek
City of Glendale	City of Scottsdale
City of Goodyear	City of Surprise
Maricopa County	City of Tempe
Other Agencies	
Arizona Council of the Blind	Regional Public Transportation Authority
Maricopa Association of Governments	

A broader Stakeholder Group was also formed at the beginning of the study. This group included representatives from local disability advisory committees and commissions, local and regional disability service organizations, university and community college disability resource centers, local and regional human service agencies, senior centers, local DAR operations and paratransit users. The Stakeholder Group met at three key time points in the study.

A first Stakeholder Group meeting was held in December of 2006 to get Stakeholder input on DAR service issues and needs. This meeting was attended by 47 individuals and significant input on issues with current DAR services as well as service barriers and unmet needs was obtained. The current process for determining ADA paratransit eligibility, and possible changes involving in-person interviews and assessments, were presented and discussed.

A second meeting was held in March of 2007 to receive input on possible alternative designs of a regional paratransit service. A total of 51 individuals attended this second meeting. Several possible regional service design alternatives were presented and explained by the TranSystems study team. Attendees were then divided into smaller

working groups to debate the advantages and challenges of each alternative service design. Each working group summarized its discussions to present to the group as a whole, and consensus was obtained on a preferred regional design alternative.

A third meeting was held in July of 2007 and was attended by 69 individuals. The purpose of the meeting was to get input on proposed regional paratransit service organization, policies, and operating procedures. The TranSystems study team presented and explained the proposed regional paratransit service design and obtained group feedback on system organizational issues. Proposed policies including the service area, days and hours of operation, fares, reservation policies, and rider assistance policies also were presented and discussed.

Two surveys were also conducted to get rider and broad community input. One survey was administered as part of the study and one was administered concurrent to and as a supplement to the study. The TranSystems study team developed an on-line survey that requested community feedback on DAR service issues and needs. This survey was distributed to community members and riders through the Stakeholder Group. The second was an extensive DAR rider telephone survey conducted by WestGroup under separate contract to the RPTA. This survey requested rider feedback on each aspect of current DAR operations. Survey input was then used by the study team to help identify service issues, barriers and needs.

Section 1 of this report contains a summary of recent studies of the areas paratransit services. Section 2 then provides a detailed overview of current community-based and county-operated Dial-A-Ride (DAR) and paratransit programs. It is important to note that the information in these sections was collected in the Fall of 2006 and the Winter of 2007. The descriptions and data are based on the programs as of January 2007. Changes may have been made in more recent months that may not be reflected in this report.

Section 3 presents service barriers and unmet needs identified by riders, local agencies and other stakeholders. Section 4 provides estimates of demand for paratransit services based on recent ridership trends as well as national paratransit demand models.

Section 5 then proposes a change to the process currently used to determine who is eligible for regional paratransit service – specifically the determination of riders considered ADA paratransit eligible. Section 6 provides a plan for a more regional paratransit service design. A short-term as well as a long-term element are included.

Section 7 discusses several related and supplemental services which could expand travel opportunities for riders with disabilities and seniors and also make the provision of service to these populations more cost-effective. Finally, Section 8 provides an implementation plan for the recommended regional paratransit services as well as the supplemental services and programs.

Section 1. Recent Plans and Studies

A number of other studies of paratransit services have been conducted by the RPTA and Maricopa County in recent years. As part of this study effort, these plans were reviewed. In particular, the study team examined the following reports and studies:

- ◆ the RPTA's 1992 ADA complementary paratransit plan and annual updates;
- ◆ the 1998 Regional Dial-a-Ride Analysis;
- ◆ the 2003 Regional Transit System Study;
- ◆ the 1999 MAG Special Needs Transportation Study;
- ◆ the 2006-2007 MAG Coordination Study;
- ◆ the Regional Transportation Plan 2007 Update.

Following is a summary of key information and data from each of these studies and reports.

1.1. 1992 ADA Complementary Paratransit Plan and Plan Updates

The Americans with Disabilities Act of 1990 (ADA) requires that all public entities operating fixed route public transit service provide complementary paratransit service to persons with disabilities who, because of their disability, were unable to use the fixed route services. The ADA also requires that all public entities prepare plans indicating how they intended to comply with these requirements. Plans were required to be developed and submitted to the Federal Transit Administration (FTA) by January 26, 1992.

In 1992, local fixed route bus service was provided in Chandler, Glendale, Guadalupe, Mesa, Peoria, Phoenix, Scottsdale, and Tempe and in small portions of Paradise Valley and the Sun City area of Maricopa County. This bus service was funded by the RPTA and the cities of Chandler, Mesa, Phoenix, Scottsdale and Tempe. There also were six dial-a-rides operating in areas of Maricopa County served by local fixed route bus service. These included the Glendale Dial-a-Ride, Mesa Dial-a-Ride, Peoria Dial-a-Ride, North Phoenix Dial-a-Ride, Sun Cities Area Transit (SCAT) and Tempe/Scottsdale Dial-a-Ride.

To meet the ADA planning requirements, the RPTA prepared a Joint Complementary Paratransit Plan for itself and the cities of Chandler, Mesa, Phoenix, Scottsdale and Tempe and submitted the plan to the FTA. The City of Glendale submitted an individual plan to the FTA. Both plans were approved by FTA; however, the FTA strongly urged that Glendale join the regional plan. In December 1992, the Glendale City Council authorized Glendale's participation in the regional plan and the RPTA's January 1993 Regional ADA Plan Update reflected Glendale's participation.

The Regional ADA Complementary Paratransit Plan called for modification of the existing dial-a-rides and the addition of new service in uncovered areas to provide the required complementary paratransit service.

The initial plan and plan updates included an implementation timetable to bring the region into full compliance. The schedule included:

- ◆ adding service to cover all areas within $\frac{3}{4}$ mile of local fixed route service;
- ◆ implementing eligibility certification, appeals and visitor policies;
- ◆ allowing advance reservations and reservations on Sunday;
- ◆ providing Saturday service when and where local fixed route buses operated on Saturdays;
- ◆ extending service hours to match local bus service hours;
- ◆ implementing a regional dial-a-ride transfer policy for ADA eligible persons; and
- ◆ modifying dial-a-ride services to ensure capacity requirements were met for all ADA paratransit eligible persons.

Annual plan updates were prepared and submitted by the RPTA until January 1996, at which time FTA no longer required them.

While the initial timeline called for full compliance in March 1996, the schedule was modified over the course of the annual updates. Full compliance was attained when the RPTA began providing complementary paratransit service in the portions of Paradise Valley served by fixed route in late 1996.

1.2 1998 Regional Dial-a-Ride Analysis

A comprehensive analysis of the region's Dial-a-Ride services was conducted in 1998. The analysis was performed by Transportation Planning and Policy (TPP), a private consulting firm based in Costa Mesa, California, and AMA, a private consulting firm based in Claremont, California.

The study, commissioned by the RPTA, had two phases, which were

- ◆ to resolve service quality concerns with three Dial-a-Ride services: Phoenix Dial-a-Ride, Mesa/Chandler/Gilbert Dial-a-Ride and Scottsdale/Tempe Dial-a-Ride¹; and
- ◆ to examine regional demand-response issues.

Phase I assessed the three Dial-a-Ride services through detailed statistical reviews and comparison with similar systems in other communities. Recommendations were made

¹ Note: since this study was completed in 1998 the Mesa/Chandler/Gilbert Dial-a-Ride has been combined with Scottsdale/Tempe to form the East Valley Dial-a-Ride

for each Dial-a-Ride. Phase 2 developed short and long term alternatives to address regionalizing the Dial-a-Ride services.

Phase I Recommendations

The study provided findings and recommendations for each of the Dial-a-Ride systems. Key findings and recommendations from the study are provided below.

Phoenix Dial-a-Ride:

Findings:

- ◆ Quality, quantity and cost effectiveness fell below the mid range indicator in comparison to other paratransit services as measured by on-time performance, productivity, passengers per mile and subsidy per passenger. Operating cost per vehicle hour however was low. Fleet size was adequate for the service.

Recommendations:

- ◆ Develop policies and procedures manual
- ◆ Modify to curb to curb service (from door to door)
- ◆ Clarify soft boundary rules
- ◆ Limit the number of trips that can be booked with one phone call
- ◆ Clarify policy for number of packages allowed
- ◆ Institute computer based transfer logs
- ◆ Eliminate rewriting of ADA reservations
- ◆ Book return demand trips up front
- ◆ Develop a policy regarding passenger that can not be left unattended
- ◆ Institute uniform complaint policy
- ◆ Produce alternate format information materials
- ◆ Modify phone system to create trip request queues and sequencing
- ◆ Improve passenger fare security
- ◆ Purchase larger vehicles

Mesa/Chandler/Gilbert Dial-a-Ride:

Findings:

- ◆ Performance indicators are generally above those of Phoenix Dial-a-Ride with a service of comparable size. The subsidy per passenger is low. There are inherent conflicts between operation policies and procedures.

Recommendations:

- ◆ Modify on-time standards for ADA and non ADA trips
- ◆ Modify to curb to curb (from door to door service) for most passengers
- ◆ Develop a policy regarding passengers who can not be left unattended
- ◆ Clarify soft boundary rules
- ◆ Clarify standing trip policies
- ◆ Adopt a trip denial policy
- ◆ Eliminate the “no negotiation” rule
- ◆ Improve scheduling of standing trips to insure availability
- ◆ Institute computer based transfer logs
- ◆ Clarify vehicle wait-time procedures
- ◆ Institute uniform complaint handling and reporting
- ◆ Implement and monitor no-show policy
- ◆ Clarify system goals and refine performance management analysis
- ◆ Produce alternate format information materials

Tempe/Scottsdale Dial-a-Ride:*Findings:*

- ◆ Performance indicators are average for the region but low compared to paratransit systems in other communities. Subsidy per passenger is higher than many services. There are inherent conflicts between operation policies and procedures. The PASS scheduling system is not adequately used.

Recommendations:

- ◆ Modify on-time standards for both demand and ADA trips
- ◆ Develop a policy regarding passengers who can not be left unattended
- ◆ Clarify soft boundary rules
- ◆ Clarify standing trip policy
- ◆ Adopt a trip denial policy
- ◆ Eliminate the “no negotiation” rule
- ◆ Institute scheduled runs for remote destinations
- ◆ Institute computer-based transfer logs
- ◆ Clarify vehicle wait- time procedures
- ◆ Institute uniform complaint handling and reporting
- ◆ Clarify system goals and refine performance management analysis
- ◆ Produce alternate format information materials

Phase II Recommendations

The findings and recommendations for each of the three Dial-a-Ride systems from Phase I revealed certain patterns which were then itemized in a recommendation for regionalization that was presented in Phase II of the study. Regionalization of paratransit services was recommended in order to minimize or eliminate the “seams” that exist between the Dial-a-Rides in the Phoenix metro area. Regionalization in several different areas was recommended. This included regionalization of:

- ◆ Public information and assistance
- ◆ Eligibility certification
- ◆ Service policies
- ◆ Service operation
- ◆ Service support

Short term alternatives for regionalization within existing funding were then presented. These included recommendations to:

- ◆ Develop consensus on goals for regional service
- ◆ Develop and adopt standardized service policies
- ◆ Identify common performance measures and system specific objectives
- ◆ Develop and implement standard complaint procedures
- ◆ Establish uniform fares
- ◆ Develop a regional Dial-a-Ride bus book
- ◆ Produce information materials in accessible formats
- ◆ Improve long-distance efficiencies through preplanned tours
- ◆ Encourage sharing of training and maintenance resources among systems
- ◆ Long term alternatives within existing funding
- ◆ Develop and implement cross boundary procedures
- ◆ Implement central customer service function
- ◆ Institute a single number for trip requests (prefix routing) initially for ADA trips
- ◆ Adopt a regional Dial-a-Ride Identity (like Valley Metro for fixed route)
- ◆ Implement DAR identity cards
- ◆ Institute centralized maintenance/rehab program

Finally, several long term recommendations were made. The study noted that implementation of these long-term recommendations would require additional funding. The long-term recommendations included:

- ◆ Assess and enhance the ADA certification processes
- ◆ Assess and redefine service area and zonal boundaries
- ◆ Consider alternatives for long distance trips
- ◆ Develop and implement community-based routes and fixed route service enhancements to enable use by current Dial-a-Ride users

- ◆ Evaluate benefits of installing Mobile Data Terminals and Automatic Vehicle Locators in Dial-a-Ride vehicles
- ◆ Implement region-wide computer network to facilitate information and transfers
- ◆ Consider a “wide area network” between Dial-a-Ride dispatch offices

1.3 2003 Regional Transit System Study

This study was completed on July 10, 2006. It was conducted by LKC Consulting Services Inc., S.R. Beard & Associates, LLC, and Hexagon Transportation Consultants, Inc.

The Regional Transit System Study (RTS) is a component of the Regional Transportation Plan, developed for the Maricopa Association of Governments. The RTS developed a multi modal plan, to be implemented over 20 years, that evaluates all modes of public transportation (except for fixed guideway/high capacity transit) to determine current and future transportation needs. Paratransit demand and estimated fleet size is estimated for 2010 and 2020.

The study analyzed existing Dial-a-Ride services and compared current levels of service with future transportation needs. The analysis of existing service includes:

- ◆ Population per Dial-a-Ride vehicle;
- ◆ Service statistics for the region’s Dial-a-Rides including hours of service, boardings, miles, hours and costs;
- ◆ Eligibility standards for each Dial-a-Ride; and
- ◆ Characteristics of each Dial-a-Ride, including trips, revenue hours and revenue miles

To estimate the future demand for paratransit services the following steps were taken: set assumptions; estimate demographics and estimate future demand.

Set Assumptions- Paratransit is assumed to be two tiered, ADA and non ADA. Trip rates resembling those of Dallas Area Rapid Transit (DART) were used to represent Valley Metro. It is assumed that trip characteristics will remain the same in 2030

Estimate demographics- The proportion of people over 65 and people with a disability was based on the 2000 US Census.

Estimate future demand- Future demand estimates below are projections based on the 2000 US Census.

Table 1.1. Estimated Demand for ADA Paratransit, 2030

MPA	Population	ADA Riders	ADA Trips	Annual Revenue Hr	Annual Revenue Mi
Total	7,011,532	7,807	1,103,200	492,200	6,781,000

Table 1.2. Estimated Demand for Senior Paratransit 2030

MPA	Population	% Senior	Senior Riders	Annual Trips	Annual Revenue Hr	Annual Revenue Mi
Total	7,011,532	11%	11,046	1,245,000	554,200	7,645,000

1.4 MAG Special Transportation Needs Study

The Maricopa Association of Governments (MAG) prepared a Special Transportation Needs Study in June of 1999. This region-wide study identified populations in need, identified current services, assessed existing travel patterns, identified gaps in existing services, examined existing funding from both FTA and other health and human service programs, and recommended both short- and long-term actions. The study's identified gaps in service still have some merit despite this study being eight (8) years old. Gaps included: lack of service in outlying communities; difficulties in regional or cross-jurisdictional travel; and a lack of evening and weekend service.

The study advanced 12 options for addressing unmet needs, including better coordination between public transit and human services transportation to providing service delivery options under various categorical funding sources.

Key study recommendations included the following:

- ◆ Establish brokerages as a means of supplying accessible, effective, affordable transportation services to the target population;
- ◆ Strengthen carpool and vanpool programs in the region;
- ◆ Develop significant mechanisms to communicate available services and how to access them;
- ◆ Develop service alternatives;
- ◆ Pay neighbors, families, and friends for automobile transport for individuals in the target population groups;
- ◆ Encourage faith-based organizations to provide volunteer rides for TANF clients;
- ◆ Expand Wheels-to-Work program;
- ◆ Examine consolidation of human service agency vehicle fleets;
- ◆ Examine the consolidation of various dial-a-ride programs;
- ◆ Use school buses to provide neighborhood services;

- ◆ Request ADOT to seek a waiver to permit use of Section 5310 vehicles to serve low income populations;
- ◆ Develop partnerships to coordinate non-service functions of public transit and human service agency transportation;
- ◆ Establish service routes designed to meet the needs of the target population;
- ◆ Employ stricter eligibility standards for dial-a-ride users.

1.5 MAG Human Services and Senior Transportation Assessment and Coordination Project

The Maricopa Association of Governments (MAG), working in conjunction with the Arizona Department of Transportation (ADOT), and their partners, the Governor's Office, Department of Economic Security (DES), and the Arizona Health Care Cost Containment System (AHCCCS) (all part of the Arizona Rides initiative), developed a local coordination and implementation plan that enhances coordination between and among human service agencies receiving Federal financial assistance in order to increase the efficiency and effectiveness of funds used on client transportation and to reduce redundant or overlapping/duplicative service.

MAG, representing communities throughout the Greater Phoenix, AZ metropolitan area, developed the plan consistent with the *United We Ride* framework and the locally developed coordination plan requirements of SAFETEA-LU. The vision for this plan is to create a seamless human services transportation system that will result in greater knowledge, access, and coordination. People will benefit by having increased mobility and enhanced quality of life. This plan lays the foundation for supporting activities that promote coordination throughout the MAG region. These efforts will be based on existing and emerging services for older adults, persons with disabilities, and low income individuals.

As part of this project, a survey of 147 transit and human service agencies was undertaken; a project stakeholders group was formed to review various coordination options, and a plan was developed consistent with the goals of the federal Coordinating Council on Access and Mobility (CCAM) set forth on February 7, 2007 to increase ridership for the target population by using existing assets, simplifying access, and increasing customer satisfaction. The plan:

- Creates a comprehensive inventory of service providers.
- Establishes a formal process to build sub-regional collaborations that will focus on improving the coordination within the MAG region.
- Establishes coordination strategies as a priority for funding under specified FTA programs.
- Builds the foundation to consider more expansive coordination strategies in later years.

This plan further embraces the “family of services” concept that recognizes that no single mode of transportation can meet the needs of all people. In this method, a variety of services appropriate to client needs are provided.

The plan articulates short-range and long range actions. Under short-range actions, an on-line directory of services will be created as a synthesis of data collected from existing inventories. Second, on-going assessment of coordination activities will be conducted by the organizations that administer the Sections 5310, 5316, and 5317 programs. Long-range strategies include potential implementation of a one-stop, centralized reservation and call center and the establishment of regional service zones that would allow for the sub-regions to adopt the strategies most appropriate for their area while achieving greater coordination.

1.6 Regional Transportation Plan 2007 Update

As the designated Metropolitan Planning Organization (MPO) for transportation planning in the Maricopa County Region, the Maricopa Association of Governments (MAG) is responsible for the preparation of a Regional Transportation Plan. The performance-based RPT provides a 20 year vision that addresses all modes of transportation including highways and freeways, streets, mass transit, airports, bicycle and pedestrian facilities and special needs transportation. This plan is developed through a cooperative effort among government, business and public interest groups and includes extensive public participation. The final decision-making body of MAG is the MAG Regional Council which is comprised of elected official from each member agency.

References to Paratransit

The RPT contains the following definition for “paratransit services” in the region:

“Paratransit Services- *Paratransit includes all modes of transit service generally intended to serve only seniors and persons with disabilities. Paratransit service is demand-response and provides curbside pick-ups and drop-offs. Paratransit consists of two types of service: (1) ADA paratransit service, which is required by the Americans with Disabilities Act (ADA) for all areas within a ¼ mile of a fixed route; and (2) senior paratransit service which is an optional service provided for the senior population and disabled patrons who do not meet ADA eligibility criteria. Under the RTP, ADA paratransit service is regionally funded while senior paratransit service (Dial-a-Ride) continues to be locally funded”.*

The RTP also notes that services for seniors and persons with disabilities are a “regional concern” and references work being done by the MAG to coordinate transportation programs for these populations. Specifically, the RTP states:

“The Transportation needs of special populations are a regional concern. Limitations caused by age or disability often complicate the process of securing transportation for a portion of the population. In addition those who are seeking employment or training and those who lack financial resources find limited transportation options available to reach second shift and weekend employment. Special Transportation Services (STS) provide transportation assistance to the most transit dependent populations in Maricopa County which include the elderly, disabled and low-income individuals.

As part of the effort to plan and coordinate special needs services, MAG is in the process of preparing a Public Transit/Human Services Plan. This plan is aimed at ensuring maximum feasible coordination between and among human services agencies receiving Federal transportation dollars, increasing the efficiency and effectiveness of funds utilized for transportation, and reducing redundancy/overlap of service.”

Paratransit services are identified as one of the modes that will be supported with regional transit funding over the next 20 years. Estimates of expenses as well as farebox revenues for paratransit service are provided. Operating expenses for ADA paratransit services are estimated over the 20 year timeframe to be about \$277.3 million. Capital expenses for ADA paratransit services are estimated to be about \$99.2 million. Operating expenses are also estimated at \$250.6 million for locally-funded paratransit services. Various funding sources, including local, regional, state and federal funding is identified to meet these estimated operating and capital costs. Farebox revenues for paratransit services are estimated for the 20 year period to be about \$62 million.

Section 2. Current Paratransit Services

Each paratransit, taxi and mileage reimbursement program was examined by the TranSystems study team. Detailed reports on each system were prepared. This section contains summary information that describes the key features of all of the systems.

The paratransit services examined included:

- ◆ East Valley Dial-A-Ride (DAR)
- ◆ El Mirage DAR
- ◆ Glendale DAR
- ◆ Peoria DAR
- ◆ Phoenix DAR
- ◆ Paradise Valley DAR
- ◆ Southwest Area DAR
- ◆ Special Transportation Services (STS)
- ◆ Sun Cities Area Transit, Inc. (SCAT)
- ◆ Surprise Dial-A-Ride Transit (DART)

The taxi subsidy and volunteer driver mileage reimbursement programs examined included:

- ◆ Phoenix Taxi Subsidy Program for Employment
- ◆ Phoenix Taxi Subsidy Program for Dialysis
- ◆ Scottsdale Cab Connection
- ◆ Scottsdale Taxi Subsidy Program for Dialysis
- ◆ Glendale Taxi Subsidy Program
- ◆ East Valley Ride Choice Program
- ◆ Mesa Mileage Reimbursement Program

Section 2.1 provides information about the paratransit programs. This includes information about the service areas of each program, the organizational structure and design of each program, and the staffing and vehicle fleet information for each program.

Section 2.2 then contains information about the service policies and performance standards adopted by each paratransit system. This includes policies such as rider eligibility, the days and hours of operation, fares, trip reservation policies, and other operating policies.

Section 2.3 contains key service and performance statistics for all of the paratransit services. This includes statistics such as ridership, vehicle hours and vehicle miles, as well as performance measures such as productivity, average trip length, on-time

performance and travel times. This section also contains information about rider travel patterns. Local and regional travel information is presented. Regional paratransit travel is also compared to general public travel on the fixed route system.

Section 2.4 provides information about paratransit costs and funding. This includes operating costs and funding as well as capital costs and funding.

Information about the taxi subsidy and mileage reimbursement programs in the RPTA area is then included in Section 2.5. This includes information about eligibility for each program, the service areas, the days and hours of service, fares and levels of subsidy, and trip purposes served. Cost and funding information is also provided.

As was indicated in the “Introduction” to this report, the information about current programs and services presented in this section was collected in the Fall of 2006 and the Winter of 2007. The descriptions and data are based on the programs as of January 2007. Changes may have been made in more recent months that may not be reflected in this report.

2.1 DAR and STS Service Areas, Organization and Design

DAR Service Areas

Ten different public paratransit programs are provided within Maricopa County. This includes eight city-based Dial-A-Ride (DAR) programs, the County-based STS service, and the SCAT non-profit service. These ten public paratransit services are listed in the preceding “Introduction” section.

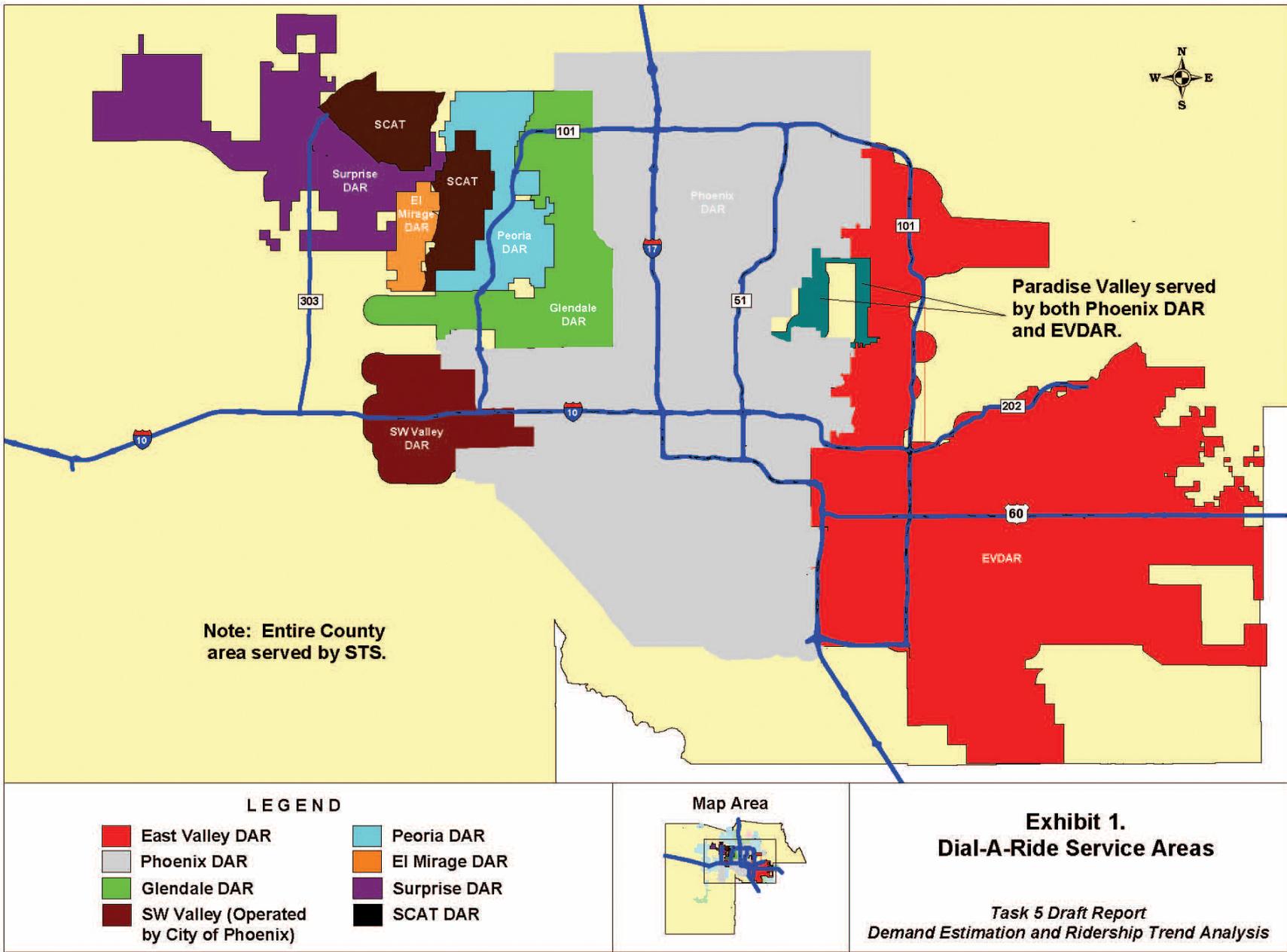
While there are a total of ten public paratransit programs, the Phoenix DAR, Paradise Valley DAR and Southwest Area DAR are all provided by the same operator. *There are therefore a total of eight DAR operations in the county.*

One program – Special Transportation Services (or STS) – provides service throughout the county. The other programs serve specific cities or groups of cities. Table 2.1 on the following pages also lists the communities served by each DAR program. Figure 2.1 on the following page shows the service areas of the eight city-based DAR programs plus the SCAT service. Because the Phoenix DAR, Paradise Valley DAR and Southwest Area DAR are operated as one system, the areas on Figure 1 are combined and the three programs are listed together in Table 1 under Phoenix DAR. Figure 1 also shows the areas within each program where ADA paratransit service is provided.

Table 2.1. DAR Programs and STS: Communities Served, Management and Organization, Vehicles, and Ridership

	East Valley DAR	El Mirage DAR	Glendale DAR	Peoria DAR	Phoenix DAR	Special Transportation Services (STS)	Sun Cities Area Transit, Inc. (SCAT)	Surprise DART
Communities Served	Chandler, Gilbert, Guadalupe, Mesa, Scottsdale, Tempe, some Paradise Valley trips	El Mirage	Glendale	Peoria	Phoenix, Paradise Valley, Avondale, Goodyear, Litchfield Park, Tolleson	Maricopa County	Sun City, Sun City West, Youngtown	Surprise
Areas Within Which ADA Service Is Provided	The full DAR areas with the exception of Zones C-4 and C-5 in Chandler.	NA. No non-Express fixed route in El Mirage, so ADA service not required.	Parts of Glendale that are within ¾ of a mile of non-commuter (non-Express), regional fixed bus routes	Parts of Peoria that are within ¾ of a mile of non-commuter (non-Express), regional fixed bus routes	All of Phoenix, plus parts of Paradise Valley, Avondale, Goodyear, Litchfield Park and Tolleson that are within ¾ of a mile of non-commuter, regional fixed bus routes	NA. STS serves riders who are ADA eligible but their trips are not necessarily ADA required or eligible trips.	Parts of Sun City that are within ¾ of a mile of non-commuter (non-Express), regional fixed bus routes	NA. No non-Express fixed route service in Surprise, so ADA service not required.
Areas Receiving Broader Non-ADA Service	All areas of Chandler, Gilbert, Scottsdale, and Tempe.	All areas of El Mirage	All areas of Glendale	All areas of Peoria	All of Phoenix	All areas of Maricopa County	All areas of Sun City, Sun City West, and Youngtown	All areas of Surprise
Service Managed By	Regional Public Transportation Authority (RPTA)	City of El Mirage, Community Services Department	City of Glendale, Transportation Department, Transit Division	City of Peoria, Public Works Department, Transit Division	City of Phoenix, Public Transit Department	Maricopa County Department of Human Services	Sun Cities Area Transit System, Inc.	City of Surprise, Department of Community Initiatives
Service Operated By	Veolia Transportation	City of El Mirage, Community Services Department	City of Glendale, Transit Division	City of Peoria, Public Works Department, Transit Division	MV Transportation	Maricopa County Department of Human Services	Sun Cities Area Transit System, Inc.	City of Surprise, Department of Community Initiatives
Total # of Vehicles in the Fleet	63	1	21	10	120	62	10	7
FY05/06 Ridership (Boardings/Year)	220,153	1,466	89,055	42,560	409,037	102,856	57,091	12,578

Figure 2.1. DAR Service Areas



As shown, three of the DAR operations serve groups of cities. The East Valley DAR program serves the communities of Chandler, Gilbert, Guadalupe, Mesa, Scottsdale, Tempe, and certain trips to and from Paradise Valley. The cities of Phoenix, Paradise Valley, as well as the southwest area communities of Avondale, Goodyear, Litchfield Park and Tolleson are all served as by the Phoenix DAR operation. And Sun Cities Area Transit, Inc. (SCAT) provides DAR service to the communities of Sun City, Sun City West, and Youngtown.

The other city-based DAR programs serve single communities. These include El Mirage DAR, Glendale DAR, Peoria DAR, and Surprise DART.

In most cities, general (non-ADA) DAR service is provided throughout all parts of the community. In some communities, though, DAR service is provided only to persons who are “ADA Paratransit Eligible” and only in areas required by federal ADA regulations (explained later in this report). The communities where DAR service is limited to only ADA riders and areas include Guadalupe, Paradise Valley, Avondale, Goodyear, Litchfield Park, Mesa, and Tolleson.

To facilitate regional travel, several of the DAR programs will transport riders coming into their areas and transferring from either fixed route services or other DAR programs. East Valley DAR, Phoenix DAR (including the Paradise Valley and Southwest Area programs), Glendale DAR, Peoria DAR, and SCAT coordinate transfers between programs and serve riders from each program traveling in their area. Each of these programs also transports riders who come into their areas on regional fixed route buses.

The El Mirage and Surprise DART programs only serve city residents. Both programs will transport residents to neighboring communities. El Mirage DAR provides transportation for residents to Sun City and Sun City West. Surprise DART provides transportation for residents to Sun City, Sun City West, El Mirage, and Youngtown. Both of these programs also transport residents of their communities to and from the nearest regional bus stops in their areas.

Several of the DAR programs also operate within “buffer zones” around their borders to also facilitate regional travel. East Valley DAR, Phoenix DAR, and Peoria DAR will provide direct (non-transfer) trips to locations that are in other DAR areas but close to the borders. The actual size of the buffer zones is loosely interpreted but is generally about one or two miles. Transfers are then required for trips between these DAR areas that are not within these buffer zones.

Glendale DAR does not have a buffer zone and only operates within the City of Glendale. All riders traveling out of Glendale and into Phoenix or Peoria are required to transfer to these other DARs.

Several communities also have Intergovernment Agreements (IGAs) with Maricopa County Special Transportation Services (STS) to assist with local as well as regional travel. As noted above, STS is the one DAR program that operates throughout

Maricopa County. STS has IGAs with every community in the region except Peoria and Phoenix.

DAR Service Organization and Design

Table 2.1 above also shows how each of the DAR services is organized, managed, and operated. Following is a brief description of the organization and design of each program.

East Valley DAR. The East Valley DAR program is administered and managed by the RPTA for participating cities. Each of the cities that are part of the program provide local funding to the RPTA to pay for services provided. Each community specifies the type of service that it would like to have provided as part of the regional program. The RPTA combines local city funding with other available regional transit and federal transit funding. The RPTA then contracts with a private transportation company – Veolia Transportation – to operate the service. Veolia handles all aspects of the operation, including trip reservations, scheduling, dispatching and vehicle operations and maintenance. The RPTA monitors services provided by Veolia. Each participating community also has staffs that oversee the services provided on their behalf by the RPTA and Veolia.

El Mirage DAR. The El Mirage DAR program is managed and operated by staff of the City of El Mirage.

Glendale DAR. The Glendale DAR program is managed and operated by the City of Glendale staff in the Transit Division, which is part of the Transportation Department.

Peoria DAR. The Peoria DAR program is managed and operated by City of Peoria staff in the Transit Division, which is part of the Public Works Department.

Phoenix, Paradise Valley and Southwest Area DARs. As noted above, the City of Phoenix coordinates and operates services for its residents as well as for Paradise Valley, Avondale, Goodyear, Litchfield Park, and Tolleson. Phoenix combines local funding with federal funding to provide the service. The City of Phoenix contracts with a private transportation company – MV Transportation – for the operation of the service. MV Transportation handles all aspects of the operation, including trip reservations, scheduling, dispatching, and vehicle operations and maintenance. Staff within the City of Phoenix's Public Transit Department (PTD) oversee the contract and manage the service.

Special Transportation Services (STS). STS is operated by the Maricopa County Department of Human Services. County staffs manage and operate the service directly.

Sun Cities Area Transit, Inc. (SCAT). SCAT is a private, non-profit transportation company. It was formed specifically to provide transportation services in the Sun Cities area. SCAT receives funding from several sources, including local agencies,

communities, the RPTA, and fundraising to provide DAR service. The service is overseen by a volunteer Board of Directors and managed and operated by the corporation's staff.

Surprise DART The Surprise DART program is managed and operated by staff of the City of Surprise in the Department of Community Initiatives.

Table 2.2 on the following page shows administrative and operating staffing for each of the DAR programs. Staffing is organized in three groups. Administrative staffs refer to individuals who oversee contracted operations or who indirectly administer in-house operations. Operations management staffs refer to management personnel who oversee the direct operations. In some cases, particularly in the in-house city-based operations, the same staffs perform administrative as well as operations management duties. Direct operations staffs are persons working in reservations, scheduling, dispatching, vehicle operations, maintenance, or other direct operating positions. The numbers in parentheses after each type of staff represent estimated FTEs in each area.

The RPTA and the City of Phoenix have administrative staffs that oversee contracted operations in the East Valley and in the Phoenix/Paradise Valley/Southwest area. Seven RPTA employees spend part of their time overseeing the Veolia operation in the East Valley. The collective work of these seven people is estimated to be about 1.86 FTEs. Six staff people in various departments within the City of Phoenix assist with the administration and oversight of the MV Transportation contracted operation. Collectively, it is estimated that about 2.2 FTEs are involved in this oversight.

Administrative activities are combined with more direct operations management duties in the other six DAR programs. In EI Mirage, the Community Services Director spends about 50% of his time administering/managing the DAR operation (0.5 FTE). In Glendale, the Transit Manager plus seven Transit Coordinators, Transit Supervisors, and Secretaries administer and manage the DAR operation (the remainder of their time being spent on other City transit programs and services). Collectively, this totals to about 5.2 FTEs in Glendale. In Peoria, a DAR Manager, Supervisor and Administrative Assistant work full-time on the DAR program (3.0 FTEs). At STS, nine staff members work on the administration and management of transportation services (9.0 FTE). At SCAT, the Executive Director, Operations Manager and Administrative Assistant/Bookkeeper all work full-time on the program (3.0 FTEs). And in Surprise, a full-time Transit Supervisor administers and manages the DAR service (1.0 FTE).

There also is direct operations management staff in the two contracted operations in the East Valley and in Phoenix. Veolia has a full-time Paratransit Manager, full-time Call Center Manager, Customer Service Manager, part-time Safety and Training Manager, and an Administrative Assistant working on the East Valley DAR service (4.5 FTE). MV Transportation, which manages the largest operation in the region, has 11 full-time management staff working on the Phoenix/Paradise Valley/Southwest Area DAR services (11.0 FTE).

Table 2.2. DAR and STS Program Staffing

	East Valley DAR	EI Mirage DAR	Glendale DAR	Peoria DAR	Phoenix DAR	STS	SCAT	Surprise DART
Administrative Staff	7 RPTA Staff (1.86)	Community Services Director (0.5)	Transit Mgr (0.2) 2 Transit Coord (1.5) 2 Secretaries (1.5) 3 Supervisors (2.0) City IT & Adm Support	DAR Manager (1.0) Supervisor (1.0) Adm Asst (1.0)	3 PTD staff (1.8) 2 Facility staff (0.3) 1 IT staff (0.1)	Asst Dir Adm (1.0) Asst Dir Ops (1.0) Data Analyst (1.0) Mobility Spec (3.0) Contract Spec (1.0) Sched Super (1.0) Fleet Super (1.0)	Exec Dir (1.0) Adm Asst (1.0) Ops Mgr (1.0)	Transit Super (1.0)
Operations Management Staff	Paratransit Mgr (1.0) Call Ctr Mgr (1.0) Safety & Trng (0.5) Cust. Service Manager (1.0) Adm. Asst. (1.0)				Gen Mgr (1.0) Ops Mgr (1.0) IT Mgr (1.0) Training Mgr (1.0) Safety Mgr (1.0) Cust Serv Mgr (1.0) Quality Assur (1.0) Admin Asst (1.0) Reserv Super (1.0) Disp Mgr (1.0) Maint Mgr (1.0)			
Direct Operations Staff	Reservationists (9.0) Schedulers (1.0) Dispatchers (7.0) 68 FT, 4 PT Operators Mechanics (8.0) Road Super. (5.0)	1 Reser/Sch (0.25) 1 FT Operator (1.0)	7 Disp/Sch (6.5) 17 FT, 6 PT, 16 Temp Operators	Reser/Sch/Disp (3.0) Operators (8.5)	14 Reservationists (13.5) PT Scheduler (0.5) 10 Dispatchers (10.0) 6 Road Superv (6.0) 11 Mechanics (11.0) 210 Operators	Reser/Sch/Disp (5.0) 52 Operators	Reser/Sch/Disp (3.0) 6 FT, 4 PT Operators	2 Res/Sch/Disp (1.5) 7 Operators

Finally, there is direct operations staff in each of the eight DAR services. As noted above, this includes reservationists, schedulers, dispatchers, vehicle operators, mechanics, and road supervisors. In some cases, particularly in the smaller operations, the same staff serve multiple functions, such as being combined reservationists, schedulers, and dispatchers.

In the two larger operations in the East Valley and in Phoenix, there are separate staff dedicated to the tasks of reservations, scheduling and dispatching. The FTEs in each area of the East Valley (Veolia) operation are: reservations (9.0 FTEs); scheduling (1.0 FTE), dispatching (7.0 FTE), mechanics (8.0 FTE), and Road Supervisors (5.0 FTE). In the Phoenix (MV Transportation) operation, there are: reservations (13.5 FTE), scheduling (0.5 FTE), and dispatching (10.0 FTE). In addition, there are six road supervisors and 11 mechanics in the Phoenix (MV Transportation) operation.

In the other programs, reservations, scheduling and dispatching duties are combined. In El Mirage, an administrative support person spends 25% time doing reservations and scheduling (0.25 FTE). In Glendale, seven people serve as router/dispatchers (6.5 FTEs). In Peoria, three people do combined reservations, scheduling and dispatch (3.0 FTEs). At STS, five staff perform these combined duties (5.0 FTEs). At SCAT, three people do reservations, scheduling and dispatch (3.0 FTEs). And in Surprise, there are two staff that do combined reservations, scheduling and dispatch (1.5 FTEs).

Finally, each operation has a complement of vehicle operators to cover scheduled runs. In the east Valley, there are 69 full-time and four part-time vehicle operators. In El Mirage, there is one full-time vehicle operator. In Glendale, there are 17 full-time, six part-time, and 16 temporary vehicle operators. In Peoria, there are 8.5 FTE vehicle operator positions. In Phoenix, there are 210 vehicle operators. STS has 52 vehicle operators. SCAT has six full-time and 4 part-time vehicle operators. And Surprise employs seven vehicle operators.

For all eight DAR operations, the total staffing can be summarized as follows:

◆ Strictly Administrative staff	4.06 FTEs
◆ Combined Admin. and Operations Management staff	37.2 FTEs
◆ Reserv., Sched., Disp., Road Supers., Mechanics	90.25 FTEs
◆ Vehicle Operators	403 FT/PT/Temp

DAR Vehicle Fleets and Ridership

To get a sense of the scale and size of each DAR program, Table 2.1 on page 2-3 above includes information about fleet size and annual ridership. Ridership reflects total boardings for FY2005/2006. As this table shows, Phoenix DAR is the largest operation with 120 total vehicles and 409,037 boardings per year. East Valley DAR has a fleet of 63 vehicles and 220,153 boardings per year. STS operates 62 vehicles and had

102,856 total boardings in FY2005/2006 (the ridership reflecting the longer-distance, more regional nature of the service). Glendale DAR has 21 total vehicles and provided 89,055 rides in FY2005/2006. SCAT and Peoria each have 10 vehicles and provided 57,091 and 42,560 rides respectively in FY2005/2006. Surprise DART uses seven vehicles and provides 12,578 rides per year. And El Mirage DAR is provided with one vehicle and had a ridership of 1,466 in FY2005/2006.

2.2 DAR and STS Service Policies

A description of key service policies for the eight DAR programs, as of January 2007, is provided in this section.

Eligibility

The RPTA and its member communities currently provide paratransit services to several different groups of individuals. Federally-required ADA complementary is provided in communities where fixed route service is operated. Paratransit service also is provided in many communities to seniors (defined as persons 65 years of age or older), to persons with disabilities who qualify for fixed route reduced fares, and to Medicare card holders. Some communities also provide paratransit to the general public.

Paratransit services for seniors, persons with disabilities and the general public were implemented in many communities prior to the passage of the ADA in 1990. Paratransit services were often started at that time as a form of general transportation (in the absence of a regional fixed route system). The commitment to serve broader populations has been continued in many communities after the passage of the ADA and after expansion of fixed route services to most communities in the region.

Table 2.3 on the following page identifies the various types of paratransit eligible persons served in each community. Federally-required ADA complementary paratransit service is provided in every community except El Mirage and Surprise, which do not have non-commuter fixed route service (and ADA paratransit is therefore not required²). Seniors and persons with disabilities who qualify for Valley Metro reduced fare ID cards are served in 13 communities, including all cities in the East Valley (except Mesa), Guadalupe, El Mirage, Glendale, Peoria, Phoenix, Sun City and Surprise.³ Seniors and persons with disabilities are not served in the communities in the Southwest Valley (Avondale, Goodyear, Litchfield Park and Tolleson), in Mesa, or the unincorporated communities of Dreamland Villa and Leisure World.

² ADA complementary paratransit service is only required in areas where non-commuter fixed route service is provided.

³ Mesa served seniors and persons with disabilities who qualified for the RPTA reduced fare ID cars until very recently. Service policies were changed in July of 2006 to only serve persons who are ADA paratransit eligible.

Table 2.3. Types of Riders Served in Each Community in the RPTA Area

Community	Persons Served				
	ADA ¹	Seniors ²	Persons with Disabilities ³	Low Income	General Public
East Valley DAR					
Chandler	✓	✓	✓		
Gilbert	✓	✓	✓		
Guadalupe	✓				
Scottsdale	✓	✓	✓		
Mesa	✓				
Dreamland Villa	✓				
Leisure World	✓				
Tempe	✓	✓	✓		
El Mirage		✓	✓	✓	✓
Glendale	✓	✓	✓	✓	✓
Maricopa County (STS)		✓	✓	✓	
Peoria	✓	✓	✓	✓	✓
Phoenix DAR					
Paradise Valley	✓				
Phoenix	✓	✓	✓		
SW Valley					
Avondale	✓				
Goodyear	✓				
Litchfield Park	✓				
Tolleson	✓				
Sun City (SCAT) Sun City West and Youngtown	✓	✓	✓	✓	✓
Surprise		✓	✓	✓	✓

¹ Persons who are determined ADA paratransit eligible

² Persons who are 65 years of age or older or Medicare Card holders

³ Persons who are determined eligible for a fixed route reduced fare ID card

Note: This eligibility is broader than ADA paratransit eligibility.

These communities only provide paratransit service to persons who are ADA paratransit eligible. Five communities – El Mirage, Glendale, Peoria, Sun City (including Sun City West and Youngtown) and Surprise provide paratransit service to the general public (and therefore serve all persons). In addition, the Special Transportation Service (STS) operated by Maricopa County Human Services, which operates throughout the county, serves seniors, persons with disabilities, and persons who are low-income.

Days and Hours of Operation

Table 2.4 on the following page shows policies related to days and hours of service for the eight DAR programs as of January 2007. Where applicable, policies for ADA service are shown separate from policies for non-ADA service.

ADA Service

All DAR programs that assist with the provision of ADA Complementary Paratransit service operate DAR services during the same days and hours that regional fixed route service is provided in their area. The days and hours of ADA service in Table 4 are the typical times when fixed route is operated in each area. This can vary somewhat in each area, though, depending on the actual fixed route hours.

In the East Valley, this means that ADA service is provided six days a week (Monday through Saturday) generally from 4:00 a.m. to midnight in Chandler, Gilbert and Mesa. In Scottsdale and Tempe, ADA service is provided seven days a week during slightly longer hours - from 4:00 a.m. to 1:00 a.m.

In Glendale, ADA service is provided seven days a week generally from 5:00 a.m. to 10:00 p.m.

In Peoria, ADA service is provided weekdays generally from 4:30 a.m. to 9:30 p.m. and weekends from 6:00 a.m. to 10:00 p.m.

In Phoenix, ADA service is provided weekdays generally from 5:00 a.m. to midnight and weekends from 5:00 a.m. to 10:00 p.m.

In Paradise Valley, ADA service is provided in most areas seven days a week generally from 5:00 a.m. to 10:00 p.m. The exception to this is that in the area served by fixed route #72, service is provided slightly longer hours – from 4:00 a.m. to midnight.

In the Southwest Area communities of Avondale, Goodyear, Litchfield Park and Tolleson, ADA service is provided weekdays generally from 5:30 a.m. to 10:00 p.m. and Saturdays from 5:30 a.m. to 8:00 p.m.

In Sun City, ADA service is provided weekdays generally from 4:00 a.m. to 9:00 p.m.

Table 2.4. DAR and STS Program Policies: Days and Hours and Fare Policies

Program/ Community	Days and Hours		Eligible Rider Fares		PCA and Companion Fares		Transfer Fare Policies			
	ADA	Non-ADA	ADA	Non-ADA	ADA	Non-ADA	ADA	Non-ADA		
East Valley DAR:										
Chandler	M-Sat, 4am-12am	M-Sat, 7am-7pm	\$2.00	\$1.00 for 1 st zone; 50¢ each additional zone	PCAs free; Companions same fare as rider	PCAs free; Companions same fare as rider	To/from other DAR is free; To fixed route is free; 50¢ discount from fixed route	60¢ discount to Phoenix; 50¢ discount from Phoenix; To fixed route free; 50¢ discount from fixed route but pay appl. zone charges		
Gilbert	M-Sat, 4am-12am	M-Sat, 7am-7pm								
Mesa	M-Sat, 4am-12am	NA		NA						
Scottsdale	M-Sun, 4am-1am	M-Sun, 4am-1am		\$1.00 for 1 st zone; 50¢ each additional zone					PCAs free; Companions same fare as rider	60¢ discount to Phoenix; 50¢ discount from Phoenix; To fixed route free; 50¢ discount from fixed route but pay appl. zone charges
Tempe	M-Sun, 4am-1am	M-Sun, 4am-1am								
El Mirage DAR	NA	M-F, 8am-4:30pm	NA	\$2.00 – Gen Public Children (<6) free with paying adult	NA	Attendants and companions pay applicable non-ADA fare	NA	No discounts for DAR or fixed route transfers		
Glendale DAR	Same hours as fixed route in the area, generally: M-Sun, 5am-10pm	M-F, 7am-6pm Sat/Sun, 7am-5pm	\$2.00	\$2.00 - Gen. Public \$1.00 - Seniors (65+), riders with disabilities, juniors (age 6-13). \$1.00 - Groups (4+); 50¢ - Groups of seniors, disabled or juniors; Children (<6) free	\$2.00– Companions Attendants free	Attendants and companions pay applicable non-ADA fare	Free transfers to/from other DAR; No discounts for transfers to/from fixed route	No discounts for DAR or fixed route transfers		
Peoria DAR	M-F, 4:30am-9pm Sat/Sun, 6am-10pm	M-F, 6am-6pm	\$2.00	\$3.00 - Gen. Public \$1.00 - Seniors (65+), riders with disabilities, and children (6-12)	\$2.00– Companions Attendants free	Attendants and companions pay applicable non-ADA fare	Free transfers to/from other DAR; No discounts to/from fixed route	No discounts for DAR or fixed route transfers		

Table 2.4. DAR and STS Program Policies: Days and Hours and Fare Policies, continued

Program/ Community	Days and Hours		Eligible Rider Fares		PCA and Companion Fares		Transfer Fare Policies	
	ADA	Non-ADA	ADA	Non-ADA	ADA	Non-ADA	ADA	Non-ADA
Phoenix DAR:								
Phoenix	M-F, 5am-12am Sat/Sun, 5am-10pm	M-F, 5am-12am Sat/Sun, 5am-10pm	\$2.40 \$34 monthly pass	\$1.20 for 1 st zone; 60¢ each additional zone	PCAs free; Companions same fare as rider	PCA & companions <18 same as rider; PCA & companions 18+ \$2.40 1 st zone, \$1.20 each additional zone	To/from other DAR is free; To fixed route is free; No discount from fixed route	60 discount from (but not to) Glendale; To fixed route free; No discount from fixed route
Paradise Valley	M-Sun, 5am-10pm (4am-12am in Route 72 corridor)	NA	\$2.40	NA		NA		NA
SW Communities	M-F, 530am-10pm Sat, 530 am-8pm	NA	\$2.40	NA		NA		NA
STS	NA	M-F, 7am-4:00pm for Special Needs service; M-F, 4am-11pm and weekends as needed for Work Links service	NA	No fares. Contributions accepted.	NA	No fares. Contributions accepted	NA	NA
SCAT	Same hours as fixed route in the area, generally: M-F, 4am-9pm	M-F, 7:15am-5pm	\$2.00	\$3.00	\$2.00 – Companions Attendants free	\$3.00 for companions and attendants.	No discounts on transfers to/from other DAR services; Free transfer to fixed route; \$1.00 discount from fixed route.	No discounts on transfers to/from other DAR services; Free transfer to fixed route; \$1.00 discount from fixed route.
Surprise DART	NA	M-F, 7am-5pm	NA	\$1.00 within Surprise \$1.25 out-of-city \$1.75 to 111 th Ave and Grand (to fixed route bus)	NA	Attendants and companions pay applicable non-ADA fare	NA	Free transfer to fixed route bus with \$1.75 trip to 111 th Ave and Grand. No discounts for DAR transfers.

Non-ADA Service

DAR service is provided to non-ADA riders (seniors, other persons with disabilities, and in some cases the general public) during different days and hours. These days and hours are set by each city and are not regulated by ADA requirements.

In the East Valley, non-ADA service is provided six days a week (Monday through Saturday) from 7:00 a.m. to 7:00 p.m. in Chandler and Gilbert. In Scottsdale and Tempe, non-ADA service is provided during the same days and hours as ADA service - seven days a week from 4:00 a.m. to 1:00 a.m. There is no non-ADA service in Mesa or Guadalupe.

In El Mirage, non-ADA service is provided weekdays from 8:00 a.m. to 4:30 p.m.

In Glendale, non-ADA service is provided weekdays from 7:00 a.m. to 6:00 p.m. and on weekends from 7:00 a.m. to 5:00 p.m.

In Peoria, non-ADA service is provided weekdays from 6:00 a.m. to 6:00 p.m.

In Phoenix, non-ADA service is provided the same days and hours as ADA service - weekdays from 5:00 a.m. to midnight and weekends from 5:00 a.m. to 10:00 p.m.

Non-ADA service is not provided in Paradise Valley or in the Southwest Area communities of Avondale, Goodyear, Litchfield Park and Tolleson.

STS provides non-ADA service during days and hours requested by contracting communities and agencies. Two types of services are provided by STS – a Special Needs transportation service, which serves general community and agency rider needs, and a Work Links service that provides transportation for work and work training. The Special Needs service is generally operated weekdays from 7:00 a.m. to 4:00 p.m., and the Work Links service provides transportation weekdays from 4:00 a.m. to 11:00 p.m.

In Sun City, Sun City West, and Youngtown, SCAT provides non-ADA service weekdays from 7:15 a.m. to 5:00 p.m.

In Surprise, non-ADA service is provided weekdays from 7:00 a.m. to 5:00 p.m.

Fare Policies

Table 2.4 above shows fare policies for the eight DAR programs. As shown, a fairly straightforward, standard fare policy has been adopted for ADA riders in order to meet the requirements of the ADA regulatory requirements. ADA paratransit fares can not exceed twice the applicable fixed route fares. Because general public riders can travel across the region on some fixed routes, a flat ADA fare that is twice that of the standard fixed route fare has been established. In the East Valley and in communities in the

West Valley, the ADA fare is \$2.00 per trip. In the Phoenix/Central area where fixed route services have slightly higher fares, the ADA fare has been set at \$2.40 per trip. To allow ADA riders to travel throughout the region at the specified ADA fare, each DAR that provides ADA service will allow ADA riders to transfer to their service at no additional cost.

Various policies exist for ADA riders transferring to and from fixed route bus services. In the East Valley, ADA riders can transfer to fixed route service free. Riders are given a 50¢ discount on DAR fares when they transfer from fixed route service.

As specified in ADA regulations, personal care attendants (PCAs) accompanying ADA riders are accommodated on all DAR systems at no charge. Companions are also accommodated and pay the same fare as the ADA rider.

Non-ADA fare policies are established by each community and are much more complex. In the East Valley, a zone fare system is in place. Non-ADA riders travel for \$1.00 for the first zone and 50¢ for each additional zone. PCAs ride free and companions pay the same fare as the eligible rider. A 60¢ discount is offered for riders transferring to the Phoenix DAR service and a 50¢ discount is offered for riders transferring from the Phoenix DAR service. Transfers to fixed route are free and a 50¢ discount is offered for transfers from fixed route.

In El Mirage, which provides general public DAR service, the standard fare is \$2.00. Children under the age of six ride free. Attendants and companions are treated as other general public riders and pay the \$2.00 standard fare. There are no discounts for transfers to or from other DAR services or to or from fixed route service.

In Glendale, The general public fare is \$2.00. Seniors, riders with disabilities, and “juniors” (ages 6-13) pay \$1.00. Groups of general public riders, defined as four or more riders, pay \$1.00 each and groups of seniors, persons with disabilities and juniors pay 50¢ each. Children under the age of 6 ride free with an accompanying adult. Attendants and companions are treated as additional riders and pay the fare that is applicable to them. There are no discounts for transfers to or from other DAR services or to or from fixed route service.

In Peoria, the general public fare is \$3.00. Seniors, riders with disabilities and children ages 6-12 pay \$1.00. Attendants and companions are treated as additional riders and pay the fare that is applicable to them. There are no discounts for transfers to or from other DAR services or to or from fixed route service.

In Phoenix, a zone-based non-ADA fare structure is used. Riders pay \$1.20 for the first zone and 60¢ for each additional zone. PCAs and companions under the age of 18 pay the same fare as the eligible rider. PCAs and companions over the age of 18 pay \$2.40 for the first zone and \$1.20 for each additional zone. There is a 60¢ discount from (but not to) the Glendale DAR service. Transfers to fixed route are free, but there is no discount for transfers from fixed route service.

In the Sun Cities area, SCAT charges \$3.00 per ride. PCAs and companions pay the same \$3.00 fare. There are no discounts for transfers to or from other DAR services. Transfers to fixed route are free and there is a \$1.00 discount for transfers from fixed route services.

The Surprise DART charges \$1.00 for trips within the city, \$1.25 for trips outside the city, and \$1.75 for trips to the fixed route bus at 111th Ave. and Grand. Attendants and companions are treated as additional riders and pay the same fares. There are no discounts for transfers to or from other DAR services. Transfers to the fixed route bus service are free.

STS does not charge a formal fare. Contributions are accepted from riders.

Trip Purpose and Trip Reservation Policies

Table 2.5 on the following pages shows trip purpose and trip reservation policies for the eight DAR programs. In accordance with ADA regulations, there are no trip purpose limitations or trip purpose prioritizations in the reservations or scheduling processes. All DAR programs that assist with the provision of ADA paratransit service comply with this requirement. In addition, most DAR systems providing ADA service accept reservations for ADA trips on a “next day” basis and up to 14 days in advance. The SCAT service will accept ADA trip reservations on a same-day basis and up to 30 days in advance. In the East Valley, Phoenix and in Glendale, there is no ADA same-day or will-call service. If ADA riders request same-day changes to scheduled trips, these are then treated as non-ADA trips. There is no same-day service in Peoria.

For non-ADA service, all systems will accept requests for any trip purpose. In some systems, though, certain trips are given priority in scheduling and dispatching as indicated in Table 6. SCAT also limits weekend service to medical only on Saturdays and religious services on Sundays.

The hours when ADA trip requests are accepted and other ADA trip reservation policies varies by system. In the East Valley, ADA trip requests are accepted seven days a week from 6:00 a.m. to 7:30 p.m. In Glendale, ADA trip requests are accepted seven days a week from 8:00 a.m. to 5:00 p.m. In Peoria, ADA trip request are accepted seven days a week from 7:00 a.m. to 5:00 p.m. In Phoenix, ADA trip requests are accepted seven days a week from 6:00 a.m. to 8:00 p.m. And in the Sun Cities area, SCAT accepts ADA trip requests seven days a week from 6:45 a.m. to 5:00 p.m.

Non-ADA trip reservation hours and policies vary by community and system. In the East Valley, non-ADA trips requests are accepted seven days a week from 6:00 a.m. to 7:30 p.m. (the same as ADA trips). Non-ADA trip requests are taken only from 1-3 days in advance, though. This is done to allow most ADA requests to be scheduled first and non-ADA requests scheduled later.

In El Mirage, trip requests are taken weekdays from 8:00 a.m. to 5:00 p.m. from 1-14 days in advance.

In Glendale, most non-ADA trips are requested on a same-day basis up to two hours before the time of the trip. Advance reservations are allowed only for certain trips. Non-ADA trips can be requested weekdays from 7:00 a.m. to 5:00 p.m. (slightly longer hours than for ADA trips) and on Saturdays from 7:00 a.m. to 4:00 p.m. Non-ADA requests are not accepted on Sundays.

In Peoria, all non-ADA service must be requested in advance by 5:00 p.m. on the day before service. Non-ADA requests are accepted seven days a week from 7:00 a.m. to 5:00 p.m. (same as ADA hours) and can be placed from 1-14 days in advance.

In Phoenix, non-ADA service is provided on a same-day basis. Only trips requiring a transfer to other DAR areas can be placed in advance (up to seven days). Same-day non-ADA trips can be requested weekdays from 5:00 a.m. to 10:00 p.m. and on weekends from 5:00 a.m. to 9:00 p.m.

In the Sun Cities area, SCAT provides mainly same-day service. Trip requests can be placed seven days a week from 6:45 a.m. to 5:00 p.m. Non-ADA requests for weekend or Monday holiday service must be made in advance (by 2:00 p.m. on the prior Thursday). Trip requests are accepted up to 30 days in advance.

In Surprise, non-ADA trips are accepted weekdays from 8:30 a.m. to 4:00 p.m. Requests are accepted 1-14 days in advance. Same day requests are accepted, but same-day service is provided on a space-available basis.

Computer software is used to assist with the trip booking process in all systems except El Mirage where trips are booked manually. Five of the systems use the latest version or a recent version of the Trapeze PASS software. Surprise uses the Trapeze Novus software (a scaled down version for smaller systems). SCAT uses a customized software product that was developed locally.

Table 2.5. DAR and STS Program Policies: Trip Purposes and Trip Reservation Policies

Program/ Community	Types of Trip Purposes Served		Trip Reservation Hours		Advance Reservation Policies		Method of Scheduling	Subscription Trip Policies
	ADA	Non-ADA	ADA	Non-ADA	ADA	Non-ADA		
East Valley DAR:								
Chandler	All types of trip purposes served	No formal policy; medical given priority in practice	M-Sun, 6am-730pm	M-Sun, 6am-730pm	1-14 days. No same-day or will-call ADA service. Any same day changes then make trip non-ADA	1-3 days. Same day on space available basis	Trapeze 4.7.1 By either requested pick-up or desired arrival time, as appropriate	Permitted for any trip purpose; must travel at least 1x per week for 30 days. Some non-ADA on wait list
Gilbert				NA		NA		
Mesa		No formal policy; medical given priority in practice		M-Sun, 6am-730pm		1-3 days. Same day on space available basis		
Scottsdale								
Tempe								
El Mirage DAR	NA	All types of trip purposes served, but priority given to (1) medical, (2) work, (3) leisure	NA	M-F, 8am-5pm	NA	Up to 14 days. Same day trips served on space available basis	All trips scheduled manually. Pick-up times and appt. times considered.	Not permitted
Glendale DAR	All types of trip purposes served	All types of trip purposes served	M-Sun, 8am-5pm. Voice-mail used to take reservations on Sundays and holidays	M-F, 7am-5:30pm Sat, 7am-4pm	1-14 days in advance. No same-day or will-call ADA service. Any same day changes then make trip non-ADA.	Most trips requested up to 2 hours in advance on the day of service. Advance (up to 7 day) reservation only for weekend and holiday trips or for the "going" portion of non-holiday weekday trips for work, school, medical, agency program, or DAR transfers. Weekend and Monday holiday service must be requested by noon on previous Friday	Trapeze 4.6 All trips scheduled based on pick-up time; appt. times recorded but only used to generate pick-up time for scheduling	Permitted for any trip purpose; must travel at least 3x per week (but exceptions for some trips made only 1-2 times per week). There are no waiting lists (all requests served).
Peoria DAR	All types of trip purposes served	All types of trip purposes served.	M-Sun, 7am-5pm. Voice mail used on weekends and holidays	M-Sun, 7am-5pm. Voice mail used on weekends and holidays	1-14 days in advance. No same day service	Day before trip by 5 pm. No same day service	Trapeze 4.61.228 All trips scheduled based on pick-up time; appt. times recorded but only used to generate pick-up time for scheduling	Permitted for work, volunteer, medical, and education trips. Must travel at least 1x per week

Table 2.5. DAR and STS Program Policies: Trip Purposes and Trip Reservation Policies, continued

Program/ Community	Types of Trip Purposes Served		Trip Reservation Hours		Advance Reservation Policies		Method of Scheduling	Subscription Trip Policies	
	ADA	Non-ADA	ADA	Non-ADA	ADA	Non-ADA			
Phoenix DAR:									
Phoenix	All types of trip purposes served	All types of trip purposes served	M-Sun, 6am-8pm	M-F, 5am-10pm Sat/Sun, 5am-9pm	1-14 days	Non-transfer trips only same day; transfer trips up to 7 days in advance	Trapeze 4.61.228 All trips scheduled based on pick-up time; appt. times recorded but only used to generate pick-up time for scheduling	Permitted for any trip purpose; must travel at least 3x per week. Are wait lists.	
Paradise Valley		NA		NA		NA		NA	NA
SW Communities		NA		NA		NA		NA	NA
STS	NA	STS will serve any trip purpose, but limits and priorities typically set by funding entity	NA	M-F, 7am-2pm for Special Needs service. Work Links all arranged as subscription	NA	From 14 days in advance to 48 hours in advance.	Trapeze PASS. By either requested pick-up or desired arrival time, as appropriate	As per agreements with funding entities. Typically used for ongoing medical and Work Links trips	
SCAT	All types of trip purposes served	All types of trips served on weekdays. Priority is sched/dispatch to trips with appointments. Medical only on Saturdays. Only religious services on Sundays.	M-Sun, 6:45am-5pm Voice mail used to take requests on weekends and holidays.	M-Sun, 6:45am-5pm Voice mail used to take requests on weekends and holidays.	Most trips requested on the day of service. Requests accepted up to 30 days in advance	Most trips requested on the day of service. Requests accepted up to 30 days in advance. Weekend and Monday holiday trips must be requested by 2pm on prior Thursday.	Custom software. Going trips with set appts. booked by appt., with pick-up set 90 min. prior to appt. Other trips booked by requested pick-up time	No formal policy. Subscription used mainly for dialysis and ongoing medical trips and church trips.	
Surprise	NA	All types of trips for ADA certified riders. Medical and work priority for non-ADA	NA	M-F, 8:30am-4pm	NA	1-14 days in advance. Same day on space available basis	Trapeze Novus By either requested pick-up or desired arrival time, as appropriate	Permitted for any dialysis trip or other trips made at least 3x per week. No wait lists	

Using the automated systems, trips are scheduled based on requested pick-up times or appointment/desired arrival times as appropriate in the East Valley, Surprise and by STS. Both pick-up and appointment times are also considered by El Mirage during the manual scheduling process. In Glendale, Peoria and Phoenix, appointment times are recorded, but not used in the automated trip scheduling process. Instead, when an appointment time is indicated, a pick-up time 60 minutes before the appointment is calculated and entered into the system. Ride times are then generated based on this calculated pick-up time. In the review of individual systems, it was noted that trip scheduling based solely on requested or calculated pick-up times (rather than on appointment times) sometimes resulted in very early pick-ups and drop-offs, circuitous routing, and difficulties with coordination of DAR-to-DAR transfers in some systems.

At STS, non-ADA trip requests are accepted weekdays from 7:00 a.m. to 2:00 p.m. Trip requests can be placed from 40 hours in advance to 14 days in advance.

Subscription service is provided in every system except El Mirage. Subscription policies vary, however. In the East Valley, trips are eligible to be served on a subscription basis if made at least once a week for 30 days. Any type of trip can be made on a subscription basis. All ADA subscription requests are served, but there can be a waiting list for non-ADA subscription service.

In Glendale, subscription service is provided mainly for trips made 3 or more times a week. There is some flexibility to this policy, though. Any type of trip can be provided on a subscription basis and there are no waiting lists for subscription service – all requests are met.

In Peoria, subscription service is provided for work, volunteer, medical and education trips which are made at least once each week.

In Phoenix, any type of trip that is made at least three times a week can be requested to be served on a subscription basis. There is a waiting list, though, for subscription service.

At SCAT, there is no formal subscription service policy. Subscription service is provided, though, for dialysis and other ongoing medical trips, as well as for trips to church.

In Surprise, subscription service is provided to and from dialysis or for any other trips made at least three times per week. There are no waiting lists for subscription service – all requests are met.

STS provides subscription service if called for in agreements with contracting communities and agencies. Subscription service is typically provided for ongoing medical trips as well as for work and work training trips provided under the Work Links program.

Pick-Up, Wait Time, No-Show and Cancellation Policies

This section provides a summary of key operating policies, including the pick-up or “be ready” window, rider no-show and cancellation policies, missed trip and no-strand policies. Table 2.6 on the following page summarizes these policies for all eight DAR programs.

Pick-Up Windows. In the East Valley, the pick-up, or “be ready” time “window” for ADA trips is from the scheduled time to 30 minutes after the scheduled time (known as a “0, +30 window”). For non-ADA riders, a 0, +45 window is used. El Mirage asks riders to be ready from 15 minutes before to 15 minutes after the scheduled time (a -15, +15 window).

Glendale also uses a -15, +15 window for both ADA and non-ADA trips.

Peoria uses a -15, +15 window for ADA trips, and a slightly longer -20, +20 window for non-ADA trips.

Phoenix DAR uses a 0, +30 window for pre-scheduled ADA trip requests provided in all areas served (Phoenix, Paradise Valley, and the Southwest Area). For same-day non-ADA service in Phoenix, riders are told that vehicles can arrive up to an hour after the time a call is made to request the ride.

SCAT, which also provides mainly same-day service, tells riders who call for same-day service to expect vehicles up to an hour from the time they call. For pre-scheduled trips, SCAT does not have a formal pick-up window, but uses an informal 0, +20 window and most riders who have pre-scheduled trips expect the vehicle to arrive within 20 minutes of the scheduled time.

In Surprise, a ready window of 10 minutes before to 10 minutes after the scheduled time (a -10, +10 window) is used.

And at STS, a -15, +15 pick-up window is used.

Vehicle Wait Time. Five of the eight DAR programs have a 5 minute vehicle wait time policy. This means that drivers must wait at least five minutes within the pick-up window for riders to board before leaving and marking them as no-shows. SCAT uses a slightly flexible wait time of 3-5 minutes with dispatchers deciding exactly how long drivers should wait. Glendale uses a shorter two minute vehicle wait time policy. STS does not have any formal policy and relies on dispatchers to decide the appropriate wait time.

Table 2.6. DAR and STS Program Policies: Pick-Up Window, Vehicle Wait Time, No-Show, Cancellation, Missed Trip, and No Strand Policies

Program/ Community	Pick-Up (“Be Ready”) Window		Vehicle Wait Time Policies	Late Cancellation Definition	No-Show and Late Cancel Policy	Missed Trip Definition	No Strand Policy
	ADA	Non-ADA					
East Valley DAR:							
Chandler	0, +30	0, +45	5 minutes, all in “ready window”	No “late cancel” policy.	Warning letter if 3+ no-shows in 60 days. Possible suspension for 2 nd occurrence. Also can lose subscription service.	Any trip not completed when vehicle arrives late.	No formal policy. No riders are stranded in practice
Gilbert							
Mesa		NA					
Scottsdale		0, +45					
Tempe							
El Mirage DAR	NA	-15, +15	5 minutes	“Late cancel” if cancelled after vehicle has left garage.	Possible suspension for three successive no-shows. Riders charged \$1.00 for no-show.	No formal policy	No formal policy. No riders are stranded in practice
Glendale DAR	-15, +15	-15, +15	2 minutes	“Late cancel” if cancel <1 hour before sched. pick-up	No suspensions, but can lose subscription privileges if 3+ late cancels or no-shows in 60 days. Warning letter first violation. Possible suspension second time.	Any trip not completed when vehicle arrives late.	Policy is to never leave riders stranded. Same day trips done as non-ADA trips.
Peoria DAR	-15, +15	-20, +20	5 minutes	“Late cancel” if cancelled < 2 hours before sched. pick-up	Possible suspension if 3+ no-shows or late cancels in 30 day period.	No formal policy	No formal policy. No riders are stranded in practice
Phoenix DAR:							
Phoenix	0, +30	0, +60	5 minutes, all in “ready window”	“Late cancel” if cancelled < 2 hours before sched. pick-up	Warning letter if 3+ no-shows or late cancels in 60 days. Possible suspension for 2 nd occurrence. Also can lose subscription service.	Pick-up > 60 minutes after sched. pick-up time. Only applies to ADA trips	Policy is to never leave riders stranded
Paradise Valley		NA					
SW Communities		NA					
STS	NA	-15, +15	No set policy. Dispatch calls riders and controls time	“Late cancel” if cancel <1 hour before sched. pick-up	No formal policy for Special Needs program. For Work Links, rider is suspended if 3+ no-shows in one month.	No formal policy	Policy is to never leave riders stranded
SCAT	0, +60 for immediate response same day trips. 0,+20 informal policy for prescheduled	0, +60 for immediate response same day trips. 0,+20 informal policy for prescheduled	3-5 minutes. Dispatch calls riders and controls time.	No formal policy	No formal policy. Contact made if problems and efforts made to resolve. Policy is to charge a round-trip fare for no-shows, but hasn’t been implemented	No formal policy	Policy is to never leave riders stranded
Surprise	NA	-10, +10	5 minutes	“Late cancel” if cancelled < 2 hours before sched. pick-up	Possible suspension if 4+ no-shows or late cancels in 6 months	No formal policy	No formal policy. No riders are stranded in practice

No-Shows and Late Cancellations. Three of the DAR programs (Peoria, Phoenix and Surprise) define a “late cancellation” to be a cancellation made less than two hours before the scheduled pick-up time. STS defines a late cancel as taking place less than one hour before the scheduled pick-up time. El Mirage considers a trip to be cancelled late if the cancellation is received after the vehicle leaves the facility in the morning. East Valley DAR and SCAT do not have late cancellation policies or definitions.

In three of the DAR programs, riders can lose subscription trip privileges or can be suspended from service for a period of time if they no-show or late-cancel three or more trips in a two month period. In El Mirage, riders can be suspended for three successive no-shows. Riders in El Mirage also are charged \$1.00 per no-show. In Peoria, riders can be suspended for three or more no-shows in a one month period. In Surprise, suspensions are possible if riders no-show or late cancel four or more times in a six month period. STS and SCAT do not have formal no-show suspension policies. At SCAT, there is a policy to charge a round-trip fare for no-shows, but this has not been implemented. At STS, no-show issues are worked out with riders, but Work Links riders can be suspended for three or more no-shows in one month.

Missed Trips. East Valley DAR and Glendale DAR consider a trip to be “missed” by them if the vehicle arrives late (i.e., outside the pick-up window) and the ride is not taken. This is the definition promoted by the federal Transit Administration. In Phoenix, a trip is considered missed by the contractor if the pick-up takes place 60 minutes after the scheduled pick-up time. The other five DAR systems do not define a “missed trip.”

No Strand Policies. Four of the eight systems have formal “no strand” policies. Riders are always provided a return trip, even if they initially no-show their scheduled return ride. The other four systems do not have formal policies, but do not strand riders in practice.

PCA, Companion, Service Refusal and Rider Assistance Policies

Table 2.7 on the following page shows personal care attendant (PCA), companion, and rider assistance policies for the eight DAR programs.

PCAs and Companions. All DAR programs that assist with the provision of ADA paratransit service comply with ADA requirements regarding PCAs and companions. All systems will always ensure that PCAs are transported at no fare. One companion traveling with the ADA eligible rider is always accommodated, and additional companions are accommodated on a space-available basis.

Similar PCA and companion policies are used for non-ADA service in the East Valley, Peoria, Phoenix, and by STS. In the other four systems (El Mirage, Glendale, SCAT

and Surprise), which provide general public DAR service, PCAs and companions are always accommodated, but are treated just as other riders and pay applicable fares.

Accommodation of Service Animals and Life Support Equipment

All eight systems accommodate service animals and allow riders to bring portable life support equipment on-board.

Refusal of Service Policy

Four of the systems (East Valley, Glendale, Peoria, and Phoenix) have adopted policies regarding the potential refusal of service that is in keeping with ADA regulatory requirements. These policies state that riders can be suspended from service if their behavior is violent, illegal, or seriously disruptive.

El Mirage, STS, Scat and Surprise do not have formal policies but will review rider behavior on a case-by-case basis and reserve the right to suspend service in certain instances.

Rider Assistance Policies.

Four systems (East Valley, El Mirage, Phoenix and SCAT) provide door-to-door service. In Glendale, the base level of assistance is curb-to-curb, but additional assistance to the door will be provided as needed. STS offers “portal-to-portal” service which includes assistance beyond the curb as needed. Peoria and Surprise provide only curb-to-curb service.

All systems provide assistance with grocery bags and packages. Limitations and restrictions on the number, size and weight of packages are detailed in Table 2.8.

Table 2.7. DAR and STS Program Policies: PCA, Companion, Service Refusal and Rider Assistance Policies

Program/ Community	PCA and Companion Policies		Service Animal and Life Support Equipment Policies	Service Refusal Policies	Rider Assistance Policies	Assistance with Packages
	ADA	Non-ADA				
East Valley DAR:						
Chandler	PCAs always served at no fare; One companion always served; Additional companions served if space available	Same as for ADA	Always accommodated	Rider can be refused service if behavior is violent, illegal, or seriously disruptive	Door-to-door service provided. Must have a safe path-of-travel; driver must maintain "line of sight" with vehicle	Up to 6 bags each <15 lbs.
Gilbert		NA				
Mesa		Same as for ADA				
Scottsdale						
Tempe						
El Mirage DAR	NA	No formal policy. All are general public riders	Always accommodated	No formal policy, but disruptive or abusive passengers can be suspended	Door-to-door	No limits imposed
Glendale DAR	PCAs always served at no fare; One companion always served; Additional companions served if space available	All served as general public riders	Always accommodated	Rider can be refused service if behavior is violent, illegal, or seriously disruptive	Base service is curb-to-curb, with additional assistance provided as needed. Drivers cannot lose sight of vehicle	No limit on # of packages as long as can be accommodated. Packages must be 50# or less and not too bulky or unsafe to transport
Peoria DAR	PCAs always served at no fare; One companion always served; Additional companions served if space available	PCAs always served at no fare; One companion always served; Additional companions served if space available	Always accommodated	Rider can be refused service if behavior is violent, illegal, or seriously disruptive	Curb-to-curb	Up to 3 packages or grocery bags. Combined weight cannot exceed 30#
Phoenix DAR:						
Phoenix	PCAs always served at no fare; One companion always served; Additional companions served if space available	Same as for ADA	Always accommodated	Rider can be refused service if behavior is violent, illegal, or seriously disruptive	Door-to-door always provided; must have a safe path-of-travel; driver must maintain "line of sight" with vehicle	Up to 3 shopping bags or 6 plastic bags.
Paradise Valley		NA				
SW Communities		NA				
STS	NA	PCAs accommodated and one or more companions allowed as long as space is available.	Always accommodated	No formal policy. Informal if unsafe traveling or unsafe to others. Issues typically addressed and resolved.	"Portal-to-portal" with amount of assistance at the discretion of the driver	Two shopping bags allowed.
SCAT	PCAs served at no fare. Companions served at applicable ADA or non-ADA fare	All served as general public riders	Always accommodated	No formal policy. Handled case-by-case	Door-to-door service	Informal policy is 8-10 plastic grocery bags. More at driver discretion and a possible \$3.00 "cartage" fee (not really used, though)
Surprise	NA	All served as general public riders	No formal policy. Service animals accommodated, though, and life support equipment transported if "under the person's or companions control and others not affected"	No formal policy. Handled case-by-case	Curb-to-curb	Up to 6 grocery bags. Additional bags at 50¢ per bag.

Service Performance Standards

Table 2.8 on the following page summarizes service performance standards adopted by each of the eight DAR programs and in effect as of the time each system was reviewed (January 2007). These include standards regarding trip denials, on-time performance, on-board travel times, telephone hold times, and productivity.

Trip Denials Policies. All DAR systems that assist with ADA paratransit service have zero trip denial policies for ADA riders. All systems except Phoenix DAR were found to also deliver ADA service without any trip denials. There were ADA trips denials in the Phoenix DAR service. All systems also limit the negotiation of ADA trip requests to an hour before or after the requested time (in accordance with ADA regulations).

For non-ADA service, most systems attempt to meet all trip requests. In some cases, though, trips are not able to be served and trip denials on non-ADA requests are allowed. Only the Phoenix DAR system has a policy of not denying any non-ADA trip requests. Non-ADA trips also are sometimes negotiated more than an hour to a time that can be fit into the schedules.

On-Time Pick-Up Standards. Three of the five systems that provide ADA service (East Valley, Glendale and Phoenix) have adopted on-time pick-up standards for ADA trips. In the East Valley, the provider contract sets a performance scale that ranges from 97% on-time service (rated as “A” level service) to 87.9% (rated as “F” level service). Glendale has a standard to provide ADA pick-ups on-time 95% of the time. Phoenix has a 90% on-time pick-up standard. The other two systems that provide ADA trips have not adopted a formal on-time pick-up standard.

For non-ADA service, East Valley DAR and Glendale DAR use the same on-time pickup standards that are used for ADA trips. In Phoenix, there is no formal on-time standard for non-ADA trips, but fares are waived if pick-ups are more than two hours after the time that riders call to request this same-day service. There are no formal on-time pick-up standards for non-ADA service in the other systems.

On-Time Drop-Off Standards. Only the East Valley DAR system has established a standard for on-time drop-offs. A standard similar to that used for pick-ups is applied. Performance is rated on an A-F scale, with “A” level service being on-time drop-offs 97% of the time and “F” level service being on-time only 87.9% of the time.

In the individual system reviews, the lack of on-time drop-off standards was found to contribute to both late drop-offs as well as circuitous routing in some systems. If schedulers and dispatchers are only focused on picking all riders up on time, routes that are circuitous can result.

On-Board Ride Time Policies. Several different on-board ride time standards have been established. The most detailed standard has been created in the East Valley. Maximum travel times have been created and set as parameters in the scheduling

software based on trip distances. Acceptable maximum travel times range from 30 minutes for trips up to two miles in length, to a maximum of 150 minutes for trips 24 or more miles in length.

Phoenix DAR has established service zones in the City of Phoenix and allows trips to be up to 40 minutes long per zone (up to 110 minutes). In Paradise Valley and the Southwest Area, a flat 60 minute ride time maximum is used.

Glendale DAR also uses a single 60 minute travel time maximum for trips within the City. Surprise DART uses a 90 minute maximum travel time for both local and out-of-city trips. The other systems do not have maximum travel time standards or scheduling parameters.

STS does not have a program-wide policy, but its contract with the Area Agency on Aging calls for maximum travel times of 45-60 minutes.

For trips that involve transfers between DAR systems, a regional policy has been adopted by the East Valley, Phoenix, Glendale, Peoria and SCAT DAR systems. The policy calls for ride times of no more than 60 minutes for each DAR region traveled.

Telephone Hold Time Standards. Two systems have established formal telephone hold time standards. In the East Valley, an A-F performance scale has been established with “A” level service being when hold times average 1:30 or less and “F” level service existing when average hold times exceed 2:15. In the East Valley, average phone hold times are monitored by the hour.

In the Phoenix DAR system, the service provider contract includes a goal of having telephone holds of no more than 120 seconds. These hold times are measured by the day and week, though. The review of the Phoenix DAR system indicated that measuring average hold times over a long period including times when there are no calls or very few calls, tends to skew the “average” measurements. Monitoring hold times by the hour, as is done in the East Valley, was recommended.

Glendale has an informal two minute maximum average hold time standard. The other DAR systems do not have formal telephone hold time standards.

Productivity Goals. Two systems (East Valley and Phoenix) have formal productivity goals. In the East Valley, an A-F performance scale has been established with “A” level productivity being at least 2.1 trips per vehicle revenue-hour and “F” level service being a productivity of less than 1.65 trips per revenue-hour. In the Phoenix DAR system, the service provider contract calls for a productivity of at least 1.4 trips per vehicle revenue-hour.

Table 2.8. DAR and STS Program Policies: Service Performance Standards

Program/ Community	Trip Denials		On-Time Pick-Ups		On-Time Drop-Offs		Maximum On-Board Travel Times		Telephone Hold Times	Productivity (Trips/Veh-Hr)
	ADA	Non-ADA	ADA	Non-ADA	ADA	Non-ADA	In Area	Regional		
East Valley DAR:										
Chandler	Zero denial policy	No formal standard; some denials	A-F Scale A = 97% F=87.9%	A-F Scale A = 97% F= 87.9%	A-F Scale A = 97% F= 87.9%	A-F Scale A = 97% F= 87.9%	Based on miles; 30 min max for trips ≤2 miles; up to 150 min max for trips 24+ miles	60 minutes max per DAR area	A-F Scale A = <1:30 F= >2:15	A-F Scale A = >2.1 F= <1.65
Gilbert		NA		NA		NA				
Mesa		No formal standard; some denials		A-F Scale A = 97% F= 87.9%		A-F Scale A = 97% F= 87.9%				
Scottsdale										
Tempe										
El Mirage DAR	NA	Can be trip denials	NA	No formal standard	NA	No formal standard	No formal standard	No formal standard	No formal standard	
Glendale DAR	Zero denial policy	No formal standard; some denials	95% goal	95% goal	No formal goal	No formal goal	No formal standard. Sched system set to 60 min max.	60 minutes max per DAR area	No formal standard. Informal 2 min. max average hold used	Informal goal is 3.0 trips per hour
Peoria DAR	Zero denial policy	No formal goal. Are some denials	No formal goal	No formal goal	No formal goal	No formal goal	No formal standard	60 minutes max per DAR area	No formal standard	No formal standard or goal
Phoenix DAR:										
Phoenix	Zero denial goal. Are some denials in practice	Zero denial policy; no denials	90% contract standard	No standard; If >120 min. late, fare is waived	No standard	No standard	40 min per zone up to 110 min	60 minutes max per DAR area	120 sec avg hold is contract standard	1.4 is contract standard
Paradise Valley		NA		NA		NA				
SW Communities		NA		NA		NA				
STS	NA	No formal goal; some denials in practice	NA	No formal standard or goal	NA	No formal standard or goal	NA. STS operates regionally	45-60 minute standard in contract with AAA. No other formal standards	No formal standard	No formal standard
SCAT	Zero denial policy. Are no denials	Zero denial policy. Offers provided for all requests, with negotiation permitted.	No formal goal	No formal goal	No formal goal	No formal goal	No formal standard	60 minute max per Dar area	No formal standard	Informal goal to provide 25 trips per vehicle per day
Surprise	NA	No formal goal. Informal goal is to serve all trips; some denials.	NA	No formal goal	NA	No formal goal	90 minutes maximum	90 minute maximum	No formal standard	No formal standard

Glendale DAR has an informal goal of providing 3.0 trips per vehicle revenue-hour. SCAT has an informal goal of providing at least 25 trips per vehicle per day (which translates to about 3.1 trips per hour for a typical eight hour shift). The other DAR services did not indicate productivity standards or goals.

2.3. DAR and STS Service Statistics and Service Performance Measures

Statistics and Performance Measures

Table 2.9 on the following page shows major service statistics for FY2006 for each of the eight DAR programs. This includes trips requested, scheduled, and provided, as well as cancellation and no-show information. Numbers of PCAs and companions and total boarding information also is included. Note that some systems do not track detailed cancellation, no-show and missed trip information. Several systems also treat PCAs and companions as general public riders and therefore do not track these riders separately. Where complete information is available for all systems, totals for the region are provided.

Table 2.10 then provides key service performance indicators for FY 2006 for the DAR programs. This includes service quality measures such as on-time performance, travel times, and telephone hold time information, as well as operating performance measures such as productivity, miles per trip, and accidents per 100,000 miles. Note that not all systems track all performance measures on an ongoing basis and that sample data or limited on-site observations were used to estimate some performance measures.

As shown, a total of 1,078,611 trip requests were reported by all eight systems in FY 2006. Most of the systems were able to accommodate all ADA trip requests without denials. Phoenix DAR reported 3,659 ADA trip denials in FY2006. There also were 7,790 non-ADA trip denials reported. A relatively small percentage of total non-ADA trip requests were denied in El Mirage (1% of total non-ADA trip requests), Glendale (1.4%), Peoria (0.1%), and STS (1.4%). No non-ADA trip denials were reported by Phoenix DAR and SCAT. There were significant non-ADA trip denials, though, in the East Valley (5%) and in Surprise (4%).

A total of 1,067,162 trip requests were scheduled. After cancellations, no-shows and missed trips, a total of 864,791 eligible rider trips were provided. The eight systems also transported an additional 49,174 PCAs and companions. Total boardings (eligible rider trips plus PCAs and companions) was therefore 913,965.

Of the 864,791 eligible rider trips, a total of 422,538 (48.9%) were ADA paratransit eligible trips. The remaining 51.1% (442,253) were non-ADA trips. It is interesting to note that for the two major providers of ADA trips, the split between ADA and non-ADA

was similar. Both the East Valley DAR and Phoenix DAR reported that 65-70% of the trips provided were ADA trips in FY2006 and 30-35% were non-ADA trips. In Glendale, the reverse was true – 71% were non-ADA trips and 29% were ADA trips. In Peoria, only 1% of trips provided were ADA, and in SCAT only 0.1% were ADA trips.

Throughout the region, 629,394 total vehicle-hours were operated, with 526,037 of these being revenue vehicle-hours. Vehicles were driven a total of 8,960,583 miles, with 7,674,973 of these being revenue vehicle-miles.

As shown in Table 2.10, on-time performance information for pick-ups was available in seven of the systems. Performance varied somewhat. ADA pick-ups were made on-time from 87-100% of the time. For non-ADA trips, pick-ups were on-time between 61-99% of the time.

On-time drop-off information could be calculated from the same data at four of the systems. For both ADA and non-ADA trips, on-time drop-off performance ranged from 85-98%.

Travel times were relatively good in most systems with a high percentage of trips being completed in only 20-30 minutes. Travel times were somewhat longer in the Phoenix DAR.

Telephone hold times were also relatively short or moderate in most systems. Some longer phone hold issues were noted in the Phoenix and Glendale systems. Hold times also were noted to be an issue sometimes in Surprise where a single person took calls from riders as well as dispatched vehicles.

Productivity (boardings per vehicle revenue-hour) averaged 1.7 throughout the region. This ranged from 0.9 boardings/hour in El Mirage to 3.5 boardings per hour in Peoria. Productivity was largely related to trip length with the systems that had smaller areas and shorter average trip lengths reporting higher productivities. Average trip length ranged from 3.8 miles in Peoria to 11.3 miles in the Phoenix DAR system.

Table 2.9. DAR and STS Service Statistics, FY2006

	East Valley DAR	El Mirage DAR	Glendale DAR	Peoria DAR	Phoenix DAR	STS	SCAT	Surprise DART	TOTALS
Rider Statistics									
Total trips requested	257,662	1,481	99,555	42,602	482,671	123,043	58,518	13,079	1,078,611
ADA denials	0	NA	0	0	3,659	NA	0	NA	3,659
Non-ADA denials	4,513	15	998	42	0	1,721	0	501	7,790
Total trips scheduled	253,149	1,466	98,557	42,560	479,012	121,322	58,518	12,578	1,067,162
Advance cancels	34,744	NA	8,428	NA	80,101	20,505	NA	NA	NA
Late cancels	NA	NA	1,577	NA	In no-shows	6,264	NA	NA	NA
Other cancels	27,326 (1)	NA	NA	NA	NA	5,631	NA	NA	NA
No-shows	9,645	NA	3,761	NA	22,028	6,774	1,427	NA	NA
Missed trips	1,178	NA	185	NA	1,351	123	NA	NA	NA
Total trips provided	207,582	1,466	84,606	42,560	376,883	82,025 (3)	57,091	12,578	864,791
ADA Trips	135,413 (2)	0	24,270	469	262,321	0 (4)	65	0	422,538
Non-ADA trips	72,169	1,466	60,336	42,091	114,562	82,025	57,026	12,578	442,253
PCAs and companions	12,571	NA	4,449	NA	32,154	NA	NA	NA	49,174
Total boardings	220,153	1,466	89,055	42,560	409,037	82,025	57,091	12,578	913,965
Vehicle Operating Statistics									
Total vehicle hours	151,753	2,016	33,593	14,444	345,262	49,935	23,309	9,082	629,394
Revenue vehicle hours	121,607	1,613	29,594	12,038	283,516	49,313	21,802	6,554	526,037
Total vehicle miles	2,204,493	16,379	423,815	204,097	4,967,505	787,772	260,012	96,510	8,960,583
Revenue vehicle miles	1,796,728	12,284	390,561	159,903	4,235,962	763,018	230,472	86,045	7,674,973
Total accidents	NA	0	1	0	84	NA	2	0	NA
Preventable accidents	NA	0	NA	0	41	NA	NA	0	NA
Breakdowns	NA	NA	NA	NA	603	NA	NA	NA	NA

(1) East Valley "Other cancels" are included in the Advance cancels count.

(2) Includes 2,227 trips performed by East Valley DAR in Phoenix and Paradise Valley.

(3) Represents the portion of STS ridership considered to be demand-responsive.

(4) STS does transport individuals who have been determined to be ADA paratransit eligible, but the trips taken are not necessarily ADA eligible trips.

Table 2.10. DAR and STS Service Performance Indicators, FY2006

	East Valley DAR	El Mirage DAR	Glendale DAR	Peoria DAR	Phoenix DAR	STS	SCAT	Surprise DART	TOTALS
Service Performance Measures									
% ADA trips denied (1)	0%	NA	0%	0%	1.38%	NA	0%	NA	0.7%
% non-ADA trips denied (1)	5.0%	1.0%	1.4%	0.1%	0%	1.4%	0%	4.0%	1.4%
ADA on-time performance (pick-ups)	90%	NA	94%	100%	94%	NA	87%	NA	NA
ADA on-time performance (drop-offs) (2)	86-91%	NA	98%	NA	92%	NA	85%	NA	NA
Non-ADA on-time performance (pick-ups)	93%	NA	94%	99%	61%	90% (4)	87%	94%	NA
Non-ADA on-time performance (drop-offs) (2)	86-91%	NA	98%	NA	NA	NA	85%	NA	NA
% advanced cancellations	13.7%	NA	8.6%	NA	16.72%	14.4%	NA	NA	NA
% late cancels	NA	NA	1.6%	NA	(3)	4.4%	NA	NA	NA
% no-shows	3.8%	NA	3.8%	NA	4.6%	4.6%	2.4%	NA	NA
% missed trips	NA	NA	0.2%	NA	0.52%	0.1%	NA	NA	NA
Travel times	84% ≤ 20 min. 98% ≤ 40 min.	No reported issues	98% ≤ 60 min.	NA	46% ≤ 20 min.; 72% ≤ 40 min.	NA	90% ≤ 30 min 99% ≤ 60 min	NA	NA
Telephone hold times	88% ≤ 1 min. 100% ≤ 90 sec	No Observed problems	76% of hrs ≤ 6 min avg.	92% < 2 min.	64% ≤ 2 min hold times	No Observed problems	No Observed problems	Some hold time issues	NA
Operating Performance Measures									
Boardings/vehicle revenue hour	1.8	0.9	3.0	3.5	1.4	2.1	2.6	1.9	1.7
Rev-miles per trip	8.7	8.4	4.6	3.8	11.3	7.4	4.0	6.8	8.9
Accidents per 100K miles	NA	0	0.2	0	1.7	NA	0.8	0	NA

(1) Calculated as denials/est% trips requested based on % trips provided by type.

(2) Based on limited sample of data developed as part of review.

(3) In Phoenix, the late cancels are included in the no-show count.

(4) From RPTA FY2006 Annual Service Performance Report.

2.4 DAR and STS Service Costs and Funding

Operating Costs and Funding

Table 2.12 on the following page shows costs for the administration and operation of each of the DAR programs for FY2006. It also shows sources and amounts of funding used to support each system. In some cases, systems identified administrative costs separately from operating costs. In several of the programs, though, administrative costs are included with operations management and other operating costs. As shown, total administrative and operating costs for the DAR and STS services was \$25,231,251 in FY2006.

Region-wide, farebox revenues and rider donations totaled \$1,314,175 (a recovery ratio of 5.2%). This ranged from 0.7% recovery at STS to a 23% recovery ratio by SCAT.

In the East Valley, farebox revenues covered 5.1% of administrative and operating costs. Local cities contributed the largest portion of revenues - \$4,070,800. Proposition 400 funding was used to cover \$1,963,255 of expenses. Smaller amounts from fuel tax credits and FTA Section 5307 Associated Capital Maintenance funds accounted for the rest of the revenues.

In El Mirage, farebox receipts accounted for 1.8% of total revenues. Local Transit Assistance Funding (LTAF) revenues covered the remainder of the operating costs.

In Glendale, farebox receipts were 4.6% of total revenues. An almost equal amount of LTAF funding and local City funding covered the remaining costs.

In Peoria, fares accounted for 4.8% of revenues. LTAF funding covered the remaining expenses.

In the Phoenix DAR program, farebox receipts covered 5.0% of operating and administrative costs. The remaining 95% (\$11,813,855) was from T2000 local city transit funds.

STS, which does not have formal fares and only asks for rider donations, uses these donations to cover only 0.7% of costs. A significant amount of LTAF and local city funding is then used. Funding is then received from a variety of other programs, including the Area Agency on Aging and Homeland Security. STS general fund monies and other sources then make up the remainder of revenues.

SCAT, which has a \$3.00 fare and only a \$15.76 cost per boarding, has a 23% farebox recovery ratio. Fundraising and a grant from the United Way account for \$332,699. Funding is also received from the RPTA, and there is a small amount of FTA S. 5307 Associated Capital Maintenance funding.

Table 2.12. DAR and STS Operating Costs and Funding, FY 2006

	East Valley DAR	El Mirage DAR	Glendale DAR	Peoria DAR	Phoenix DAR	STS	SCAT	Surprise DART	TOTALS
Costs:									
Administrative Costs			\$314,094		\$419,938				\$734,032
Operating (w/ some Admin) Costs	\$6,717,959	\$81,486	2,073,460	\$977,312	12,020,039	\$1,545,686	\$689,473	\$391,804	\$24,497,219
Total Costs	\$6,717,959	\$81,486	\$2,387,554	\$977,312	\$12,439,977	\$3,868,895	\$689,473	\$391,804	\$25,231,251
Funding:									
Fares/Donations	\$342,096	\$1,466	\$110,890	\$47,025	\$626,122	\$12,000	\$161,774	\$12,802	\$1,314,175
Prop 400	1,963,255					86,000	175,000		2,224,255
Local city funding	4,070,800		1,117,666	930,287	\$11,813,855	500,000		100,000	17,602,321
Local Transp. Assist. Funds (LTAF)		80,020	1,158,998			537,993		279,002	2,986,300
Fuel Credits	211,808								211,808
FTA S5307 Assoc. Capital Maint.	130,000						20,000		150,000
Area Agency on Aging						152,647			152,647
STS General Fund						167,972			167,972
Homeland Security Grant						97,208			97,208
United Way							48,000		48,000
General fundraising						97,000	284,699		381,699
Total Funding	\$6,717,959	\$81,486	\$2,387,554	\$977,312	\$12,439,977	\$1,650,820	\$689,473	\$391,804	\$25,336,385

Surprise DART has a 3.3% farebox recovery ratio. Remaining revenues are from local City funds and LTAF funding.

Cost Performance Indicators

Based on the cost and service information from Tables 2.9 and 2.12 above, several cost performance indicators were calculated for each DAR program as well as for the region as a whole for FY2006. These are shown in Table 2.13. Productivity is also repeated in this table since it plays a significant role in cost-effectiveness. Miles per trip are also repeated since the size of the area and trip length is a major factor in productivity.

As shown, the region-wide total operating cost per boarding (which includes companions and PCAs) was \$27.61. This ranged from a low of \$12.08 at SCAT to a high of \$55.58 in El Mirage. Total operating cost per vehicle-revenue-hour for the region averaged \$47.96, with a low of \$31.34 at STS and a high of \$81.19 in Peoria. Average total operating cost per revenue-mile for the region was \$3.29, ranging from a low of \$2.03 at STS to a high of \$6.63 in El Mirage.

The SCAT service appears to be quite cost-effective. Hourly operating costs are the lowest in the region (\$31.62). Combined with these low hourly costs, the service area is relatively compact, trip lengths are relatively short, and as a result, productivity is very good. High productivity combined with low hourly costs results in very low unit costs of service. The review of SCAT noted, though, that this non-profit agency operates on a very tight budget and that funding issues and tight staffing can sometimes impact service quality.

Glendale and Peoria had higher hourly operating costs (\$80.68 and \$81.19, respectively), but these services were the most efficient, with productivities of 3.0 and 3.5 respectively. Productivity was aided in each case by shorter average trip lengths. Because of the high productivities, both systems had costs per boarding that were below the region average (\$28.22 in Glendale and \$22.96 in Peoria. On-site reviews also showed that, with good budgets and staff compensation, both had stable and experienced staffs and good quality service.

East Valley DAR had an hourly operating cost that was slightly above the region average, trip lengths are also slightly above the average and a productivity slightly lower than the region average. Overall, its cost per boarding (\$30.51) and cost per mile (\$3.74) were reasonable and average.

Table 2.13. DAR Program and STS Cost Performance Indicators, FY2006

	East Valley DAR	EI Mirage DAR	Glendale DAR	Peoria DAR	Phoenix DAR	STS	SCAT	Surprise DAR	TOTALS
Total operating cost	\$6,717,959	\$81,486	\$2,387,554	\$977,312	\$12,439,977	\$1,545,686	\$689,473	\$391,804	\$25,231,251
Total boardings	220,153	1,466	89,055	42,560	409,037	82,025	57,091	12,578	913,965
Total trips	207,582	1,466	84,606	42,560	376,883	82,025	57,091	12,578	864,791
Total vehicle revenue hours	121,607	1,613	29,594	12,038	283,516	49,313	21,802	6,554	526,037
Total vehicle revenue miles	1,796,728	12,284	390,561	159,903	4,235,962	763,018	230,472	86,045	7,674,973
Operating cost per boarding	\$30.51	\$55.58	\$26.81	\$22.96	\$30.29	\$18.84	\$12.08	\$31.15	\$27.61
Operating cost per trip	\$32.36	\$55.58	\$28.22	\$22.96	\$32.87	\$18.84	\$12.08	\$31.15	\$29.18
Operating cost per veh. rev-hr.	\$55.24	\$50.52	\$80.68	\$81.19	\$43.70	\$31.34	\$31.62	\$59.78	\$47.96
Operating cost per rev-mile	\$3.74	\$6.63	\$6.11	\$6.11	\$2.92	\$2.03	\$2.99	\$4.55	\$3.29
Productivity (boardings/rev-hr)	1.8	0.9	3.0	3.5	1.4	1.7	2.6	1.9	1.7
Rev-Miles per trip	8.7	8.4	4.6	3.8	11.3	9.3	4.0	6.8	8.9

Phoenix DAR had a relatively low cost per revenue-hour (\$43.70), second lowest only to SCAT. This is due in part to economies of scale. The average trip length is the longest in the region, though, at 11.3 revenue-miles per trip. This results in a lower than average productivity. Combining all of these factors, the cost per boarding is below the region average. The system review did note, though, that service quality could be aided by some additional scheduling, dispatching and reservations staff, which would raise the costs slightly.

Surprise DART had a somewhat higher cost per revenue-hour (\$59.78) than the region average. For a smaller operation without significant economies of scale, though, this cost was quite good. Average trip length was lower than the region average and productivity was also slightly higher than average. Overall, the cost per boarding was almost exactly the system average.

El Mirage DAR had a relatively low cost per hour (\$50.52) for a very small system. Even though El Mirage does not benefit at all from economies of scale, the very slim staffing appears to keep costs down. While the area is quite small, trip length was about average, and productivity was low (only 0.9 boardings per revenue-hour). The very low productivity resulted in a cost per boarding (\$55.58) that was the highest in the region.

STS has a relatively low operating cost per revenue-hour (\$31.34). The average trip length was slightly higher than the region average. Service productivity was comparable to the region average (1.7). The resulting average cost per boarding is quite low given that service is provided over such a large area.

2.5 Taxi Subsidy and Mileage Reimbursement Programs

In addition to the DAR and STS programs, the RPTA and several member communities also administer taxi subsidy and auto mileage reimbursement programs that serve seniors and persons with disabilities. Information about these programs, as of January 2007, is presented in this section.

General Program Description

As the name implies User-Side-Subsidy programs differ from contracted service in that the public transit subsidy is provided directly to the user of service, rather than through a contract between the Public Transit agency and a provider. Transit funds are used to subsidize trips from for-hire vendors in the community. Taxi programs are particularly well suited to providing time-sensitive trips that require a dedicated vehicle such as dialysis trips. From the participant's perspective taxi trips provide a direct on-time trip; from a program perspective taxi trips siphon off from Dial-a-Ride some of the more difficult and expensive trips.

A lesser-used transportation alternative is a mileage reimbursement program for individuals who recruit a "volunteer" to drive them. The most notable reimbursement program is in Riverside, California where seniors and persons with disabilities can use the program for most of their local travel needs. Other reimbursement programs limit trips purpose, such as Franklin County, Pennsylvania which restricts the program to medical trips. Mesa is the only city within Maricopa County that currently offers this program.

Overview of Taxi Programs in Maricopa County

Although the first Taxi User-Side-Subsidy program in Maricopa County was started in 1984 and the second in 1999, it wasn't until the past five years that the concept caught on and been replicated throughout the area. Since the year 2000, taxi programs have been initiated by the cities of Scottsdale, Mesa, and Glendale. Recently RPTA initiated a taxi program with the intent of providing availability to the cities and consistency to the users. To date Mesa, Chandler and Gilbert have joined this program while Phoenix, Glendale and Scottsdale have retained discrete services. In early 2007, Surprise started a Cab Coupon program for its residents; Tempe is considering a taxi program. Current taxi programs act as supplements to Dial-a-Ride service, rather than as ADA complementary paratransit.

The various taxi programs in Maricopa County are similar in that they serve people with disabilities and older adults and provide dedicated rather than shared trips. In most, but not all programs, there is user choice about the taxi company they use and the user

pays a share of the trip cost. Programs vary in the manner in which they provide the subsidy, the types of trips that are eligible, the user cost and the fare media. Some of the programs use all of the taxi services in the region, others use specified taxi companies. The following section describes each of the Taxi Programs in the urban area

Phoenix Programs

The City of Phoenix provides two Taxi Subsidy Programs which are administered under contract with a non-profit agency, LIFE. One of the programs subsidizes trips to employment; the other subsidizes trips from home to dialysis centers.

Taxi Subsidy Program for Employment

Service Policies

The Taxi User-Side Subsidy program for employment is available for Phoenix residents with a disability who are unable to use the bus effectively and safely for their trips to work. The subsidy is provided for trips to employment and employment training and the participants live and work in the City of Phoenix. The program is available 24 hours a day, 7 days a week and all work and training trips are eligible. Employment is verified, often by a referring agency.

Travel vouchers containing the user's name, home address and work address are issued to eligible people. Each voucher covers $\frac{3}{4}$ of the cost of a taxi trip between home and work. Vouchers expire annually. The user gives the driver one voucher and pays the other $\frac{1}{4}$ of the fare in cash at the time of his or her trip. The subsidy is capped at \$15.00 per one way trip plus a 15% gratuity. Program participants are provided with a list of taxi and van companies from which to select a provider of their service and are free to change companies at any time. The rates charged are regular taxi rates: no reductions are sought because they reduce the quality of service. All taxi and van services in the metro area are invited to participate in this program. At any given time participants select 4 or 5 companies based on price and quality of service. There are no contracts between LIFE and the taxi companies.

Participants order their vouchers once a month by telephone. The number of vouchers ordered depends on the number of days a person works or goes to training; 41 vouchers is an average number for people who are working full time. The monthly call, in addition to securing vouchers, provides feedback to the program on the quality of service that is being provided as well as the participants work status.

LIFE manages all aspects of the program including preparation of vouchers, tracking, billing, reporting and monitoring. Two staff people at LIFE manage the program. Detailed monthly reports are provided to the City of Phoenix with the monthly invoices. Annual reports are also provided to the City of Phoenix and monthly meetings are held with a transit staff person who oversees the program.

Service Data and Costs

Participants in the Employment program may go anywhere within the City of Phoenix, but the vouchers cover $\frac{3}{4}$ of trips up to about 8 miles. When the \$15.00 cap is reached the participant must pay the full fare for the remainder of the trip. In practice this limits the number of people who make longer trips to employment.

In the period between July 1, 2005 and June 30, 2006, 22 people took 3,760 one-way trips to work. The cost of the taxi trips averaged \$15.62, the average subsidy was \$12.30 including the tip and the average user share was \$3.90. The total subsidy cost for the year was \$45,851 plus a 21% administrative fee. Six taxi companies were used and more than half the participants used more than one taxi company.

Transportation for Dialysis

Service Policies

In 1999 Phoenix initiated a second User-Side Subsidy program based on the Employment Program described above. Phoenix residents receiving dialysis treatments are eligible for trips between home and their dialysis centers, about 26 trips a month. As in the Employment program, Travel vouchers contain the user's name, home address and work address and the subsidy is $\frac{3}{4}$ of the cost of a one way taxi trip up to \$15.00 plus a 15% gratuity. Vouchers expire annually. Rates charged are regular taxi rates and the program is open to all taxi and van companies.

The program differs from the Employment Program in that receipt and distribution of vouchers is handled by social workers in the dialysis centers. Initially social workers complete registration forms for each participant; subsequently patient lists are updated once a month. At other times during the month new participants are added to the program individually.

Another difference in the Dialysis Program is that the Arizona Kidney Foundation pays the user share for participants with low incomes; more than half of the users are assisted in this way. In such cases, vouchers are stamped AFK, indicating to taxi drivers that the passenger will not pay a fare.

Service Design

As in the Employment program, LIFE manages all aspects of the program including preparation of vouchers, tracking, billing, reporting and monitoring with the same two staff people who manage the employment program and provides monthly and annual reports to the City of Phoenix. An advisory committee composed of dialysis patients, dialysis social workers and transportation providers provides guidance to the program.

Service Data and Cost

In the period between July 1, 2005 and June 30, 2006, 105 people took 13,344 trips to dialysis. The cost of the taxi trips averaged \$ 14.14 with tip, the average subsidy was \$10.67 including the tip and the average user share was \$3.47. The total subsidy cost for the year was \$143,033 plus a 29% administrative fee. Seven taxi companies were used and 73 of the participants used only one taxi company. The program was frozen during the year to avoid budget overruns. Plans have been made to increase the funding in 2008.

Travel Patterns

Every attempt is made to locate dialysis patients at centers near where they live, and the large number of dialysis centers in Phoenix makes this possible. Most trips are within five miles and therefore well within the subsidy cap. Participants rarely change dialysis centers so the trips remain consistent month after month for most participants.

Scottsdale Programs

In 2000 the City of Scottsdale initiated a Taxi Subsidy Program for its older residents and residents with disabilities. Subsequently a dialysis component was added. All aspects of the program are operated by the City of Scottsdale.

Cab Connection

Service Policies

The Taxi User-Side Subsidy program in Scottsdale is available for people over 65 and those with disabilities. There is no restriction on trip purpose but rides must either begin or end in Scottsdale. The program is available 24 hours a day, 7 days a week and all trip purposes are eligible. Participants may bring along companions provided the trip origin and destination are the same.

Participants call to register and are mailed a form. A reduced fare photo ID from Valley Metro is required for all participants; in addition people with disabilities need a doctor's signature. Forms are used to order vouchers by mail. After the initial order, participants are automatically sent an order form each month listing their previous trips. Each person may receive 20 vouchers on which their name and origin are printed. Sixteen of the vouchers will have a destination address, while the other four are open-ended.

Each voucher covers 80% of the cost of a taxi trip. The user gives the driver one voucher and pays the other 20% of the fare in cash at the time of his or her trip. The subsidy is capped at \$10.00 per one way trip plus a gratuity of \$1.88. Vouchers expire two months from the date of issue.

Provider eligibility includes having vehicles that are marked as taxis and have meters and the company must file a tax form. All taxi and van services in the metro area are invited to participate in this program. Three companies actually participated in 05-06, with one company, Discount Cab, providing 80% of trips. Program participants are sent a list of taxi and van companies from which to select a taxi company and may change companies at any time. There are no contracts between City of Scottsdale and the taxi companies. The rates charged are regular taxi rates.

Two employees of the City of Scottsdale manage all aspects of the program including preparation of vouchers, tracking, billing, reporting and monitoring.

Service Data and Costs

Trips in the Cab Connection program must either originate or end in the City of Scottsdale. Participants may request travel vouchers for 20 one way trips a month. Each voucher covers 80% of the trip cost up to \$10.00 per one-way trip. When the \$10.00 cap is reached, the participant must pay the full fare for the remainder of the trip.

The program issued 91,881 vouchers in FY 05-06; 2981 people were registered for the Cab Connection; 38,789 one-way trips were taken. The average trip length was four miles.

Costs for FY 05-06 were \$370,000 paid directly to taxi companies, \$80,000 in administrative costs and \$10,000 for supplies.

Transportation for Dialysis

In addition to Cab Connection vouchers, Scottsdale residents with end-stage renal disease are eligible for full taxi fare for 26 trips to and from their dialysis centers.

Glendale Taxi Subsidy Programs

The City of Glendale in November, 2005 initiated a pilot Taxi Subsidy Program with two components: the first to provide trips for essential medical trips, the second to provide trips for victims of domestic violence. This program is currently being considered for permanent status. This program, modeled after the Phoenix programs, is administered by LIFE, the agency that administers the Phoenix programs.

Essential Medical Trips

Service Policies

Glendale residents who take repetitive essential medical trips including dialysis, pulmonary, stroke and cardiac treatments are eligible for up to 30 travel vouchers a

month. Names and origin and destination addresses are printed on each voucher. Each voucher covers $\frac{3}{4}$ of the cost of a taxi trip up to \$15.00 and a 15% gratuity is paid by the program. Rates charged are regular taxi rates and the program is open to all taxi and van companies, though currently only three companies are providing trips. Participants may use this subsidy 24 hours a day, 7 days a week. No contracts are written between LIFE and the taxi companies.

While this program has engaged in a direct marketing effort to appropriate medical services, the only participants to date are dialysis patients. Dialysis trips are arranged by social workers in each of the dialysis centers in Glendale. Initially social workers complete registration forms for each participant, then on a monthly basis, patient lists are updated and vouchers are issued accordingly. Social workers distribute vouchers to their patients. Additional patients are registered individually as needed.

LIFE manages all aspects of the program including preparation of vouchers, tracking, billing, reporting and monitoring with the same two staff people who administer the Phoenix programs and provides monthly and annual reports to the City of Glendale

Service Date and Costs

Participants may travel anywhere in Glendale but the \$15.00 cap per trip means that for trips over about eight miles the participant must pay the full fare. As in the Phoenix Dialysis Program the Arizona Kidney Foundation pays the user share for people of low income.

In the eight months the pilot program has been running, 29 people have taken 877 one way trips. The number of vouchers issued was 2686. The average subsidy cost was \$13.23 plus tip and the user share was \$4.13. The cost of the subsidy for the period was \$27,912 which includes a 29% administrative fee. Three taxi companies were used.

Travel Patterns

Dialysis patients go to the nearest center whenever possible so trips are generally short and within the subsidy cap. A sample for June 2006 shows an average trip length of five miles. Participants rarely change dialysis centers so the trips remain consistent for most participants

Trips for Victims of Domestic Violence

While part of the Glendale Taxi Subsidy Program and managed by LIFE, the procedures for the victim assistance program are different from the program for medical trips. Blank vouchers are given to Police Officers who fill in the addresses at the time of use. To date, only two trips have been made using the vouchers.

Mesa, Chandler and Gilbert – East Valley Ride Choice

In July 2006, the Cities of Chandler and Mesa, the Town of Gilbert and the RPTA joined forces to provide a combined taxi subsidy called the East Valley Ride Choice (EVRC) Coupons for Cabs Program. The service is new for Chandler and Gilbert and is an extension of Mesa's Coupons for Cabs Program.

It is funded by Chandler, Gilbert and Mesa and administered by the RPTA under contract with the East Valley Senior Services, Inc., a non-profit agency. Each city pays for trips made by their registered residents and there are no restrictions on trip origin or destination. Three full time East Valley Senior Services, Inc. (EVSS) employees are assigned to the East Valley Ride Choice Programs.

The City of Mesa also funds the Mesa Mileage Reimbursement Program for eligible Mesa residents. The EVSS operates the EVRC Mesa Mileage Reimbursement Program under contract with the RPTA.

Additionally, an Apache Junction taxi subsidy and mileage reimbursement program is operated by the EVSS employees. The Apache Junction program is outside Maricopa County and is not covered in this report.

East Valley Ride Choice Coupons for Cabs

Service Policies

The program serves residents of Chandler, Gilbert and Mesa who are age 65 and over or who have a disability. No restrictions are placed on trip origin, destination, purpose or length.

EVSS performs all aspects of the program including determining client eligibility, maintaining a current list of participants, processing coupon requests, making payments to the participating taxi companies and mediating user complaints

Participants enroll in the program by completing a written application. Documentation is required to determine residency, age and disability. The two-page application includes questions on age, disability or health issues, the use of mobility aids and current mode of travel. Currently the information is used to determine program eligibility and internal EVSS reports and no demographic or trip-making information is being reported.

Following the end of each fiscal year, EVSS purges the rider list removing names of anyone who has not used the service in the last six months. Names are also removed when EVSS is notified of relocation or death of participants.

Coupon books valued at \$10.00 (containing 10, \$1.00 coupons) are sold for \$2.50 by EVSS by mail or during marketing presentations. When sold, EVSS records the coupon

control number and the purchaser's name to monitor use. At the current time, participants are limited to six books per month in Chandler and Gilbert and ten books per month in Mesa. Chandler and Gilbert are considering increasing to ten the number of books allowed to be purchased. A check for the exact amount must be included with the order and no other form of payment is accepted. Orders must be received by EVSS by the 15th of the month and are mailed out on the last business day of the month. Currently, promotional meetings to introduce the new service in Chandler and Gilbert are being held and first-time users are provided with two coupon books with no co-payment.

The coupon books for Mesa are date stamped with the first date of the quarter and must be used within six months of that date. Mesa participants have between three to six months to use the coupons depending upon which month in the quarter the coupons were purchased. To assist with the program start-up, coupons for Chandler and Gilbert residents are date stamped at the time of purchase allowing users a full six months to use. Expired coupons are not accepted.

Two taxi companies, AAA and Discount (Total Transit), participate in the program. The users call one of the taxi companies when ready to travel and use coupons to pay the fare and tip. Participants can use cash to supplement their coupons and extend their trip; however, no documentation is kept on the additional out-of-pocket costs by users.

The taxi companies send EVSS a monthly invoice including the canceled coupons. The coupons contain the pick up address, date of service and the user's signature. The log numbers on the coupons are checked to verify they were used and signed by the purchaser. The invoices are due to EVSS by the 8th of the following month and after verifying accuracy, payment is sent to the taxi companies.

EVSS encourages riders to resolve minor complaints personally with the taxi companies. While few complaints are received, complaints related to policy or of a serious nature are addressed by EVSS.

Service Data and Costs

The combined service is too new to provide annual information; however, information on registration and the FY 2006-07 budget is available.

As of March 20, 2007, Chandler has 32 registered participants and Gilbert 24. EVSS, RPTA, Chandler and Gilbert staff are working to increase participation and to inform dial-a-ride users about the new service. Mesa has 450 registered participants.

Table 2.14 on the following page shows the RPTA FY 2006-07 budget for the EVRC Cab Coupon Program. Please note the budget also includes information on the Mesa Mileage Reimbursement Program which is covered later in this report.

Since the Mesa Coupons for Cabs program began as a pilot program in 2002 long before the combined taxi program, last year information is available and follows below.

Service Data and Costs for Mesa Coupons for Cabs

On July 1, 2005, there were 679 Mesa residents registered for the Coupons for Cabs program. In the period of July 1, 2005 through June 30, 2006, 491 Mesa residents made 7,663 one-way taxi trips. The average one-way total trip cost was \$15.68 of which the user paid \$3.08. The annual total cost of the program was \$120,160 which includes: \$59,073.60 paid to the taxi companies, \$37,487 paid to EVSS for staff, printing and postage, and \$23,600 paid by users for coupons purchased.

The \$23,600 paid by the users reflects coupon books purchased but not all coupons were used by the riders. It is estimated between 20 to 40 percent of coupons are not used. Coupons are purchased by some participants as “insurance” in case they need them. The unused coupons add revenue to the program and provide participants with a sense of security in knowing they have transportation if needed.

Table 2.14. East Valley Ride Choice - FY 2006-07 Budget

	Mesa	Chandler	Gilbert	Total
Revenue				
Cities Contribution	\$340,000	\$50,000	\$20,000	\$410,000
*Taxi Coupons User Share (25%)	39,250	8,500	3,375	51,125
Taxi Coupon Value	[157,000]	[34,000]	[13,500]	[204,500]
Total Revenue	379,250	58,500	23,375	461,125
Expenses				
*Taxi Coupon Cost (only 80% of the sold coupons are estimated to be used)	125,600	27,200	10,800	163,600
Mileage Reimbursement	96,000			96,000
Direct Program Expenses	221,600	27,200	10,800	259,600
Overhead and Administration				
Wages & Fringe Benefits	78,429	14,505	5,806	98,740
Printing, Posting, Misc.	19,570	3,627	1,080	24,276
Start-Up Expenses	1,800	4,245	2,123	8,168
Subtotal - Overhead Cost	99,798	22,376	9,009	131,184
Administrative Cost (18%)	57,852	8,924	3,566	70,341
Total Overhead & Adm.	157,650	31,300	12,575	201,525
TOTAL PROGRAM COST	\$379,250	\$58,500	\$23,375	\$461,125
Overhead & Administration %	42%	54%	54%	44%

**Taxi coupon revenue is based on 25% of the coupon value of coupons paid by purchasers. The total value is shown in brackets. The coupon expense is based on an estimate of the percent of coupons that will be used.*

East Valley Ride Choice Mesa Mileage Reimbursement Program

Seniors and persons with disabilities in the City of Mesa have another transportation alternative, the Mileage Reimbursement Program. This program was modeled after the Riverside, California Travel Reimbursement and Information Project (TRIP) where non-driving seniors or persons with disabilities recruit a non-residing family member or friend for transportation.

The City of Mesa started the Mileage Reimbursement Program in 1999 under contract with the EVSS (formerly the Mesa Senior Services). The program continues to be funded by the City of Mesa but is now administered by the RPTA under contract with the EVSS.

Service Policies

The Mileage Reimbursement Program eligibility requirements are identical to the Coupons for Cabs Program. Both programs use the same application form and some Mesa residents use both programs. The service is for Mesa residents age 65 or over and between the ages of 18 and 64 with a disability.

The passenger chooses their own driver who cannot be residing with the passenger. It is estimated 98 percent of trips begin from the person's home. The other two percent are for trips made when participants are visiting relatives or friends who live in the area.

The passenger keeps a travel log that documents date, trip purpose, address destination, number of miles and driver signature for each trip. The user signs and dates the form at the bottom before sending to EVSS by the fifth day of the following month. Participants can submit up to 300 miles monthly for reimbursement at a rate of \$.44 per mile. The passenger is responsible for passing along the reimbursement to their volunteer driver.

Service Data and Costs

For July 1, 2005 through June 30, 2006, 192 people were reimbursed for 31,800 one-way trips. The average trip cost \$3.59 and was 5.5 miles in length. The total cost of the program is \$114,106 which includes \$70,098 for mileage reimbursement and \$44,008 for administration (staffing, printing and postage).

Travel Patterns

Currently, there is no tracking of origin and destination information for trips. Since the start and end addresses are provided on the monthly mileage logs, this information could be accessed.

Surprise Taxi Coupon Program

As a supplement to its Dial-a-Ride service, Surprise, in 2006 attempted to start a taxi-subsidy program. The program did not reach the level of interest required for full implementation. When the initial program was started, no cab companies were located in the Surprise area. Surprise has issued a Request for Proposals to locate a Transportation Provider for a new "Taxi Coupon Program" Included in this program is a further reduced user's cost share.

The new program will be provided by the Community Initiatives Department and will offer Surprise residents cab rides. Initially, the program will be offered for dialysis trips and ADA qualified individuals; while the second phase will be the residents 60 and over and low income. The program will be funded entirely with city funds and over \$80,000 is budgeted for the first year of service.

Section 3. Service Barriers, Duplication, Gaps and Needs

This section describes barriers to travel by persons with disabilities and seniors in the RPTA area. It also discussed duplication of services and the potential for economies of scale in the operation of some of the areas DAR programs. Finally, the amount and extent of service in each community and possible gaps in service are noted.

Information about service barriers, gaps, and needs was obtained from several sources. These included public Stakeholder meetings, meetings with local officials, recent surveys of DAR riders, and assessments conducted by area human service organizations. Section 3.1 summarizes the key information and input obtained and examined. Section 3.2 then discusses service barriers. Duplication of service and possible economies of scale are noted in Section 3.3. Finally, Section 3.4 notes possible service gaps and needs.

3.1 Public Input and Agency Needs Assessments

Public and Stakeholder Input

As noted in the “Introduction” of this report, a Stakeholder group was established at the outset. This group included riders, advocates, representatives of local service organizations, staff of local communities and DAR programs, and regional transit and planning staff. Stakeholders were asked to assist with outreach.

An initial meeting of the Stakeholders was held in December 2006 to identify key service issues and needs. Forty-eight people from throughout the valley attended and provided input. Participants were grouped by area – East Valley, Phoenix and the Central Valley, and the West Valley. Each area-specific group was asked to discuss and identify issues and needs in their region.

Table 3.1 on the following pages summarizes the major issues and needs identified by each group. As shown, a number of service performance and quality issues were noted. Long DAR ride times, scheduling issues and circuitous routing, early and late pick-ups, and long wait times for rides were noted. A number of service design and policy issues were also noted. A lack of evening and weekend service was cited in the West Valley as well as by some individuals in the East Valley. Trip denials and unmet trip requests were noted by Stakeholders in the Phoenix/Central area.

Table 3.1. Major Issues and Unmet Needs Identified by Stakeholders

West Region	Central Region	East Region
TRIP PERFORMANCE ISSUES		
Long trips	Long trips	Long trips
Early pick up for dialysis	Dispatching/routing improved	Reliability of Dial-a-Ride
Need to improve scheduling	Outlying areas	
	Excessive wait times	
	Early pick ups/late pick ups	
	Wheelchair accidents/faulty securing	
	Excessive ride times/long time on road	
	Waiting time/phone disconnects	
	Long time on vehicles	
	ADA trip denials	
	Early trips/late trips	
	Difficulty getting next day trips	
	Availability of requested trips	
SERVICE ISSUES		
Inefficient scheduling	Fixed route design	No service on weekends/holidays
Need for door to door service	Not meeting demand	Need more direct routing
Need to prioritize time sensitive trips		Attempt to decrease ridership Unacceptable
Limited or no weekend/holiday service		Routing problems due to inserts
Distance from bus stop to home		Inadequate forecasting of demand
POLICY ISSUES		
Age 2-17 traveling alone (behavioral issues)	Trip by trip eligibility not observed	Conditional eligibility not observed
Concern with other passengers (SMI)	Lack of information given to drivers	
Need to schedule day before	Need stricter certification (ADA)	
	Need Trip by trip eligibility (ADA)	
	Attitude of people in public transit	
COMMUNICATION/ INFORMATION		
	Lack of mobility training	Misconception about comparative travel times- fixed route and Dial-a-Ride
	Lack of input from customers	

West Region	Central Region	East Region
COORDINATION ISSUES		
Jobs threatened by regional system	Nine different transportation systems	Incompatible software, bus and DAR
	Lack of communication among providers	Large number of transportation providers
	Need for standardization	Coordination needed, one stop center
	Parochialism/fragmentation	
CROSS JURISDICTIONAL ISSUES		
Need for cross jurisdictional trips	Cross jurisdictional transfers	Long cross jurisdictional trips
Need to cross boundaries for dialysis	Need for better transfer points	
Need for dialysis centers in the area		
RESOURCE ISSUES		
Not enough vehicles, not enough W/C vans	Limited light rail	Financial Issues-how much a city can afford
	Need for taxi subsidies for all cities	
	Not enough capacity	
	Need for more vehicle hours	
	Need for heat shelters	
	Cost of paratransit	
	Need for reliable funding	
	Increased needs of elderly	
	More alternatives/options	
	Taxi subsidy program	
	Need for free bus pass	
	Lack of community awareness	

The need for additional resources and vehicles was also noted. The ability to continue to meet growing demand was discussed and several ways to expand travel options other than DAR that might allow for more cost-effective were suggested – ranging from expanded taxi subsidy programs, to free fixed route bus passes, to mobility training and expanded and improved fixed route service. A number of representatives also indicated a need for more thorough DAR eligibility determinations to ensure that resources were being directed to riders who could not use other available transportation options.

Stakeholders also noted the lack of coordination of the various DAR services and the need for more standardization of service policies. Issues with cross-jurisdictional travel were also mentioned by a number of participants.

Elected Official and Member Community Input

Input on major issues was also solicited from local officials and RPTA member community staff at the outset of the study. Twenty five staff and elected officials were interviewed. Each was asked about the perceived strengths and weaknesses of current services.

Since each community has developed its paratransit service, opinions about service quality and needs varied. Some officials and representatives acknowledged issues with service quality and with the ability to meet all service demand. Others indicated that current service quality was quite good and expressed concern about the possible impacts of a more regional system on current service quality.

Many expressed concern about the growth in service demand and the ability to provide the resources to meet the demand. A number of officials and staff supported thorough ADA paratransit eligibility determination. Another common theme was to develop a variety of services regionally and locally which could more effectively meet the specific need of the user. More effective use of taxi coupons and mileage reimbursement programs was recommended. Other suggestions included senior travel training and free bus passes for seniors to encourage riders to use bus service.

In terms of barriers and service needs, the lack of seamless regional travel was identified by most officials and staff. Suggestions ranged from only regionalizing scheduling and dispatching to one agency operating a regional ADA paratransit service. Some suggested regionalizing some paratransit functions including a call center, vehicle identity, fare policies and transfers, while continuing to operate locally similar to fixed route bus service. The goal would be to provide the passengers with a seamless service even though different vendors would continue to provide service.

RPTA Rider Satisfaction Survey

The RPTA conducts periodic rider satisfaction surveys. In January 2007, in conjunction with this study, the RPTA commissioned WestGroup Research to conduct such a study. WestGroup interviewed 1,811 current Dial-a-Ride and STS passengers across the valley. More than one in three riders surveyed (36%) said they had used Dial-a-Ride within the past week as compared to 29% in the survey conducted in 2002. The average number of trips among these riders was 3.8; in 2002 that number was 2.7. Respondents said that without Dial-a-Ride they would not have been able to make their trip.

Satisfaction among riders varied by provider; in general the smaller systems report higher satisfaction levels than the larger systems. While the majority of people reported good service, two out of seven people reported they were not usually picked up on time, one in five users was not confident they would be picked up on time and four out of seven said they didn't get to their destinations at the expected time.

One in ten riders surveyed indicated they had made a transfer using Dial-a-Ride, but more than one in five riders said concerns about the transfer process had prevented them from using Dial-a-Ride. Satisfaction with the transfer process was reported by 71% of respondents. This leaves 1/3 of riders dissatisfied with the transfer process. The primary reason for the dissatisfaction with transfers was indicated to be long wait times at transfer sites.

Area Agency on Aging Needs Assessment

The Area Agency on Aging conducts an annual assessment of the most critical needs facing seniors in the valley. The 2006 Needs Assessment was conducted in the fall of 2006. As part of the assessment, participants (primarily people over 60 years old) were asked to list problems with transportation and with the DAR services in particular. The most significant issues and needs noted, according to CJ O'Connor, Director of Research and Planning were:

- Geographic boundaries/ restrictions for Dial-a-Ride/Reserve-a-Ride
- Expensive (\$8.00 from Mesa to Guadalupe)
- Lack of information and understanding of Dial-a-Ride services
- Two to five hour wait times (especially on return trips)
- Telephone access - receiving busy signals
- A desire to be able to make non-ADA trip reservations in advance
- Poor on-time performance/not dependable

Respondents also made a number of suggestions for service improvements, including expanding the service area boundaries, providing more funding for DAR services, and reducing the cost of the service.

MAG Needs Assessment

The Maricopa Association of Governments (MAG) also produces an annual needs assessment, the **Regional Services Plan**, based on input from over 500 citizens in the MAG region. Transportation has been on or near the top of the list for 20 years. From the 2006 assessment, MAG staff noted the following:

“...another common need that participants noted was for expanded public transit options. Many older adults expressed frustration with trying to reach bus stops that are located far from their homes and that are in areas where there is no shade and no place to sit. There was concern that some areas in the MAG region do not receive bus service at all. Some expressed concern that they would soon need to stop driving their own vehicles and were uncertain how they would continue to be mobile with no family in the area and most of their friends being the same age”. Focus groups held in conjunction with the needs assessment suggested “Improve transportation systems by

providing more access points, expanding service and providing areas with shade and seating”.

3.2 Service Barriers

Based on the input received, as well as on the individual reviews of current DAR programs, the following major service barriers were identified.

Varied and Inconsistent Service Policies

The individual cities in Maricopa County have historically developed and funded autonomous transportation systems in each city in conjunction with that city’s growth and development plan. A major barrier to travel can be summed up in a single phrase: *lack of consistency*. Customers of public transportation often cite “confusion about how the transportation system works”, as a barrier to using bus or Dial-a-Ride in their location. No wonder they are confused. Since each system developed on its own there are a number of inconsistencies. Among these are hours of operation, fares, eligibility, policies that range from travel for a companion to how many bags of groceries are allowed, and whether one is deposited at the curb or at the door. As well as confusing passengers, these inconsistencies confuse vehicle operators as well, especially given that drivers often move from system to system. That drivers are not clear on the policies was revealed when we interviewed vehicle operators in conjunction with this study.

The inconsistency in DAR policies and services has been a subject of concern and serious discussion among transit planners and operators since the early 1980’s. The implementation of a sub-regional service in the East Valley provided some standardization. The implementation of ADA service, with federal required service criteria, also has provided for some consistency and standardization. The RPTA’s customer information center, where people can get information on transportation service in each community, also has assisted in addressing this barrier. Significant variation in policies and operating procedures still exists, though, and is still a barrier to regional travel.

The overview of current DAR services in Section 2 of this report clearly indicates the complexity of current services and policies. For example, in addition to having eight different reservation centers and reservation telephone numbers, the hours when each system accepts trip requests varies significantly. Trip requests are accepted in the East Valley from 6:00 a.m. to 7:30 p.m. In Phoenix and in southwest communities which receive service through Phoenix, ADA trip reservations are accepted from 8:00 a.m. to 6:00 p.m. However, non-ADA trip requests in Phoenix are taken from 5:00 a.m. to 10:00 p.m. on weekdays and from 5:00 a.m. to 9:00 p.m. on weekends. In Glendale, ADA trip requests are taken seven days a week from 8:00 a.m. to 5:00 p.m. Non-ADA trip requests in Glendale are accepted from 7:00 a.m. to 5:30 p.m. on weekdays and 7:00 a.m. to 4:00 p.m. on Saturdays. Peoria DAR takes trip requests seven days a

week from 7:00 a.m. to 5:00 p.m. SCAT takes trip requests for the Sun Cities area in person from 6:45 a.m. to 5:00 p.m., and then uses a voice mail system to take trip requests on the weekends. Trip requests are accepted by Surprise DART on weekdays from 8:30 a.m. to 4:00 p.m. And trip requests in El Mirage are accepted weekdays from 8:00 a.m. to 5:00 p.m.

Fare policies are also extremely complex. ADA fares in the East Valley and in West Valley communities is \$2.00 per trip. ADA fares in Phoenix are \$2.40 per trip. Non-ADA fares are zone-based in the East Valley and in Phoenix. In the East Valley, non-ADA riders pay \$1.00 for the first zone plus 50¢ for each additional zone. In Phoenix, non-ADA riders pay \$1.20 for the first zone and 60¢ for each additional zone traveled. In Glendale, non-ADA fares vary from 50¢ to \$2.00 depending on the type of rider and the number of riders traveling together. Peoria's non-ADA fares range from \$1.00 to \$3.00 based on type of rider. Surprise has a \$1.00 non-ADA fare for trips within the City, \$1.25 for trips outside the City, and \$1.75 for trips to the nearest fixed route bus connecting point. The non-ADA fare in the Sun Cities area is \$3.00 and in El Mirage \$2.00.

Transfer fare policies add even more complexity. For ADA riders, transfers to and from each DAR system is free. If ADA riders are transferring to or from fixed route to a DAR program, the following policies exist:

- ◆ Transfers to fixed route are free in the East Valley, Phoenix and Sun Cities;
- ◆ There is no discount for transfers to fixed route in Glendale or Peoria;
- ◆ Transfers from fixed route cost 50¢ in the East valley and \$1.00 in the Sun Cities area;
- ◆ There is no discount for transfers from fixed route in Phoenix, Glendale, or Peoria.

Similar complexities exist in policies regarding days and hours of service, pick-up “be ready windows” and vehicle wait times, PCA and companion policies, and driver assistance and package assistance policies.

It should come as no surprise that as the cities have grown, their borders have melded into one another creating an increased demand for consistency of service throughout the region and improved travel between cities.

Regional Travel and Transfer Issues

Regional travel patterns for the seven DAR programs plus STS were also analyzed as part of the study. Detailed trip information for the sample week of September 17-23, 2006 was obtained from each program. The origin and destination pairing of a total of 18,376 trips made during that week were then charted. The resulting origin-destination matrix is provided in Attachment A.

Using this origin-destination information, the figures on the following pages were created to depict local and regional travel patterns. Figure 3.1 graphically depicts the relative intra-community travel for this sample week. The size of each circle illustrates the relative number of trips made within each community. Figure 3.2 then shows inter-region trip flows for this week. The thickness of each flow line illustrate the relative number of trips going in that direction.

Figure 3.1. Relative Intra-Community DAR and STS Trip-Making

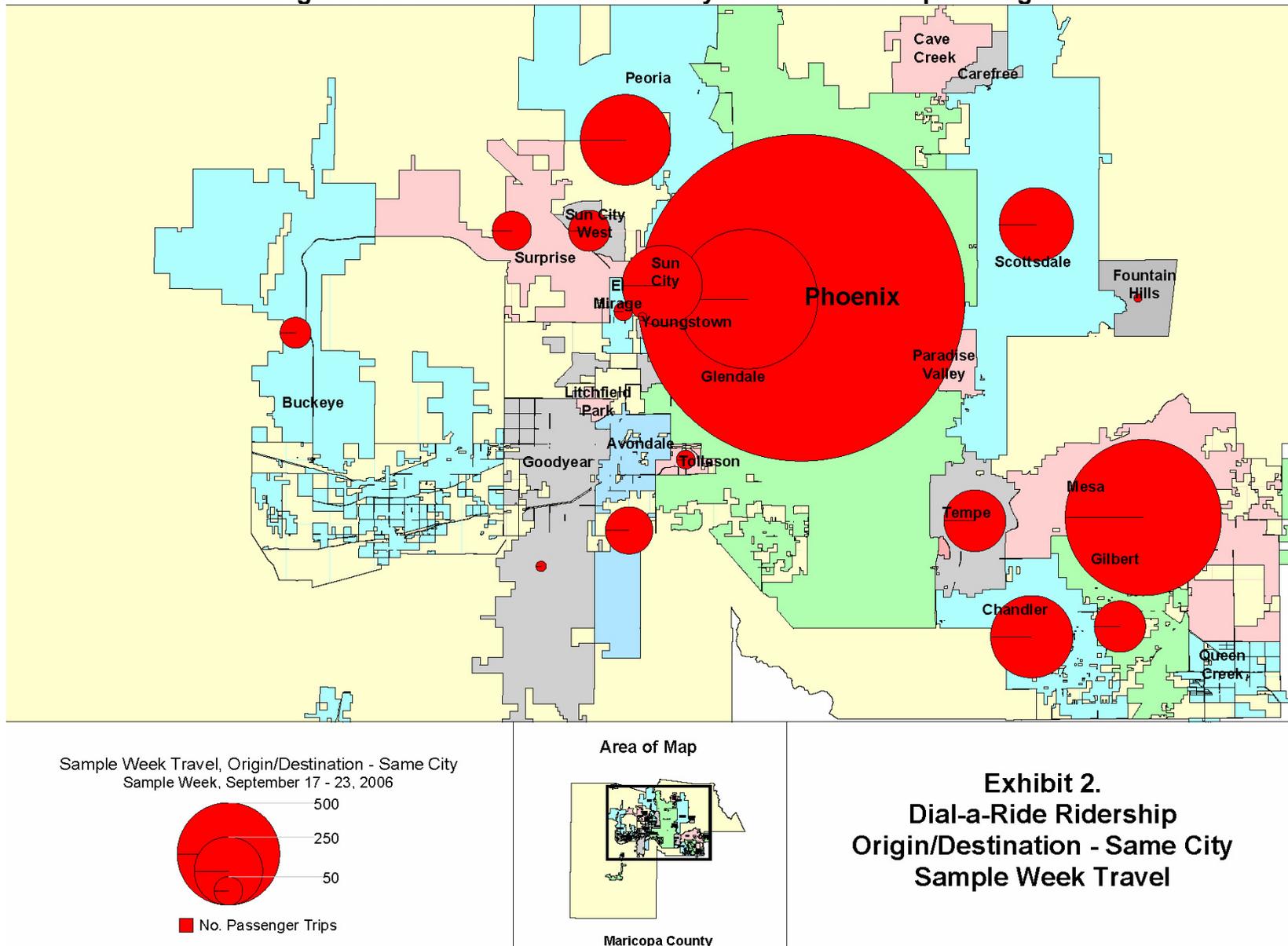
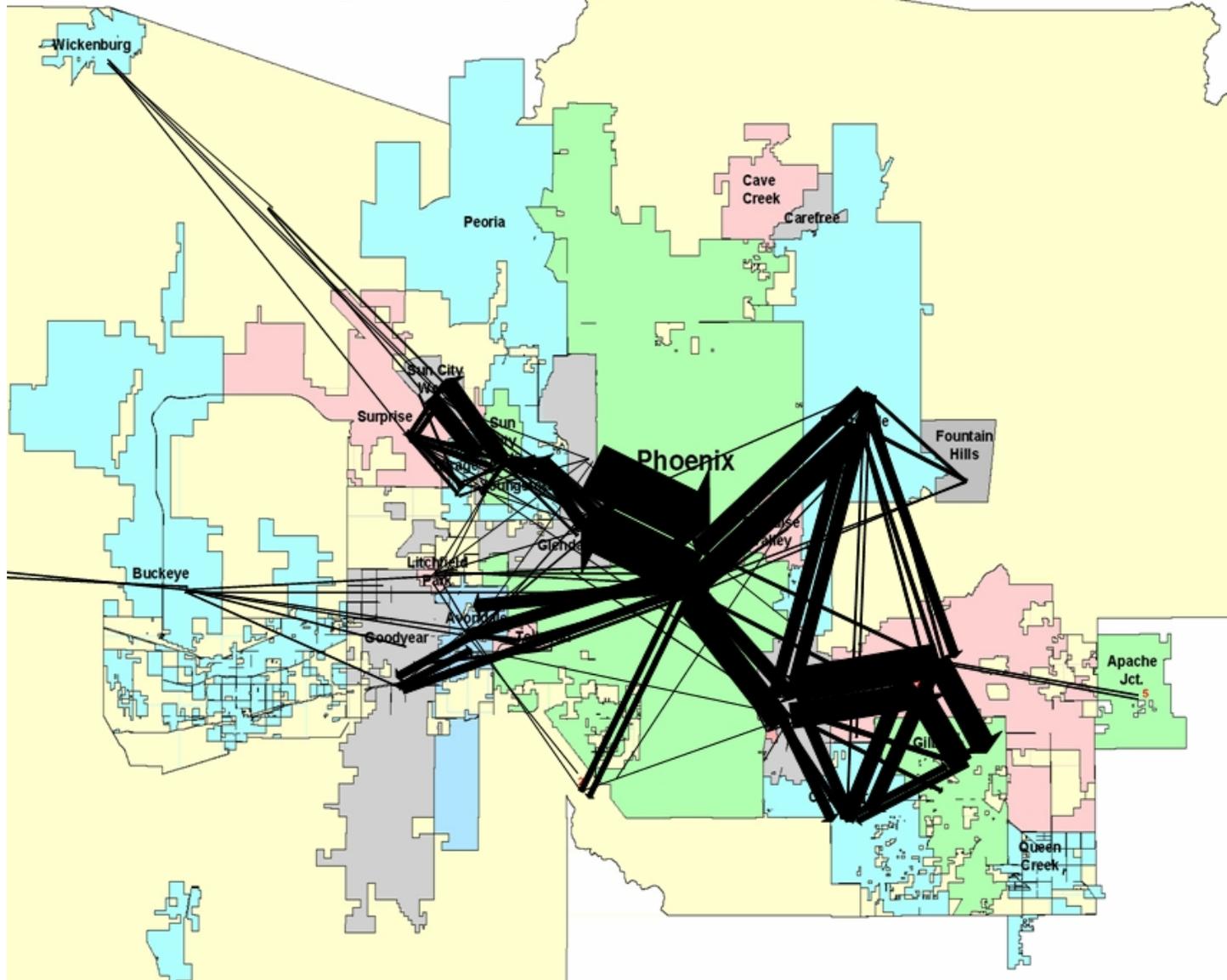


Figure 3.2. Regional DAR and STS Travel Flows



The travel patterns exhibited by DAR and STS riders for this sample week were also compared to general public fixed route travel patterns. Fixed route origin-destination data was extracted from the 2001 RPTA Origin-Destination Survey. Origin-destination pairings were tabulated and combined to show intra-community travel and inter-region travel. Regions similar to the DAR areas were used for the tabulation so that a comparison to DAR and STS travel patterns could be made.

Table 3.2 on the following page provides the information developed through this analysis. The top portion of the table shows intra- and inter-region DAR and STS travel based on the September 17-23, 2006 sample week of data. The bottom half of the table shows intra- and inter-regional general public fixed route travel from the 2001 Origin-Destination Survey.

As can be seen, general public fixed route riders tend to make many more inter-regional trips than DAR and STS riders. In the East Valley, 93.3% of DAR and STS riders traveled within the East Valley area. Only 6.7% of DAR and STS riders in the East Valley traveled to other regions. By comparison, 33.8% of the general public fixed route trips originating in the East Valley ended in other region.

In the Phoenix, Paradise Valley and Southwest communities, 91.4% of DAR and STS riders traveled within the central/southwest DAR region. Only 8.6% of DAR and STS riders in the Phoenix DAR area traveled to other parts of the Valley. By comparison, 11.1% of the general public fixed route trips originating in the central/southwest area ended in other region.

In the West Valley, 90.8% of DAR and STS riders traveled within the West Area, while 9.1% traveled to other DAR regions. By comparison, 71.8% of general public fixed route travel starting in the western communities was regional.

Overall, weighting the percentages for the relative volume of trips in each area, DAR and STS riders travel out of their local DAR area only 8.2% of the time. General public fixed route riders make regional trips 20% of the time. These results appear to support rider comments about difficulties experienced making inter-area DAR trips.

Table 3.2. Comparison of DAR and Fixed Route Travel Flows

From ↓ To →	East Valley	Phoenix	West Valley	Others	Total	East Valley	Phoenix	West Valley	Others	Total
	Dial-A-Ride	Number of Trips					Percent			
East Valley Communities	5,038	325	3	32	5,398	93.3%	6.0%	0.1%	0.6%	100.0%
Phoenix & Central Communities	307	7,511	362	41	8,221	3.7%	91.4%	4.4%	0.5%	100.0%
West Valley Communities	4	391	4,170	25	4,590	0.1%	8.5%	90.8%	0.5%	100.0%
Other	33	44	19	71	167	19.8%	26.3%	11.4%	42.5%	100.0%
Total	5,382	8,271	4,554	169	18,376					
Fixed Route	Number of Trips					Percent				
East Valley Communities	1,232	624	6	2	1,864	66.1%	33.5%	0.3%	0.1%	100.0%
Phoenix & Central Communities	488	6,036	268	3	6,795	7.2%	88.8%	3.9%	0.0%	100.0%
West Valley Communities	10	480	193	-	683	1.5%	70.3%	28.3%	0.0%	100.0%
Other	3	13	1	-	17	17.6%	76.5%	5.9%	0.0%	100.0%
Total	1,733	7,153	468	5	9,359					

Required DAR Trip Transfers

As noted in Section 2 of this report, riders who travel regionally must transfer between each city-based DAR service. So, for example, to travel from Tempe to Glendale, riders must transfer from the East Valley DAR service to the Phoenix DAR service and then from Phoenix DAR to Glendale DAR. Transfer locations have been established throughout the valley. Riders are dropped-off at these transfer sites and wait for the connecting vehicles. Drivers and vehicles do not wait with riders at these locations until the connecting vehicles arrive.

Several of the DAR programs also operate within “buffer zones” around their borders to facilitate regional travel. East Valley DAR, Phoenix DAR, and Peoria DAR will provide direct (non-transfer) trips to locations that are in other DAR areas but close to the borders. The actual size of the buffer zones is loosely interpreted but is generally about one or two miles. Transfers are then required for trips between these DAR areas that are not within these buffer zones. Glendale DAR does not have a buffer zone and only operates within the City of Glendale. All riders traveling out of Glendale and into Phoenix or Peoria are required to transfer to these other DARs.

Several communities also have Intergovernmental Agreements (IGAs) with Maricopa County Special Transportation Services (STS) to assist with local as well as regional travel. As noted in Section 2 of this report, STS is the one DAR program that operates throughout Maricopa County. STS has IGAs with every community in the region except Peoria and Phoenix.

Even though some accommodations have been made to facilitate travel between DAR areas, it appears that significant issues still exist. DAR Passenger Surveys conducted by the RPTA and the City of Glendale in 2002 and 2004 asked respondents about their level of satisfaction with trips that required transfers. Responses are shown in Tables 3.3 and 3.4 below. Table 3.3 shows responses for respondents from the East valley, Glendale, Peoria and Phoenix. Table 3.4 provides more detail on responses from each of the communities in the East Valley.

As shown, 27% to 38% of riders expressed some level of dissatisfaction with transfers. Dissatisfaction was greater in Phoenix and the East Valley (particularly in Mesa, Scottsdale and Tempe).

Table 3.3. Dial-a-Ride Transfer Information

Transfer Info	EV DAR (868)	Glendale DAR (401)	Peoria DAR (108)	Phoenix DAR (300)
Made a transfer In the past 3 months	9%	12%	12%	8%
Satisfaction with transfers				
Very satisfied	46%	48%	46%	33%
Somewhat satisfied	18%	25%	23%	29%
*Somewhat dissatisfied	13%	17%	15%	17%
*Very dissatisfied	22%	10%	15%	21%

* The Glendale Survey used "Not very satisfied" and "Not at all satisfied" instead of somewhat and very to measure level of dissatisfaction.

Table 3.4. EV Dial-a-Ride Transfer Information by City

City	Chandler (101)	Gilbert (62)	Mesa (304)	Scottsdale (200)	Tempe (201)
Made a transfer In the past 3 months	7%	8%	6%	11%	13%
Satisfaction with Transfers					
Very satisfied	43%	60%	59%	48%	33%
Somewhat satisfied	29%	--	6%	14%	30%
Somewhat dissatisfied	14%	--	12%	14%	15%
Very dissatisfied	14%	20%	24%	24%	22%
Don't know	--	20%	--	--	--

To get a better understanding of the issues with DAR trip transfers, an analysis of transfer trips was conducted as part of this study. Detailed information was gathered about 123 trips taken during the week of September 17-23, 2006 which required transfers. The total travel time was noted as well as the time spent waiting at transfer locations. The travel time required for these DAR trips was then compared to the travel time if the same trip was taken on the fixed route bus service. Fixed route bus

itineraries were developed for travel to and from the same locations at the same time of the day.

The results of this analysis are provided in Attachment B. The analysis showed that:

- ◆ Travel on DAR took longer than on fixed route for 65% of the trips studied
- ◆ DAR service took less time only 25% of the time
- ◆ Fixed route service was not available for the remaining 10% of the trips studied.

Further analysis of the 65% of the trips that took longer on the DAR services showed that:

- ◆ 23% of the time DAR trips took 1-15 minutes longer;
- ◆ 15% of the time DAR trips took 16-30 minutes longer;
- ◆ 18% of the time DAR trips took 31-60 minutes longer;
- ◆ 9% of the time DAR trips took 61+ minutes longer.

A major reason for the extra time required to travel by DAR appears to be the result of long wait times at transfer sites. The analysis showed that:

- ◆ 14% of riders who were required to transfer waited 16-30 minutes at the transfer location;
- ◆ 20% of riders who were required to transfer waited 31-45 minutes;
- ◆ 13% of riders who were required to transfer waited 46-60 minutes;
- ◆ 13% of riders who were required to transfer waited more than 60 minutes;
- ◆ Only 40% of the transfers were made with reasonable wait times (1-15 minutes).

Finally, it was noted that because DAR drivers and vehicles do not wait with riders at the transfer locations, regional travel under current policies may not be safe or appropriate for some riders. Those riders with disabilities who cannot be left unattended would not be able to use the current system at all to travel regionally. Regional travel for these riders would only be possible in communities where IGAs exist to allow these trips to be performed directly by STS.

3.3 Duplication of Service and Opportunities for Economies of Scale

As detailed in Section 2 of this report, there currently are seven separate operations that provide community-based DAR service throughout the valley. In addition, the County's STS program operates a separate county-wide DAR service for agency and program clients.

Each operation has fixed costs associated with each operation such as facility and overhead costs. Each operation also supports a separate call center and vehicle operation and most have purchased separate licenses for paratransit reservations, scheduling and dispatching computer systems. Finally, most communities also maintain transportation staffs that manage and administer each program.

Table 2 in Section 2.1 of this report provides detailed staffing information for all seven community-based DAR services plus the County STS service at the time of the individual system reviews – the Fall of 2006. Table 3.5 below summarizes staffing information for all eight services. As shown, there are about 4.06 FTEs dedicated to overall administration of contracts and services. This includes staffs at the RPTA who manage the East valley DAR service, plus 2.2 FTEs that administer the Phoenix DAR operation. Administrative staffs at each of the other DAR programs tends to be integrated with the operation. The estimated FTEs does not include transportation coordinators and directors in the East valley communities.

Table 3.5. DAR and STS Staffing

Staffing Categories	Number of Employees or FTEs
Strictly Administrative Staffs	4.06 FTEs
Combined Administrative and Operations management Staffs	37.2 FTEs
Reservationists, Schedulers, Dispatchers, Road Supervisors and Mechanics	90.25 FTEs
Vehicle Operators	403 operators (includes full-time, part-time and temps)

There are also about 37.2 FTEs dedicated to combined service administration and operations management. This includes Transit Managers and Coordinators, Operations Managers, Operations Supervisors, Trainers, Maintenance Supervisors, and other management staffs. A total of about 90.25 FTEs are then dedicated to direct operational functions such as reservationists, schedulers, dispatchers, road supervisors, and mechanics. Finally, in the Fall of 2006, the eight paratransit operations indicates that they employed a total of 403 full-time, part-time and temporary vehicle operators.

In terms of duplication of effort, it is likely that even with a combined regional paratransit system each local community would elect to maintain some or all of its transportation

administrative staff. Some of the current administrative staff in the East Valley and the Phoenix programs may be used to help manage the regional service. In general, though, it is unlikely that there would be a total reduction of administrative staffs even with the development of a more regional service.

There does, however, appear to be some duplication of effort in terms of combined operations management and administrative staffs. There are currently several Call Center Supervisors, Operations Managers, IT managers, and other management positions at the eight separate operations. It is likely that fewer mid-level managers would be required in a combined regional paratransit program. It is important to note, though, that this duplication would only be reduced if all DAR services participated in a regional paratransit program and if a single, full-service “turnkey” operation was created. As detailed in Section 5 of this report, a central Call center with multiple local service providers is proposed as the regional service model. And in the short-term it is expected that the current West Valley DAR programs will continue to operate non-ADA services separate from the regional paratransit system. Under this proposed model, it is likely that the full complement of current mid-level operations managers will still be needed.

Similarly, it is likely that the full complement of direct operations staff will be needed in the regional service plan that is proposed in Section 5 of this report. While the proposed plan is to combine the Phoenix and East Valley DAR call centers, separate call centers may still be operated for non-ADA services in the West Valley. And, the individual system reviews conducted as phase I of this study found that there was some understaffing of direct operations positions in the Phoenix DAR operations which would need to be addressed in any regional service design.

In the long-run, it is possible that some of the duplication of effort that exists with eight separate operations could be eliminated. This would occur if West Valley communities decided to have non-ADA services operated centrally, and if the human services transportation provided by STS was eventually combined with the regional DAR operation. In the short-term, though, given the likely regional service plan and approach detailed in Section 5 of this report, some duplication of effort will likely continue to exist.

Opportunities for Cost Savings and Economies of Scale

Based on the analysis of cost and service information, there do appear to be some opportunities for cost savings and economies of scale. These opportunities exist primarily for the smaller DAR operations in the West Valley.

Cost performance indicators for each of the eight DAR programs, as well as averages for all systems, is provided in Table 15 of Section 2.4 of this report. Indicators include productivity (trips per vehicle revenue-hour), miles per trip, cost per trip, and cost per vehicle revenue-hour.

As shown, the region-wide total operating cost per boarding (which includes companions and PCAs) was \$30.13. This ranged from a low of \$15.76 at SCAT to a high of \$55.58 in El Mirage. Total operating cost per vehicle-revenue-hour for the region averaged \$52.78, with a low of \$41.26 at SCAT and a high of \$81.19 in Peoria. Average total operating cost per revenue-mile for the region was \$3.62, ranging from a low of \$2.92 in Phoenix to a high of \$6.63 in El Mirage.

The SCAT service appears to be quite cost-effective. Hourly operating costs are the lowest in the region (\$41.26). Combined with these low hourly costs, the service area is relatively compact, trip lengths are relatively short, and as a result, productivity is very good. High productivity combined with low hourly costs results in very low unit costs of service. The review of SCAT noted, though, that this non-profit agency operates on a very tight budget and that funding issues and tight staffing can sometimes impact service quality.

Glendale and Peoria had higher hourly operating costs (\$80.68 and \$81.19, respectively), but these services were the most efficient, with productivities of 3.0 and 3.5 respectively. Productivity was aided in each case by shorter average trip lengths. Because of the high productivities, both systems had costs per boarding that were below the region average (\$28.22 in Glendale and \$22.96 in Peoria. On-site reviews also showed that, with good budgets and staff compensation, both had stable and experienced staffs and good quality service.

East Valley DAR had an hourly operating cost that was slightly above the region average, trip lengths are also slightly above the average, and a productivity slightly lower than the region average. Overall, its cost per boarding (\$30.51) and cost per mile (\$3.74) were reasonable and average.

Phoenix DAR had a relatively low cost per revenue-hour (\$43.70), second lowest only to SCAT. This is due in part to economies of scale. The average trip length is the longest in the region, though, at 11.3 revenue-miles per trip. This results in a lower than average productivity. Combining all of these factors, the cost per boarding is below the region average. The system review did note, though, that service quality could be aided by additional scheduling, dispatching and reservations staff, which would raise the costs slightly.

Surprise DART had a somewhat higher cost per revenue-hour (\$59.78) than the region average. For a smaller operation without significant economies of scale, though, this cost was quite good. Average trip length was lower than the region average and productivity was also slightly higher than average. Overall, the cost per boarding was almost exactly the system average.

El Mirage DAR had a relatively low cost per hour (\$50.52) for a very small system. Even though El Mirage does not benefit at all from economies of scale, the very slim staffing appears to keep costs down. While the area is quite small, trip length was about average, and productivity was low (only 0.9 boardings per revenue-hour). The

very low productivity resulted in a cost per boarding (\$55.58) that was the highest in the region.

Given the information above, particularly in regard to the smaller systems, it appears there are opportunities for economies of scale that could lower unit costs and per-hour costs.

3.4 Service Area Gaps and Potential Needs

As detailed in Section 2 of this report, ADA paratransit service appears to be provided in all areas required by the ADA regulations. At some hours of the day, ADA service is actually provided above and beyond the regulatory requirements.

Service for other, non-ADA populations also is provided in most cities in the RPTA area. Non-ADA service is not provided, though in the following communities:

- ◆ Avondale
- ◆ Goodyear
- ◆ Guadalupe
- ◆ Litchfield Park
- ◆ Paradise Valley
- ◆ Mesa
- ◆ Tolleson

In these communities, there could be a need for DAR service for persons who do not qualify as ADA Paratransit Eligible, but who have limited transportation options. This might include some seniors, persons with disabilities who do not meet ADA requirements, and persons with limited incomes who may not have access to a car.

Some communities also could benefit from expanded service days and hours. Table 3.6 below summarizes the days and hours of DAR services throughout the area in terms of their ability to meet a variety of needs. The table indicates whether existing services can meet basic shopping and personal business needs. If some reasonable period of service is provided at least on weekdays, these needs are assumed to be met. Next, it shows if available service is able to provide for basic employment transportation needs – which assumes at least weekday service from at least 6:00 a.m. to 6:00 p.m. Then, it indicates if service is available for weekday evenings (after 7:00 p.m.). Finally, it indicates if service is available on Saturdays and Sundays. For each of these categories of need, the table indicates if service is provided only to ADA riders in ADA areas (3/4 mile from fixed route), or if service is also available to other transit dependent persons such as seniors, other people with disabilities and low-income residents with limited access to personal transportation.

As shown, comprehensive service is available to both ADA riders and to others in Scottsdale, Tempe, Phoenix and Glendale. Each of these communities provides DAR

service seven days a week and during a long enough time span to meet employment and weekday evening as well as weekend needs. Chandler and Gilbert also have fairly comprehensive service, but have no service on Sundays and limited service on weekday evenings for riders who are not ADA paratransit eligible.

Paradise Valley, the East Valley communities of Mesa and Guadalupe, and the Southwest Area communities of Avondale, Goodyear, Litchfield Park, and Tolleson have good levels of service for ADA eligible riders, but do not provide DAR service to other transit dependent populations. Avondale, Goodyear, Litchfield Park, and Tolleson also do not provide any Sunday DAR service, even to ADA eligible riders since fixed route service does not operate in these communities on Sundays.

Peoria has good ADA service that meets all needs, but has limited non-ADA service. The non-ADA service can meet basic shopping and personal business needs on weekdays, but does not operate sufficient days and hours to meet weekday employment, weekday evening, or weekend needs.

El Mirage, Sun City West, Surprise and Youngtown have very limited service. The days and hours of service in these communities is sufficient to meet basic shopping and personal business transportation needs, but not to meet employment needs. Service also is not provided during weekday evenings or on weekends in these communities. These communities do provide services to the general public, though, which means that this basic level of service is available to any residents, including those who are ADA eligible even though ADA service is not required in these areas.

Sun City has very limited fixed route service and therefore has some ADA-level service that is sufficient to meet employment and weekday evening needs. The ADA service area in Sun City is very limited, though, and only a few ADA trips each week are provided. For all practical purposes, Sun City has the same limitations as Sun City West and Youngtown.

Table 3.6 Service Hour Gaps and Potential Needs

Community	Hours Sufficient for Basic Shop/Personal (some reasonable weekday hours)		Hours Sufficient for Basic Employment (M-F, 6am to 6pm)		Weekday Evenings		Saturdays		Sundays	
	ADA Areas and Riders	Other Areas and Riders	ADA Areas and Riders	Other Areas and Riders	ADA Areas and Riders	Other Areas and Riders	ADA Areas and Riders	Other Areas and Riders	ADA Areas and Riders	Other Areas and Riders
East Valley										
Chandler	●	●	●	●	●	○	●	●	○	○
Gilbert	●	●	●	●	●	○	●	●	○	○
Guadalupe	●	○	●	○	●	○	●	○	●	○
Mesa	●	○	●	○	●	○	●	○	●	○
Scottsdale	●	●	●	●	●	●	●	●	●	●
Tempe	●	●	●	●	●	●	●	●	●	●
Central and Southwest										
Avondale	●	○	●	○	●	○	●	○	○	○
Goodyear	●	○	●	○	●	○	●	○	○	○
Litchfield Park	●	○	●	○	●	○	●	○	○	○
Paradise Valley	●	○	●	○	●	○	●	○	●	○
Phoenix	●	●	●	●	●	●	●	●	●	●
Tolleson	●	○	●	○	●	○	●	○	○	○
West Valley										
El Mirage	●	●	○	○	○	○	○	○	○	○
Glendale	●	●	●	●	●	●	●	●	●	●
Peoria	●	●	●	●	●	○	●	○	●	○
Sun City	●	●	⊙		⊙	○	○	○	○	○
Sun City West	●	●	○	○	○	○	○	○	○	○
Surprise	●	●	○	○	○	○	○	○	○	○
Youngtown	●	●	○	○	○	○	○	○	○	○
Other Areas	<i>Limited, typically client and program specific transportation provided by STS</i>									

Other cities and towns in Maricopa County do not have fixed route or paratransit service.

Trips Per Capita

Another measure of service effectiveness is the amount of service provided – measured as eligible rider trips per year per capita. Table 3.7 on the following page shows this measure for each DAR system. A measure for STS is not included since this program serves only certain clients and portions of the county population as per contracting agency agreements.

For the remaining DAR programs, an estimate of the 2000 population for each community served is provided. These 2000 population numbers were obtained from MAG for all communities except Sun City and Sun City West. Population data for the Sun Cities area was not broken out from county population data in 2000. The 2000 population data for the Sun Cities was therefore taken from the 2000 Census.

Next, an estimate of the 2010 population by community is provided. Again, for all communities except for the Sun Cities area, the 2010 data is from MAG. The growth rate estimated for Youngtown was used to estimate the 2010 population in the Sun Cities.

Then, an estimate of the population in 2006 was developed. This was done by calculating a straight extrapolation between 2000 and 2010.

Finally, the 2006 eligible rider trips for each DAR service are included. A calculation of trips per capita per year is then calculated.

As shown, the highest level of service exists in the SCAT area where SCAT provides 0.57 trips per capita per year. Glendale and Peoria, at 0.32 and 0.30 trips per capita per year, also have relatively high levels of service. Phoenix DAR provides 0.22 trips per capita per year in its area. East Valley DAR provides 0.16 trips per capita per year. Surprise DART provides 0.15 trips per capita per year. El Mirage provides 0.07 trips per capita per year.

Table 3.7. Service Level - Trips per Capita per Year by Program

Community	2000 Population	2010 est Pop Population	2006 est Population	2006 trips	Trips/capita /year
East Valley:					
<i>Chandler</i>	185,300	260,000	230,120	NA	NA
<i>Gilbert</i>	119,200	202,800	169,360	NA	NA
<i>Guadalupe</i>	5,200	5,200	5,200	NA	NA
<i>Mesa</i>	441,800	537,900	499,460	NA	NA
<i>Scottsdale</i>	204,300	253,100	233,580	NA	NA
<i>Tempe</i>	158,900	176,400	169,400	NA	NA
Totals	1,114,700	1,435,400	1,307,120	207,582	0.16
El Mirage	8,700	29,700	21,300	1,466	0.07
Glendale	230,300	290,400	266,360	84,606	0.32
Peoria	114,100	160,800	142,120	42,560	0.30
Phoenix/SW:					
<i>Phoenix</i>	1,350,500	1,700,300	1,560,380	NA	NA
<i>Paradise Valley</i>	14,100	15,200	14,760	NA	NA
<i>Avondale</i>	37,800	82,100	64,380	NA	NA
<i>Goodyear</i>	21,200	61,300	45,260	NA	NA
<i>Litchfield Park</i>	3,800	7,000	5,720	NA	NA
<i>Tolleson</i>	5,000	6,100	5,660	NA	NA
Totals	1,432,400	1,872,000	1,696,160	376,883	0.22
SCAT:					
<i>Sun City</i>	38,309	68,956	56,697	NA	NA
<i>Sun City West</i>	26,344	47,419	38,989	NA	NA
<i>Youngtown</i>	3,000	5,400	4,440	NA	NA
Totals	67,653	121,775	100,126	57,091	0.57
Surprise	37,700	115,200	84,200	12,578	0.15
TOTALS	3,005,553	4,025,275	3,617,386	782,766	0.22

4. Demand Estimation and Ridership Trend Analysis

This section examines existing demographics and Dial-a-Ride (DAR) system ridership data and projects the potential demand for paratransit services among three different population segments: persons with disabilities, seniors, and general public patrons of demand responsive transportation services. These groups represent the present user populations among the DARs. Thus, while the primary focus of this study is on ADA complementary paratransit, future demand, and the best approaches for meeting those needs, the scope of existing services dictate this analysis be more comprehensive.

In conducting this analysis, TranSystems utilized emerging, state-of-the-art research relative to estimating the demand for complementary paratransit service. Heretofore, there has been no comprehensive methodology designed to take into account the strict definition of “person with a disability” and the eligibility standards established in USDOT implementing regulations for the ADA (49 CFR part 37.123(e)) when projecting demand for paratransit services for the population with disabilities. In a current Transit Cooperative Research Program (TCRP) project,¹ new modeling techniques, based on a national sample of exemplary paratransit systems, have been employed as the estimation tool to project demand for ADA complementary paratransit services.

This analysis has been augmented by other demand estimation techniques. Demographic data and geography are based on the 2000 Census of Population, the 2005 American Community Survey, Maricopa Association of Governments (MAG) Municipal Planning Areas (MPAs) population projections, and Arizona Department of Economic Security age cohort projections. These population projections and estimates were used to estimate potential demand for dial-a-ride services in the future.

4.1. Service Area Delineation and Definitions

Service Areas

In accordance with the requested scope of work, the analysis in this report has been prepared for all of Maricopa County. In addition, specified subareas of the County have been established, corresponding with the service areas of existing dial-a-ride operations. These areas may include municipalities (current boundaries provided by Maricopa County GIS) as well as the service area for the corresponding DAR operation, which may extend beyond municipal boundaries (provided by RPTA or determined in the Task 2 system reports). Finally, a third level of geography was employed, MAG’s municipal planning areas, for purposes of obtaining population forecasts.

¹ *Improving ADA Complementary Paratransit Demand Estimation*, Second Interim Report, TCRP Project B-28, September 2005.

Issues in Service Area Definition

There are numerous issues in service area definition that present challenges to the task of demand estimation:

- DAR service areas may not correspond to any existing level of census geography, making exact enumeration of the service area population for any DAR inexact.
- Even when DAR service areas correspond to census geography, dynamic changes in population may limit the usefulness of 2000 Census counts.
- Uniformly accepted population and demographic forecasts of the population are typically not performed on a small enough unit of geography to be useful in obtaining estimates of the desired population subgroups that are the primary focus of this study.
- Some DARs employ overlapping or “fuzzy” boundaries in service area definition, further complicating the delineation and enumeration processes.

In order to address these issues, it is necessary to employ a number of population and data sources and extensively rely on Geographic Information Systems (GIS) technologies in preparation of this analysis.

A map of existing DAR service areas is contained in Figure 2.1 of Section 2 of this report.

Service Area Variations

As detailed in Section 2 of this report, varying service policies have been adopted in each DAR area. Variations also exist within some DAR programs based on policy decisions made by each participating community. Of particular importance to the demographics and demand analysis, some systems serve only ADA paratransit eligible persons, while other systems also serve seniors, other persons with disabilities, and in some cases the general public. Table 2.3 in Section 2 of this report shows the different populations served by each DAR.

Moreover, ADA service may only be available in the statutorily defined ADA area, whereas other non-ADA services may be provided community wide. All of these policies were taken into account when generating population and demand estimates

East Valley Dial-a-Ride

East Valley Dial-a-Ride (EVDAR) provides both ADA and non-ADA service to persons with disabilities and seniors. These policies are not uniformly applied throughout the service area, as follows:

- General – There are various county islands that do not receive ADA service if the area falls outside the statutorily defined ADA service area. Additionally, EVDAR vehicles are permitted to go approximately one mile beyond their service boundaries to complete trips in other RPTA member communities.
- Chandler – ADA service is not available south of Pecos Road in service zones C-4 and C-5.
- Mesa – ADA service is available in Mesa and in small, unincorporated county areas. ADA eligible individuals also can request transportation on Sundays, but as non-ADA service.
- Guadalupe – EVDAR provides ADA only service in Guadalupe; data are typically reported within Tempe’s data.
- Paradise Valley – Both EVDAR and Phoenix provide ADA only service within limited areas of Paradise Valley.

El Mirage Dial-a-Ride

El Mirage Dial-a-Ride provides demand response transportation to El Mirage residents. There is no ADA service. The system will transport El Mirage residents to any location in El Mirage, Sun City, or Sun City West. As these services operate “closed door” outside the city limits, this service characteristic was not factored into the demand analysis.

Glendale Dial-a-Ride

Both ADA and non-ADA services are provided throughout the defined service areas. There are no service area anomalies.

Phoenix Dial-a-Ride

Phoenix Dial-a-Ride provides both ADA and non-ADA service throughout a defined service area within Phoenix and provides ADA service in the Southwest Valley communities of Avondale, Goodyear, Litchfield Park, and Tolleson.

In Paradise Valley and in the Southwest Valley, service is provided only in areas that are within $\frac{3}{4}$ of a mile of RPTA fixed route service (the minimum ADA requirement).

- General – DAR vehicles are permitted to go approximately one mile beyond these service boundaries to complete trips in other RPTA member communities.
- Phoenix – ADA and non-ADA service throughout the defined service area.
- Southwest Valley – The cities of Avondale, Goodyear, Litchfield Park, and Tolleson receive ADA service only within the statutorily defined (3/4 mile of a fixed route) service area. This service area contracts slightly during weekend periods.
- Paradise Valley – Phoenix will provide service to areas of Paradise Valley that are in the statutory ADA service area.

Peoria Dial-a-Ride

ADA service is only provided within the statutory boundaries of ¾ mile of a fixed route within city limits. Other Dial-a-Ride services are provided within the defined service area. In addition, Peoria Dial-a-Ride will make trips for Peoria residents to medical facilities in Sun City and Glendale. As these services operate “closed door” outside the city limits, this service characteristic was not factored into the demand analysis.

Surprise Dial-a-Ride

Surprise Dial-a-Ride provides service to Surprise residents within the city limits and will also provide service to nearby communities of Sun City, Sun City West, El Mirage, and Youngtown. There is no ADA service in Surprise.

SCAT Dial-a-Ride

ADA service is only provided within the statutory boundaries of ¾ mile of a fixed route within Sun City and Youngtown. No part of the statutory ADA service area lies within Sun City West. General dial-a-ride services are available throughout Sun City, Sun City West, and Youngtown.

4.2. Demographic Definitions

Persons with a Disability - ADA

Enumeration of the disabled population in any community presents challenges. First, there is a complex and lengthy definition in the implementing regulations. The definition of “disability” is found in 49 CFR part 37.3. The definition of disability reads:

Disability means, with respect to an individual, a physical or mental impairment that substantially limits one or more of the major life activities of such individual; a record of such an impairment; or being regarded as having such an impairment.

1. *The phrase physical or mental impairment means:*
 - (i) *Any physiological disorder or condition, cosmetic disfigurement, or anatomical loss affecting one or more of the following body systems: neurological, musculoskeletal, special sense organs, respiratory including speech organs, cardiovascular, reproductive, digestive, genito-urinary, hemic and lymphatic, skin, and endocrine;*
 - (ii) *Any mental or psychological disorder, such as mental retardation, organic brain syndrome, emotional or mental illness, and specific learning disabilities;*
 - (iii) *The term physical or mental impairment includes, but is not limited to, such contagious or noncontagious diseases and conditions as orthopedic, visual, speech, and hearing impairments; cerebral palsy, epilepsy, muscular dystrophy, multiple sclerosis, cancer, heart disease, diabetes, mental retardation, emotional illness, specific learning disabilities, HIV disease, tuberculosis, drug addiction and alcoholism;*
 - (iv) *The phrase physical or mental impairment does not include homosexuality or bisexuality.*
2. *The phrase major life activities means functions such as caring for one's self, performing manual tasks, walking, seeing, hearing, speaking, breathing, learning, and work.*
3. *The phrase has a record of such an impairment means has a history of, or has been misclassified as having, a mental or physical impairment that substantially limits one or more major life activities.*
4. *The phrase is regarded as having such an impairment means:*
 - (i) *Has a physical or mental impairment that does not substantially limit major life activities, but which is treated by a public or private entity as constituting such a limitation;*
 - (ii) *Has a physical or mental impairment that substantially limits a major life activity only as a result of the attitudes of others toward such an impairment; or*
 - (iii) *Has none of the impairments defined in paragraph (1) of this definition but is treated by a public or private entity as having such an impairment.*
5. *The term disability does not include:*
 - (i) *Transvestism, transsexualism, pedophilia, exhibitionism, voyeurism, gender identity disorders not resulting from physical impairments, or other sexual behavior disorders;*
 - (ii) *Compulsive gambling, kleptomania, or pyromania;*
 - (iii) *Psychoactive substance abuse disorders resulting from the current illegal use of drugs.*

The definition, when applied to public transportation applications, is designed to permit a *functional* approach to disability determination rather than a strict *categorical* definition. In a functional approach, the mere presence of a condition that is typically thought to be disabling gives way to consideration of an individual's abilities to perform various life functions. In short, an individual's capabilities, rather than the mere presence of a medical condition, determines transportation disability.

With regionalization of the ADA certification process, a common approach to ADA disability determination exists within the region.

Persons with a Disability – Non-ADA

A number of DARs recognize a second category of disability: individuals with a disability but who cannot otherwise meet ADA requirements. Unlike the ADA requirements, eligibility is not based on an individual's functional ability to use fixed route service, but simply on the existence of any disability. This eligibility standard is much broader than ADA eligibility. Eligibility at most of the DARs can be substantiated with a Valley Metro Reduced Fare ID card (persons with disabilities must have verification from a doctor or health professional stating the type and duration of the disability to get the ID card). Additionally, a Medicare card can be used to qualify an individual in this category.

Elderly

Persons over the age of 65 who are not otherwise eligible under the above two listed disability categories may be eligible to ride DAR services in some communities.²

Low Income

Low income individuals are those persons who are classified as "below the poverty level" as determined by the U.S. Bureau of the Census. The Census Bureau uses a set of money income thresholds that vary by family size and composition to determine who is in poverty. If a family's total income is less than the family's threshold, then that family and every individual in it is considered in poverty. The official poverty thresholds do not vary geographically, but they are updated for inflation using Consumer Price Index (CPI-U). The official poverty definition uses money income before taxes and does not include capital gains or non-cash benefits (such as public housing, Medicaid, and food stamps).

General Public

This is a general category that may be inclusive of all previous categories as well as including individuals who do not have a disability, are less than 65 years of age, or who

² See *Task 2 Report: Overview of Dial-A-Ride, Taxi Subsidy and Mileage Reimbursement Programs in the RPTA Area*, Section 2, "Eligibility," April 11, 2007.

have incomes above the poverty level. The category is typical when a local dial-a-ride system permits all individuals to ride without regard to qualification.

4.3. Demographics

Given the service characteristics of the population, it is necessary to enumerate not only the total population, but various subsets of the population, including:

- Total population
- Population, persons with disabilities
- Low income population
- Elderly population

In addition, demographic data must be sufficiently detailed in order to consider potential overlap among these population sub-groups. For example, an individual may be both low income (below the poverty level) *and* elderly. This overlap must be accounted for or potential over-estimation of demand may occur.

Data Sources

In developing this task report, multiple data sources were used to generate the necessary demographics, as follows.

U.S. Bureau of the Census

The U.S. Bureau of the Census was used to as a data source for population, poverty, age, and disability data.

Census 2000. Census 2000 data were collected at both the block group and municipal levels. While data is now more than seven years old, Census 2000 provides the only comprehensive source of all data at the necessary levels of geography. Census 2000 data were not used in demand forecasts, but primarily as a basis for demographic projections.

The primary advantage of using this data source is that data are available at a small level of geography, useful in enumerating the service area population in the statutory ADA service area (e.g., an area not included in traditional geography). The primary disadvantage with Census 2000 data is its age, particularly in an area with dynamic population growth such as found in Maricopa County.

American Community Survey. The American Community Survey (ACS) is a detailed demographic survey available for 2005. The ACS will ultimately replace the Census Bureau's "long-form" survey that has historically been used to generate Summary File 3. The plan is to replace data collected from a once every 10 years sample of the population on what is widely known as "the long form" with the data every year from the

ACS. Toward that end, the Census Bureau increased the ACS sample to approximately 3 million addresses per year in 2005 in order to provide aggregated 5-year rolling-average estimates for all areas of the country as small as census tracts by 2010. The ACS covers demographic, social, economic, and housing characteristics. At the time of this study, initial 2005 ACS data were available for geographic areas of 65,000 in population or more.

Data were available for:

- Maricopa County
- City of Avondale
- City of Chandler
- Town of Gilbert
- City of Glendale
- City of Mesa
- City of Peoria
- City of Phoenix
- City of Scottsdale
- City of Surprise
- City of Tempe

When available, ACS data for 2005 were used to establish updated baseline data over that provided by Census 2000.

Maricopa Association of Governments (MAG)

MAG produces projections of population by Municipal Planning Area (MPAs).³ An MPA represents the area of planning concern for a municipality and is based upon its anticipated future corporate limits. The latest projections and geographic boundaries were used to establish sub-county projections for the years 2005 and 2010. These estimates were used to establish overall population estimates for 2010 at the MPA level; using GIS techniques, these estimates were then adjusted to either the municipal or ADA service area.

Arizona Department of Economic Security (DES)

The Arizona Department of Economic Security (DES) prepares population projections for Arizona and its counties. Age cohort projections for 2010 prepared by DES were used to establish estimates of the elderly population for 2010. DES uses the State of Arizona Demographic Cohort-Component Projections Model. This model used age and sex specific fertility, mortality and migration rates to age the population forward, one year at a time, for a period of fifty years.

³ *Socioeconomic Projections of Population, Housing and Employment by Municipal Planning Area and Regional Analysis Zone*, May 2007.

Issues in Demographics

In conducting this analysis, several issues, some that assist the process and some that hinder or create difficulties, must be discussed. These issues include:

- Changes in the structure of Census versus ACS questions regarding disability correcting a problem that may have resulted in over-estimation of the population with disabilities in 2000;
- Inclusion of poverty data for the population with disabilities in the ACS;
- Geographic areas of coverage with the data sources; and
- Deficiencies in ridership demographic breakdowns

Potential Overestimation of Incidence of Disability in Census 2000

Research has shown that Census 2000 and the ACS in 2000 included a confusing skip pattern and item wording resulting in over-reporting of the number of persons with a disability.⁴ Since the ACS continued to use the same disability items in 2001 and 2002, it appears that the ACS also continued this trend of over-reporting those years. This changed, however, in 2003 when a re-design of the question structure, better instructions, and a form re-design was implemented. Data for 2005 used herein was based on enumeration, thus, lower counts of the population with any disability is expected. These results were observed in the Valley Metro/RPTA study area, particularly in the population 18 – 64 years of age. This is consistent with research findings, as “employment disability” was the factor with the highest rate of over estimation.⁵

Poverty and Disability Cross-Tabulation

The ACS reports a cross-tabulation of persons with a disability and poverty status, a data item that was not reported in Census 2000. This enables researchers to distinguish the “overlap” among these two transit disadvantaged segments of the population, a critical factor in enumerating the non-ADA population and projected demand for other dial-a-ride services.

Data Availability and Geographic Coverage Limitations

While multiple data sources were used to compile the necessary information to utilize in various ridership and demand models, there were limitations in each of these datasets.

⁴ Stern, Sharon, “Counting People with Disabilities,” Proceedings from 2003 Joint Statistical Meetings, May 2003.

⁵ Stern, Sharon and Matthew Brault, *Disability Data from the American Community Survey: A Brief Examination of the Effects of a Question Redesign in 2003*, U.S. Census Bureau, Housing and Household Economic Statistics Division, January 28, 2005.

- **U. S. Census Bureau** – This dataset is complete in terms of the various social and economic characteristics and it also provides small geographic area coverage (e.g., block groups). As the ADA demand model requires an enumeration of the ADA service area, use of small level geographic data is necessary. Additionally, this is the only dataset that provides geographic coverage of Census Designated Places (Sun City, Sun City West). This dataset, however, is now seven years old and in a dynamically changing area, suffers from limitations.
- **American Community Survey** – This data is also complete in terms of various social and economic characteristics, but is only available in a limited number of municipalities. There are 18 communities served by seven local dial-a-ride operations, while one dial-a-ride operation (STS) serves all municipalities in the county. Thus, this dataset only provides partial coverage.
- **MAG MPA Projections** – This data source provides countywide coverage, albeit at a different and unique level of geography. Dataset characteristics are somewhat limited in comparison to Census sources, providing only population, employment, and housing elements. Only total resident population was used in this analysis.
- **DES** – DES projections provide place (municipal) and CDP level geography projections on total population and the age characteristics of the population. However, the Maricopa dataset was not available at the time of this report. Only county total population and age characteristics were available and were used in this analysis.

Demographic Trends

Baseline Data

Based on the availability of, and limitations associated with, the various data sources, baseline data were compiled for the period 2000, 2005, and 2010. For these years, either an enumerated value or projection was developed for the following socioeconomic characteristics:

- Total population
- Total population, by age cohort
 - 0 – 4 years of age
 - 5 – 17 years of age
 - 18 – 64 years of age
 - 65 years of age or older
- Population below the poverty
 - 0 – 17 years of age
 - 18 – 64 years of age

- 65 years of age or older
- Population with any disability
 - 5 – 64 years of age
 - 65 years of age or older

Tables 4.1 to 4.3 reflect the baseline data and projections for these variables at the municipal level. These exhibits are organized based on DAR service area. For example, Phoenix and the Southwest Valley communities are grouped together; East Valley Communities are grouped as are communities in the West Valley. Other municipalities without DAR service are shown and, finally, other MPA areas are shown.

These exhibits reflect municipal population estimates. In computing ridership and demand estimates, it was necessary to use GIS techniques to estimate the municipal portion of actual ADA service area in instances where the ADA service area did not correspond to municipal boundaries. This was particularly true in the West Valley, but can be found in other communities as well, such as Chandler.

Trends in Demographic Data

As noted earlier, a common denominator throughout the study area is dynamic and rapid population growth. Maricopa County was identified by the U.S. Bureau of the Census as the fastest growing county in the United States. Short-range growth patterns will clearly impact future demand for dial-a-ride services.

Overall, Maricopa County's population will increase by more than a 1.14 million people during the time period from 2000 to 2010. The increase from 2005 to 2010 is project to be almost one-half million persons (Figure 4.1).

With respect to individual communities served by existing community dial-a-ride operations, Phoenix (as expected) will see the largest absolute increase in population. Thereafter, Gilbert in the EVDAR system and the City of Surprise will see the most rapid absolute growth, 2000 – 2010 (Figure 4.2).

With respect to relative population changes, or those communities with the greatest percentage of growth, West Valley communities led the way. The six communities that exhibited 100 percent growth or greater during the period 2000 – 2010 were all located in the West Valley (Figure 4.3).

**Table 4.1.
Baseline Demographic Data, 2000**

Place	Municipal Population, 2000 Census								
	Total	Persons with a Disability (1)			Persons 65 Years of Age, or Greater	Persons Below the Poverty Level			
		5 - 64	65+	Total		0 - 17	18 - 64	65+	Total
Phoenix									
Avondale	35,802	4,322	877	5,199	1,919	2,146	2,457	302	4,905
Goodyear	18,779	1,774	475	2,249	1,820	385	553	67	1,005
Litchfield Park	3,813	191	205	396	821	49	93	15	157
Paradise Valley	13,629	608	608	1,216	2,287	50	221	63	334
Phoenix	1,320,994	182,344	45,694	228,038	106,629	80,232	114,247	10,841	205,320
Tolleson	4,963	746	280	1,026	514	306	314	56	676
Total	1,397,980	189,985	48,139	238,124	113,990	83,168	117,885	11,344	212,397
East Valley									
Chandler	176,338	17,092	4,104	21,196	10,106	4,194	6,671	767	11,632
Gilbert	109,936	9,228	1,370	10,598	3,887	1,173	2,130	226	3,529
Mesa	397,215	44,943	19,853	64,796	52,663	11,892	19,546	3,593	35,031
Scottsdale	202,744	17,292	10,845	28,137	34,133	2,177	7,501	1,972	11,650
Tempe	158,426	18,052	4,256	22,308	11,390	4,402	16,944	558	21,904
Total	1,044,659	106,607	40,428	147,035	112,179	23,838	52,792	7,116	83,746
West Valley									
Buckeye	6,417	1,006	236	1,242	528	599	531	70	1,200
El Mirage	7,518	1,492	163	1,655	501	381	690	110	1,181
Glendale	218,596	29,207	6,929	36,136	16,191	10,194	14,030	1,464	25,688
Peoria	108,462	11,890	6,323	18,213	15,918	1,840	2,829	958	5,627
Sun City	38,155	1,888	10,857	12,745	30,464	-	458	1,275	1,733
Sun City West	26,264	839	5,576	6,415	21,694	-	65	411	476
Surprise	30,886	3,544	2,064	5,608	7,785	1,032	1,402	255	2,689
Youngtown	3,007	455	647	1,102	1,516	99	160	116	375
Total	439,305	50,321	32,795	83,116	94,597	14,145	20,165	4,659	38,969

**Table 4.1.
Baseline Demographic Data, 2000 (Continued)**

Place	Municipal Population, 2000 Census								
	Total	Persons with a Disability (1)			Persons 65 Years of Age, or Greater	Persons Below the Poverty Level			
		5 - 64	65+	Total		0 - 17	18 - 64	65+	Total
Other									
Apache Junction	31,281	4,618	3,178	7,796	7,977	1,197	1,833	587	3,617
Fountain Hills	20,199	2,024	1,072	3,096	3,972	199	484	149	832
Guadalupe	5,228	873	184	1,057	323	599	655	137	1,391
Wickenburg	5,050	750	551	1,301	1,405	125	371	70	566
Carefree	2,920	249	186	435	808	5	61	26	92
Cave Creek	3,685	432	142	574	507	98	148	37	283
Gila Bend	1,944	207	88	295	160	194	249	38	481
New River CDP	10,781	1,507	248	1,755	779	172	421	24	617
Queen Creek	4,317	425	75	500	217	138	245	14	397
Rio Verde CDP	1,461	61	80	141	870	-	7	18	25
Sun Lakes CDP	11,946	614	2,146	2,760	7,949	-	93	242	335
Total	98,812	11,760	7,950	19,710	24,967	2,727	4,567	1,342	8,636
Other MPAs									
Fort McDowell MPA	829	106	5	111	20	53	89	2	144
Gila River MPA (Maricopa)	973	138	5	143	20	111	132	2	245
Salt River MPA	6,403	1,311	199	1,510	802	856	945	122	1,923
Total	8,205	1,555	209	1,764	842	1,020	1,166	126	2,312
Remainder, Maricopa County	83,188	10,310	4,933	15,243	12,259	3,813	4,530	1,265	9,608
Total - Maricopa County	3,072,149	370,538	134,454	504,992	358,834	128,711	201,105	25,852	355,668

Source: U.S. Bureau of the Census, Summary File 3.

**Table 4.2.
Demographic Data and Projections, 2005**

Place	Municipal Population, 2005 American Community Survey								
	Total	Persons with a Disability (1)			Persons 65 Years of Age, or Greater	Persons Below the Poverty Level			
		5 - 64	65+	Total		0 - 17	18 - 64	65+	Total
Phoenix		-							
Avondale	61,666	5,720	1,344	7,064	2,077	5,924	5,669	406	11,999
Goodyear	43,941	2,952	1,100	4,052	4,259	901	1,294	157	2,352
Litchfield Park	4,523	161	241	402	974	58	110	18	186
Paradise Valley	14,558	462	643	1,104	2,443	53	236	67	357
Phoenix	1,377,980	109,365	39,564	148,929	103,676	93,893	121,808	9,416	225,117
Tolleson	5,974	639	333	972	619	368	378	67	814
Total	1,508,642	119,299	43,224	162,524	114,047	101,198	129,495	10,131	240,824
East Valley									
Chandler	225,725	13,740	5,070	18,810	13,257	6,094	9,982	777	16,853
Gilbert	178,539	7,653	2,569	10,222	8,486	3,008	3,900	323	7,231
Mesa	442,445	30,639	20,106	50,745	63,210	21,364	26,472	4,231	52,067
Scottsdale	215,933	11,060	9,185	20,245	34,957	4,529	9,346	1,419	15,294
Tempe	166,171	11,325	3,843	15,168	11,125	4,083	17,604	286	21,973
Total	1,228,813	74,417	40,773	115,190	131,035	39,078	67,304	7,036	113,418
West Valley									
Buckeye	9,619	1,073	350	1,423	791	898	796	105	1,799
El Mirage	22,171	3,130	476	3,605	1,477	1,124	2,035	324	3,483
Glendale	229,913	26,684	5,929	32,613	15,681	15,233	18,148	1,758	35,139
Peoria	141,941	11,418	5,727	17,145	16,077	3,009	3,664	952	7,625
Sun City	39,757	1,399	11,193	12,592	31,743	-	477	1,329	1,806
Sun City West	27,367	622	5,749	6,370	22,605	-	68	428	496
Surprise	91,411	6,564	6,044	12,608	15,826	2,599	3,455	750	6,804
Youngtown	4,021	433	856	1,289	2,027	132	214	155	501
Total	566,200	51,322	36,323	87,645	106,228	22,995	28,857	5,801	57,653

**Table 4.2.
Demographic Data and Projections, 2005 (Continued)**

Place	Municipal Population, 2005 American Community Survey								
	Total	Persons with a Disability (1)			Persons 65 Years of Age, or Greater	Persons Below the Poverty Level			
		5 - 64	65+	Total		0 - 17	18 - 64	65+	Total
Other Towns/CDPs									
Apache Junction	32,297	3,391	3,246	6,638	8,236	1,236	1,893	606	3,734
Fountain Hills	23,217	1,655	1,219	2,874	4,565	229	556	171	956
Guadalupe	5,258	624	183	808	325	602	659	138	1,399
Wickenburg	6,224	657	672	1,329	1,732	154	457	86	698
Carefree	3,706	225	234	458	1,025	6	77	33	117
Cave Creek	4,884	407	186	593	672	130	196	49	375
Gila Bend	2,055	156	92	248	169	205	263	40	508
New River CDP									
Queen Creek	16,628	1,164	286	1,450	836	532	944	54	1,529
Rio Verde CDP									
Sun Lakes CDP									
Total	94,269	8,280	6,118	14,398	17,560	3,094	5,045	1,178	9,317
Other MPAs									
Fort McDowell MPA	824	75	5	80	20	53	88	2	143
Gila River MPA	2,742	277	14	291	56	313	372	6	690
Salt River MPA	6,822	993	210	1,203	854	912	1,007	130	2,049
Total	10,388	1,345	229	1,574	931	1,278	1,467	138	2,882
Total - Maricopa County	3,590,804	263,549	133,030	396,579	390,265	178,671	242,579	26,878	448,127

Source: (1) Table 4: Annual Estimates of the Population for Incorporated Places in Arizona, Listed Alphabetically: April 1, 2000 to July 1, 2005 (SUB-EST2005-04-04); (2) American Community Survey, 2005, Population Division, U.S. Census Bureau.

**Table 4.3.
Demographic Data and Projections, 2010**

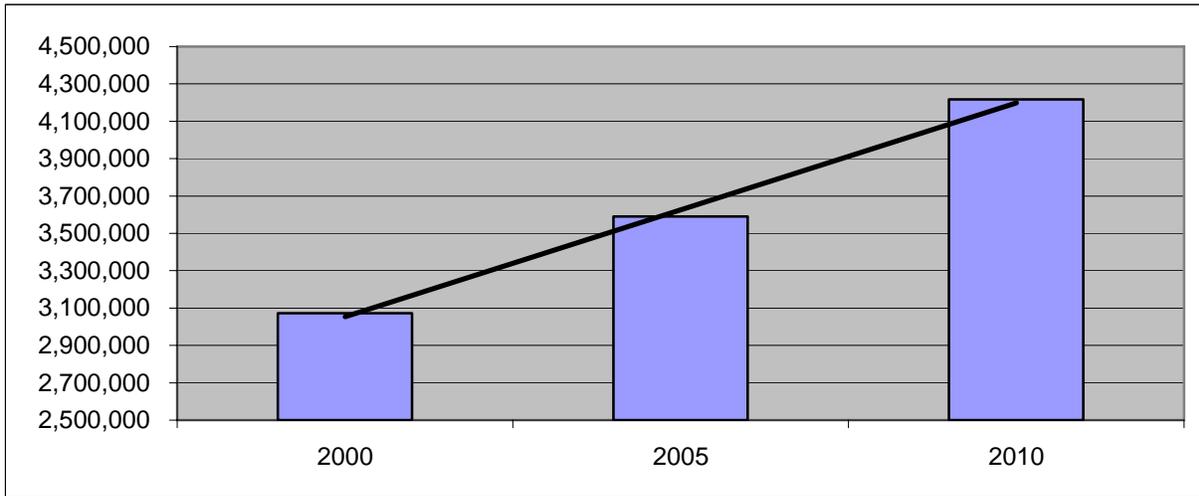
MPA	MAG Municipal Planning Area (MPA) Population, 2010								
	Total	Persons with a Disability (1)			Persons 65 Years of Age, or Greater	Persons Below the Poverty Level			
		5 - 64	65+	Total		0 - 17	18 - 64	65+	Total
<u>Phoenix</u>									
Avondale	83,856	7,778	1,828	9,606	2,695	8,056	7,709	552	16,317
Goodyear	71,354	4,794	1,786	6,580	5,525	1,463	2,101	255	3,819
Litchfield Park	8,587	306	457	763	1,263	110	209	34	354
Paradise Valley	14,790	469	653	1,122	3,169	54	240	68	362
Phoenix	1,695,549	134,569	48,682	183,251	134,501	115,532	149,880	11,586	276,997
Tolleson	7,748	828	432	1,261	803	478	490	87	1,055
Total	1,881,884	148,745	53,837	202,583	147,955	125,692	160,629	12,582	298,904
<u>East Valley</u>									
Chandler	265,107	16,137	5,955	22,092	17,199	7,157	11,724	913	19,793
Gilbert	218,009	9,345	3,137	12,482	11,009	3,673	4,762	394	8,830
Mesa	518,944	35,937	23,582	59,519	82,003	25,058	31,049	4,963	61,069
Scottsdale	249,341	12,771	10,606	23,377	45,350	5,230	10,792	1,639	17,660
Tempe	177,771	12,116	4,111	16,227	14,433	4,368	18,833	306	23,507
Total	1,429,172	86,305	47,391	133,696	169,994	45,486	77,160	8,214	130,859
<u>West Valley</u>									
Buckeye	74,906	8,352	2,726	11,078	1,027	6,992	6,198	817	14,008
El Mirage	34,819	4,915	747	5,662	1,917	1,765	3,196	509	5,470
Glendale	279,807	32,475	7,216	39,690	20,343	18,539	22,086	2,140	42,765
Peoria	172,793	13,900	6,972	20,872	20,857	3,663	4,460	1,159	9,282
Sun City	41,359	1,456	11,644	13,100	33,022	-	496	1,382	1,879
Sun City West	28,469	647	5,980	6,627	23,516	-	70	446	516
Surprise	146,890	10,548	9,712	20,260	20,531	4,176	5,552	1,205	10,933
Youngtown	6,820	734	1,452	2,186	2,630	225	363	263	851
Total	785,863	73,026	46,448	119,474	123,843	35,359	42,423	7,921	85,703

**Table 4.3.
Demographic Data and Projections, 2010 (Continued)**

Other Towns/CDPs									
Apache Junction	33,313	3,498	3,349	6,847	10,685	1,275	1,952	625	3,852
Fountain Hills	27,166	1,936	1,426	3,363	5,923	268	651	200	1,119
Guadalupe	5,790	688	202	889	421	663	725	152	1,541
Wickenburg	11,022	1,164	1,190	2,354	2,246	273	810	153	1,235
Carefree	4,418	268	278	546	1,330	8	92	39	139
Cave Creek	5,781	482	220	702	872	154	232	58	444
Gila Bend	2,575	195	115	310	219	257	330	50	637
New River CDP									
Queen Creek	34,506	2,416	593	3,009	1,084	1,103	1,958	112	3,173
Rio Verde CDP									
Sun Lakes CDP									
Total	124,571	10,647	7,374	18,021	22,781	4,000	6,751	1,390	12,140
Other MPAs									
Fort McDowell MPA	839	76	5	81	26	54	90	2	146
Gila River MPA	2,790	281	14	296	73	318	378	6	703
Salt River MPA	7,087	1,032	218	1,250	1,109	947	1,046	135	2,128
Total	10,716	1,390	237	1,627	1,207	1,319	1,515	143	2,977
Total - Maricopa County	4,216,499	320,114	155,288	475,402	506,298	211,857	288,477	30,250	530,583

Source: (1) Socioeconomic Projections of Population, House and Employment by Municipal Planning Area and Regional Analysis Zone, May 2007, prepared by the Maricopa Association of Governments; (2) American Community Survey, 2005, Population Division, U.S. Census Bureau; and consultant estimates.

**Figure 4.1.
Maricopa County Population Growth**



**Figure 4.2.
Absolute Growth Trends, DAR Communities, 2000 – 2010**

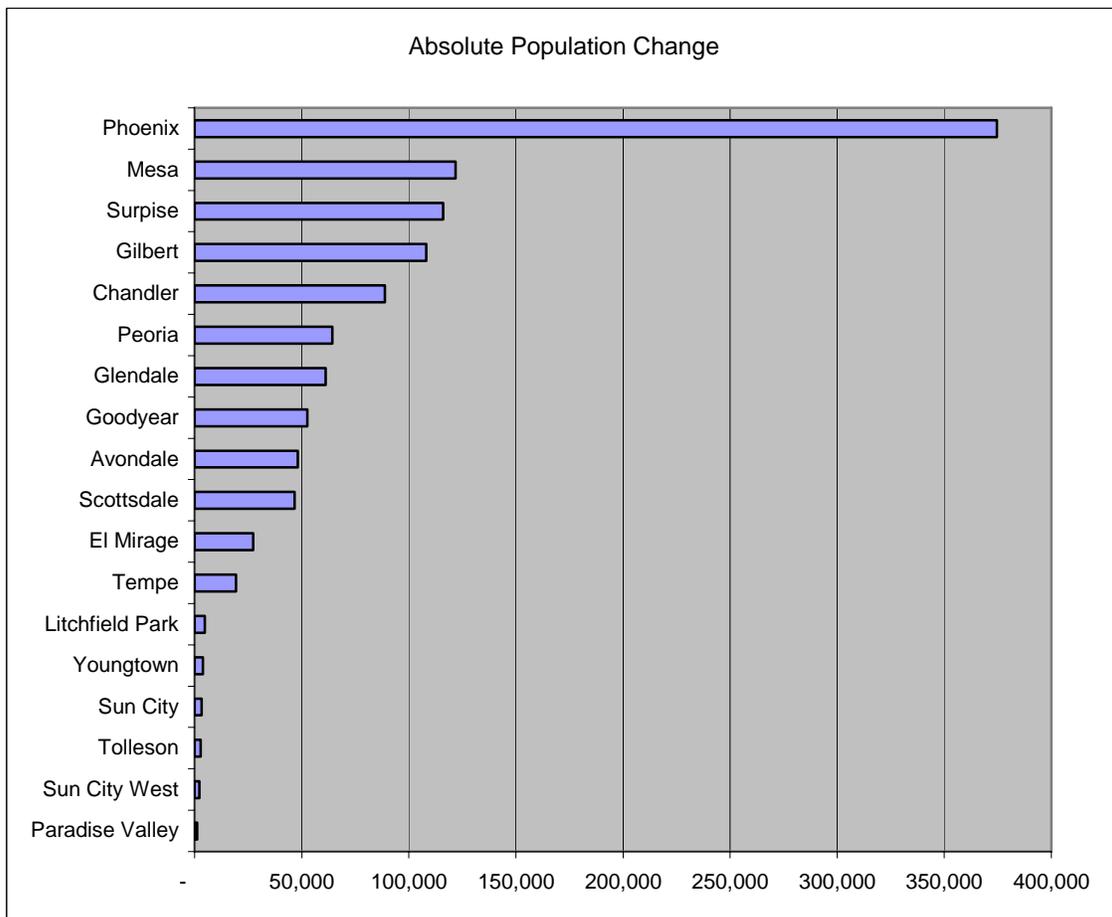
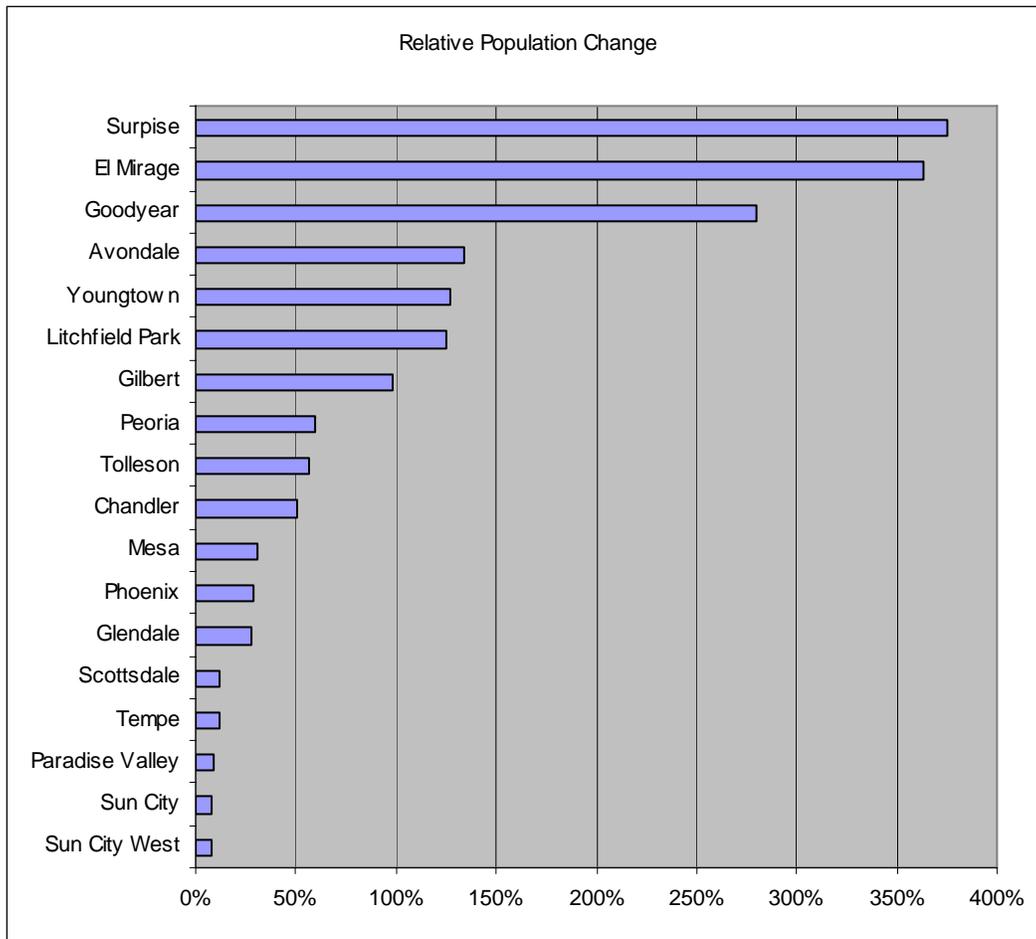


Figure 4.3.
Relative Growth Trends, DAR Communities, 2000 – 2010



While recent TCRP research has shown that ADA ridership is more significantly impacted by overall population trends, not trends within specific age cohorts, the fact that many existing DAR programs provide supplemental service to the elderly and persons with disabilities who are not ADA certified is significant.

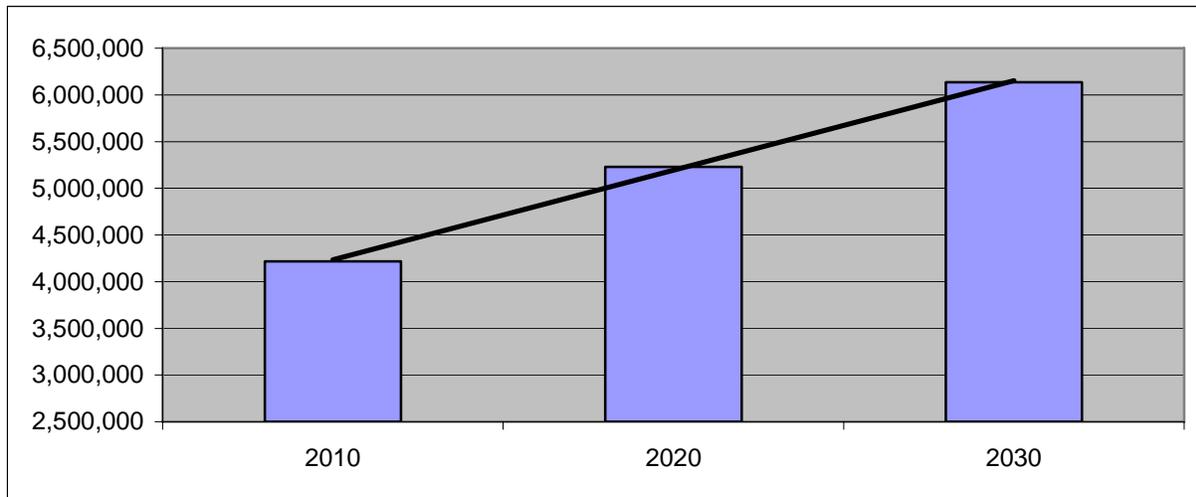
Absolute population growth among persons age 65 years or older is projected at approximately 147,463 persons in Maricopa County between 2005 – 2010.

Similar growth patterns among persons with disabilities is anticipated, although computations of growth rates is mitigated by enumeration procedural changes instituted by the Census Bureau that creates comparisons with base year 2000 data.

Long Range Trends

Long range growth trends show little abatement in the rapid growth that is projected to occur in Maricopa County. An additional 1 million residents are projected between 2010 and 2020 according to MAG projections. Another 900,000 residents are projected for the next decade, pushing the total County population above 6.1 million by 2030.

Figure 4.4.
Long Term Growth, Total Population, Maricopa County, 2010 - 2030



Source: *Socioeconomic Projections of Population, Housing and Employment by Municipal Planning Area and Regional Analysis Zone, May 2007.*

4.4. Ridership Trends

Source Data

Data for the analysis of existing ridership trends was obtained from the Task 2 system assessments, augmented in some cases by updated information provided by the system in response inquiries about data trends. To the extent possible, the consultant sought to obtain a breakdown of riders, by demographic subgroup. Generally, data collection practices are the existing DARs permitted segregation of ADA riders, non-ADA riders, and in some instances, riders who were 65 years of age or older (STS only). This section summarizes the results of that analysis.

Note that throughout this section “trips” refers to rides taken by eligible riders. The term “boardings” includes PCAs and companions as well as eligible riders.

General Patterns Among DAR Systems

Data trends reveal that existing DARs systems in the RPTA/Valley Metro service area are undergoing a profound change. Whereas these systems once provided the majority of their services to non-ADA riders, a trend has emerged where ADA ridership is rapidly increasing while non-ADA ridership is decreasing in corresponding fashion. Each system is discussed below.

Phoenix, SW Valley and Paradise Valley Dial-a-Ride

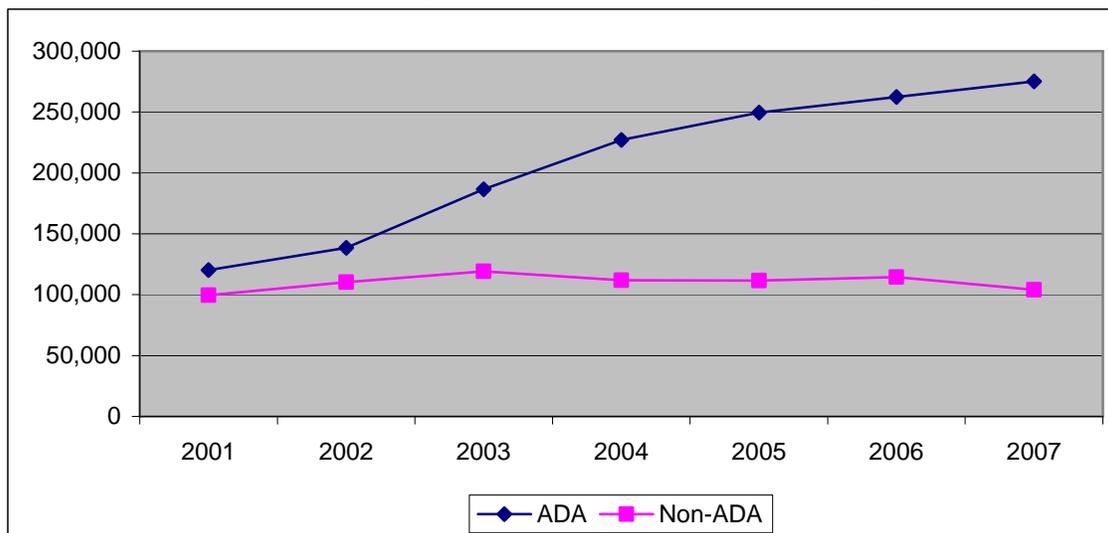
Detailed data for the years FY 2001 through FY 2007 were considered in the analysis. Overall, ridership has increased to 410,736 total boardings in FY 2007 from 237,877 total boardings in FY 2001 (72.67 percent increase over the seven-year period) (Table 4.4).

Table 4.4.
Phoenix, SW Valley and Paradise Valley DAR Ridership, 2001 - 2007

Ridership Category	2001	2002	2003	2004	2005	2006	2007
Total Trips Provided	219,747	248,596	305,556	338,997	361,026	376,883	379,127
ADA	120,210	138,427	186,500	227,151	249,512	262,321	275,146
Non-ADA	99,537	110,169	119,056	111,846	111,514	114,562	103,981
PCAs/Companions	18,130	21,897	28,304	30,793	32,027	32,154	31,609
Total Boardings	237,877	270,493	333,860	369,790	393,053	409,037	410,736

As Exhibit 10 indicates, ADA ridership has grown dramatically during the analysis period, increasing 129 percent. Meanwhile, non-ADA ridership has remained relatively flat, increasing only 4.5 percent over the seven year period (Figure 4.5).

Figure 4.5.
Phoenix & SW Valley ADA and Non-ADA Ridership Trends



Analysis of detailed ridership breakdowns by community suggest that the relative rates of growth in Phoenix and SW Valley for ADA services reflect similar patterns. Service provided to Paradise Valley, however, is relatively flat.

The City of Phoenix provides two taxi subsidy programs which are administered under contract with a non-profit agency, LIFE. One of the programs subsidizes trips to employment; the other subsidizes trips from home to dialysis centers. In FY 2006, these two programs provided 17,104 passenger trips.

East Valley Dial-a-Ride

Detailed data for the years FY 2002 through FY 2007 were considered in the analysis. Like Phoenix, ADA ridership has risen dramatically, but even more so, increasing by 212 percent over the six-year period. Non-ADA ridership, however, has decreased markedly, so that the balance of ridership has almost inversed itself by 2007 (Table 4.5).

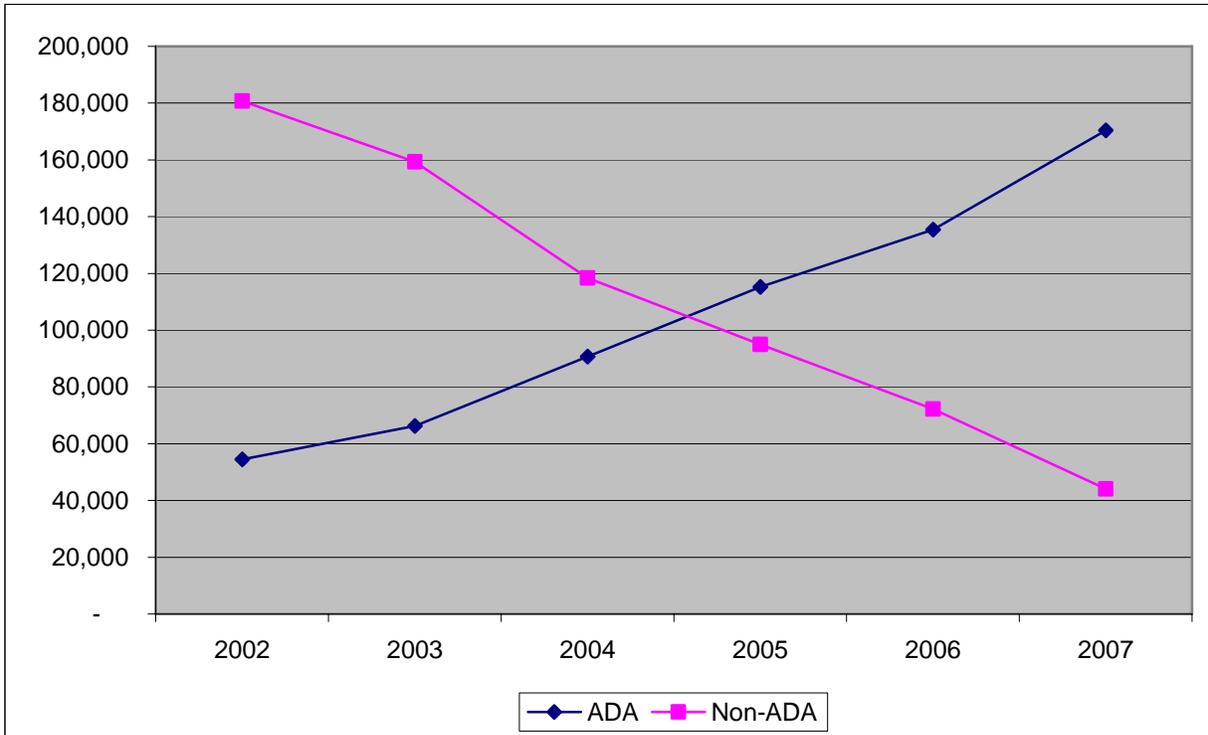
Table 4.5.
EVDAR DAR Ridership, 2002 – 2007

Ridership Category	2002	2003	2004	2005	2006	2007
Total Trips Provided	235,234	225,570	209,099	210,148	207,582	214,490
ADA	54,519	66,229	90,686	115,201	135,413 (1)	170,437
Non-ADA	180,715	159,341	118,413	94,947	72,169	44,053
PCAs/Companions	17,207	15,309	13,637	12,992	12,571	14,740
Total Boardings	252,441	240,879	222,736	223,140	220,153	229,230

(1) Includes 2,227 trips provided in Phoenix and Paradise Valley

A plot of ridership trends for both ridership segments reflects this dynamic pattern (Figure 4.6).

Figure 4.6.
EVDAR ADA and Non-ADA Ridership Trends



Declines in the current fiscal year will continue to occur in the non-ADA population due, in part, to the decision by the City of Mesa to eliminate non-ADA service in their community. However, non-ADA patronage was in decline, even steep decline (Scottsdale and Tempe), in other areas of the East Valley prior to this decision.

Offsetting declining non-ADA ridership is the rise in alternative paratransit programs in the East Valley. Since the year 2000, taxi programs have been initiated by the cities of Scottsdale, and Mesa. Recently RPTA initiated a taxi program with the intent of providing availability to the cities and consistency to the users. To date Mesa, Chandler and Gilbert have joined this program while Scottsdale has begun service with its own contractor. The service is new for Chandler and Gilbert and is an extension of Mesa's Coupons for Cabs Program. Mesa residents made 7,663 one-way taxi trips; data were not yet available for the other East Valley cities due to the newness of this program.

Additionally, seniors and persons with disabilities in the City of Mesa have another transportation alternative, the Mileage Reimbursement Program. In FY 2006, the program provided reimbursement for 31,800 one-way trips. Together, these 49,463 trips offset, in part, the loss of 136,662 from FY 2002 to FY 2007.

In 2000, the City of Scottsdale initiated a Taxi Subsidy Program for its older residents and residents with disabilities. Subsequently a dialysis component was added. All aspects of the program are operated by the City of Scottsdale. In FY 2006, 38,789 one-way trips were taken under this program. The decline in non-ADA ridership in Scottsdale between FY 2002 and FY 2007 was 17,481 trips; arguably this alternative program has actually *increased* travel opportunities for non-ADA paratransit customers.

Finally, several communities have implemented successful local community bus programs. These local circulators provide an alternative to paratransit, particularly for seniors.

Glendale Dial-a-Ride

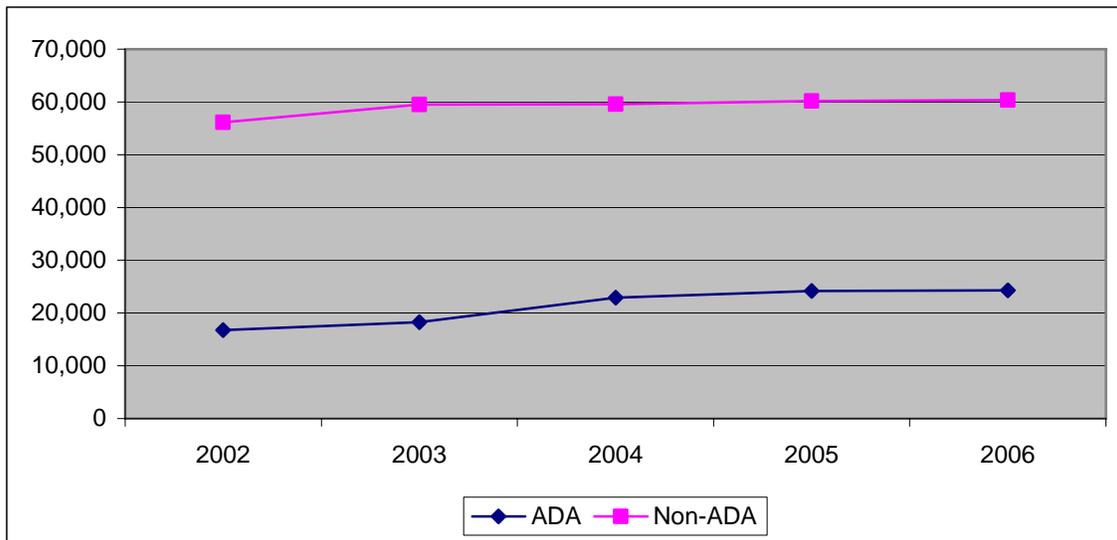
Detailed data for the years FY 2002 through FY 2006 were considered in the analysis. As shown in Table 4.6, total trips increased 16% over the five-year period. ADA ridership increased by 45% while non-ADA ridership increased by only 7.5%.

Table 4.6.
Glendale DAR Ridership, 2002 - 2006

Ridership Category	2002	2003	2004	2005	2006
Total Trips Provided	72,857	77,750	82,510	84,355	84,606
ADA	16,738	18,267	22,930	24,203	24,270
Non-ADA	56,119	59,483	59,580	60,152	60,336
PCAs/Companions	3,765	4,018	3,622	3,476	4,449
Total Boardings	76,622	81,768	86,132	87,831	89,055

ADA ridership has grown, but not at the rates seen in Phoenix or the East Valley. After moderate increase in FY 2003 and FY 2004, ADA ridership has remained almost constant from FY 2004 through FY 2006. This appears to be due in part to Glendale's efforts to facilitate use of fixed route transit services rather than complementary paratransit. Glendale has implemented successful local community bus service as well as a successful travel training program. The City of Glendale also initiated a pilot Taxi Subsidy Program in November, 2005:

Figure 4.7.
Glendale ADA and Non-ADA Ridership Trends



Peoria Dial-a-Ride

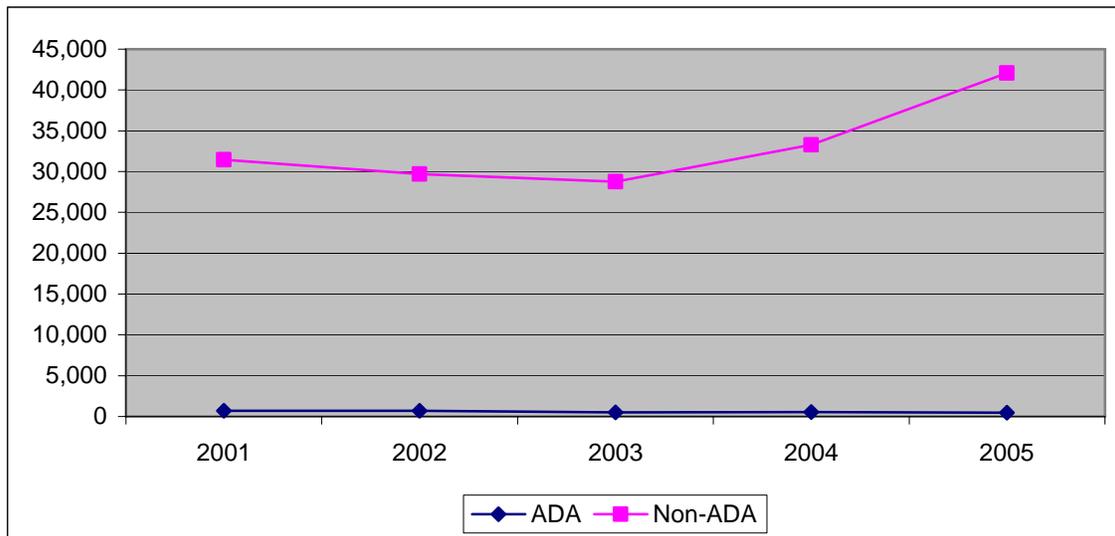
ADA ridership is modest on the Peoria DAR and has declined slightly in recent years. This may be due, in part, to fare policies, where a comparable trip is less expensive if taken as a non-ADA trip (Table 4.7).

Table 4.7.
Peoria DAR Ridership, 2002 - 2006

Ridership Category	2002	2003	2004	2005	2006
Total Trips Provided	32,176	30,399	29,258	33,805	42,560
ADA	720	696	497	547	469
Non-ADA	31,456	29,703	28,761	33,258	42,091
PCAs/Companions	N/R	N/R	N/R	N/R	N/R
Total Boardings	32,176	30,399	29,258	33,805	42,560

Of note, non-ADA ridership has begun to increase rapidly over the last two years after a period of flat or declining ridership (Figure 4.8).

**Figure 4.8.
Peoria ADA and Non-ADA Ridership Trends**



Surprise Dial-a-Ride

Surprise does not provide ADA complementary paratransit service. All ridership falls within the non-ADA category. After three years of flat or declining ridership, patronage has begun increasing markedly after 2005 (Table 4.8).

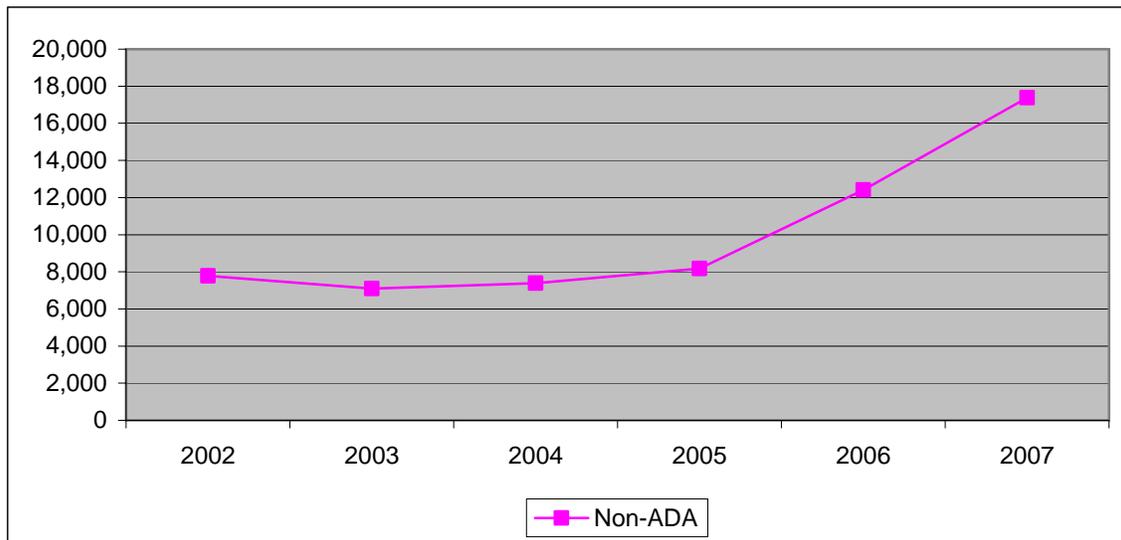
**Table 4.8.
Surprise DART Ridership, 2002 - 2007**

Ridership Category	2002	2003	2004	2005	2006 (1)	2007
Total Trips Provided	7,775	7,094	7,387	8,181	12,412	17,376
ADA	0	0	0	0		0
Non-ADA	7,775	7,094	7,387	8,181	12,412	17,376
PCAs/Companions	N/R	N/R	N/R	N/R	N/R	N/R
Total Boardings	7,775	7,094	7,387	8,181	12,412	17,376

(1) The 2006 ridership listed here is slightly lower than the ridership shown in Table 2.9 of Section 2. The information in Table 2.9 was gathered in the Fall of 2006 as part of the initial on-site visit. Information in this table was provided in July of 2007.

Trends in non-ADA ridership reflect rapid increase over the last two years, particularly when the most recent year is taken into account. (Figure 4.9).

Figure 4.9.
Surprise Non-ADA Ridership Trends



El Mirage Dial-a-Ride

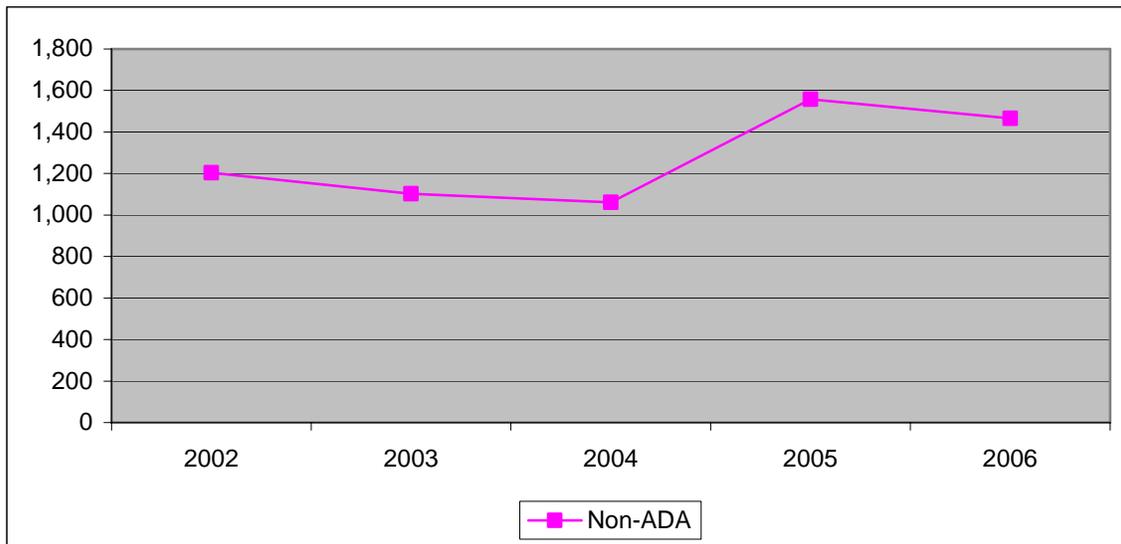
El Mirage DAR, the smallest DAR in the valley, provides about 1,000 – 1,500 trips per year (Table 4.9).

Table 4.9.
El Mirage DAR Ridership, 2002 - 2006

Ridership Category	2002	2003	2004	2005	2006
Total Trips Provided	1,204	1,103	1,061	1,558	1,466
ADA	0	0	0	0	
Non-ADA	1,204	1,103	1,061	1,558	1,466
PCAs/Companions	N/R	N/R	N/R	N/R	N/R
Total Boardings	1,204	1,103	1,061	1,558	1,466

The trends in ridership have varied over the five-year study period, with declines recorded from 2002 through 2004 and again in 2006 (Figure 4.10).

**Figure 4.10.
El Mirage Non-ADA Ridership Trends**



Sun City Area Transit (SCAT)

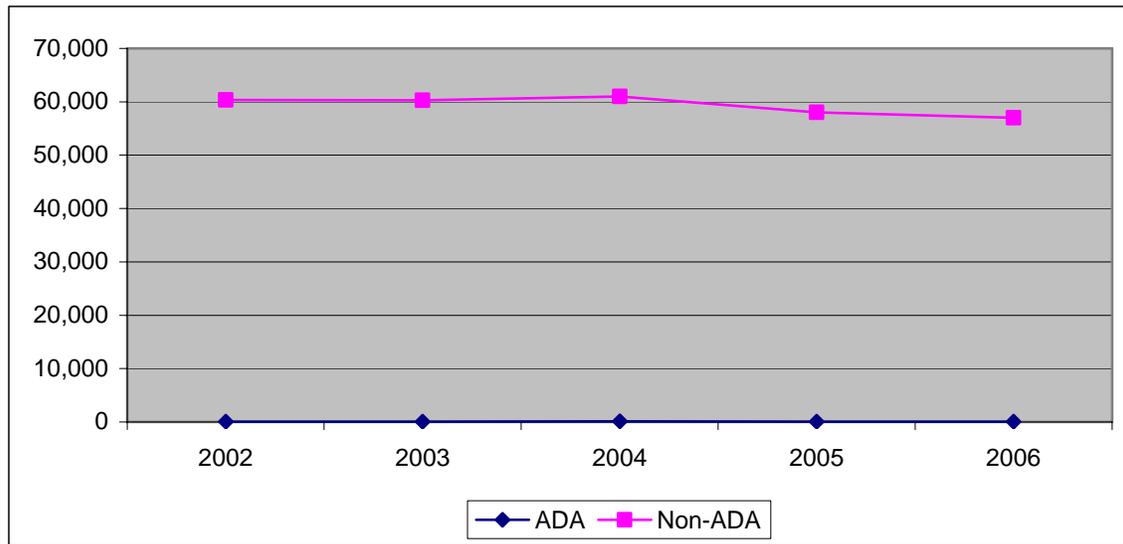
SCAT performs only a few trips per year for ADA passengers, averaging over one trip per week. Non-ADA ridership held steady during the first three years of review, but has declined since 2004 (Table 4.10).

**Table 4.10.
SCAT DAR Ridership, 2002 - 2006**

Ridership Category	2002	2004	2004	2005	2006
Total Trips Provided	60,400	60,345	61,147	58,069	57,091
ADA	68	68	145	65	65
Non-ADA	60,332	60,277	61,002	58,004	57,026
PCAs/Companions	N/R	N/R	N/R	N/R	N/R
Total Boardings	60,400	60,345	61,147	58,069	57,091

The key characteristic of SCAT's trends is the relatively flat nature of the trend in both ADA and non-ADA ridership.

**Figure 4.11.
SCAT ADA and Non-ADA Ridership Trends**



Special Transportation Services (STS)

STS provided both specialized and “program” transportation services on behalf of residents of Maricopa County. In some measures, ridership is a function of the levels of financial support provided to the system through purchase of service agreements with various categorical funding source (e.g., Title III-B). Additionally, STS was the only system that systematically broke out elderly ridership in its passenger accounting practices.

**Table 4.11.
STS DAR Ridership, 2002 – 2006 (1)**

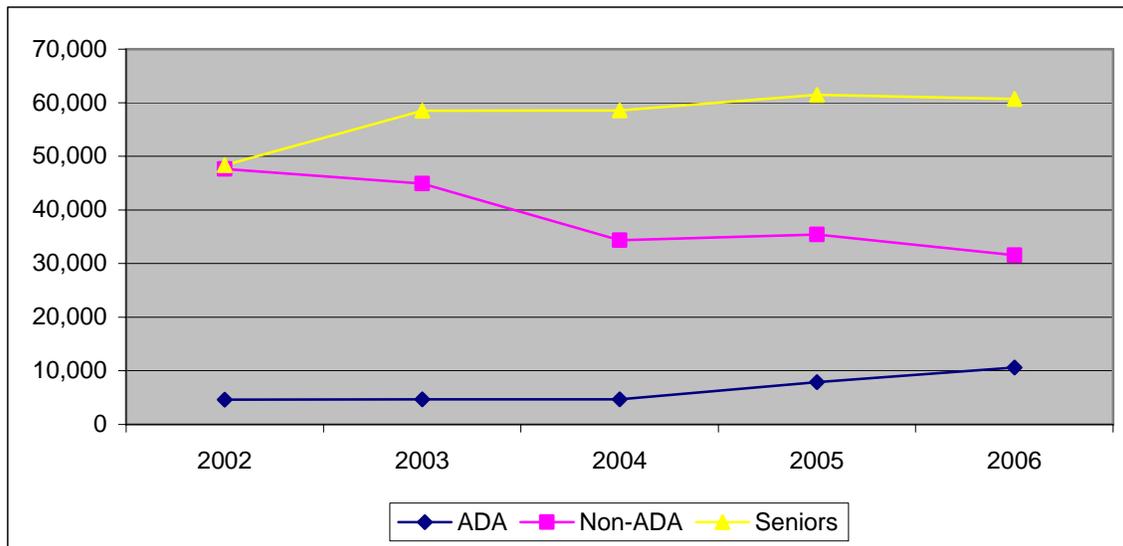
Ridership Category	2002	2004	2004	2005	2006
Total Trips Provided	100,560	108,059	97,577	104,766	102,856
ADA (2)	4,598	4,661	4,693	7,873	10,614
Non-ADA	47,627	44,903	34,338	35,425	31,569
Seniors	48,335	58,495	58,546	61,468	60,673
PCAs/Companions	N/R	N/R	N/R	N/R	N/R
Total Boardings	100,560	108,059	97,577	104,766	102,856

(1) All trips provided by STS, including JARC shuttle trips as well as demand responsive trips.

(2) Represents trips taken by persons registered as ADA eligible, but trips not necessarily ADA eligible trips.

Seniors constitute the largest segment of STS ridership. After some growth in this ridership between 2002 – 2003, overall ridership has held relatively constant. Non-ADA ridership on the system has declined, while STS is transporting more ADA eligible individuals with the additional Prop 400 funding from RPTA (Figure 4.12).

Figure 4.12.
STS ADA, Non-ADA, and Senior Ridership Trends



Summary

Summary data for all ADA, non-ADA, and seniors is reflected in Table 4.12.

Table 4.12.
Combined DAR Ridership, 2002 – 2006 (1)

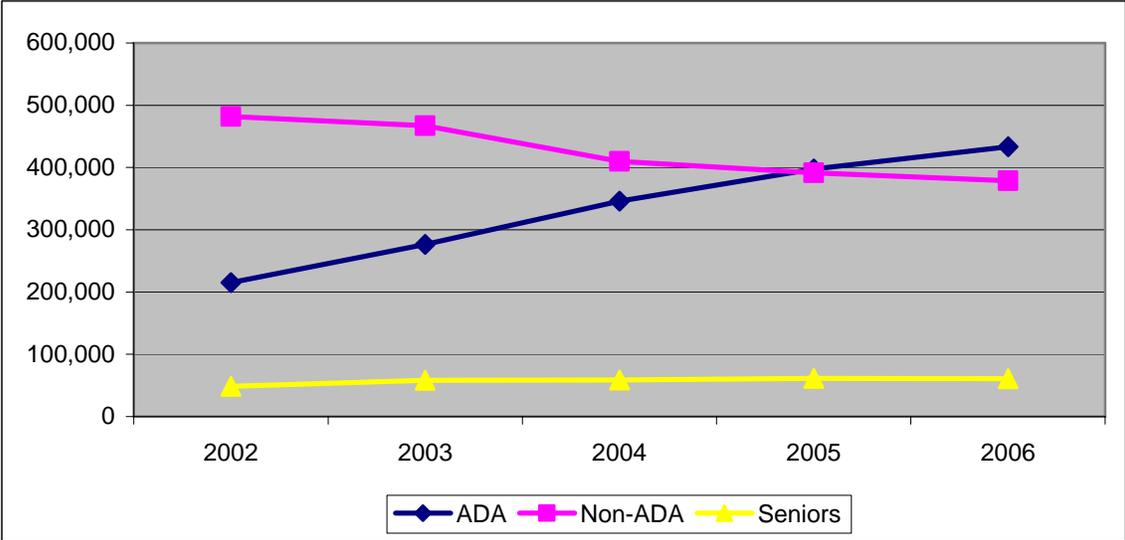
Ridership Category	2002	2004	2004	2005	2006
Total Trips Provided	745,383	801,844	814,567	850,450	885,456
ADA	215,070	276,421	346,104	397,401	433,152 (2)
Non-ADA	481,978	466,928	409,917	391,581	391,631
Seniors	48,335	58,495	58,546	61,468	60,673

(1) Includes all STS ridership.

(2) Includes 10,614 trips provided by STS to ADA registered riders which are not necessarily ADA eligible trips.

Trends for all DARs are reflected in Figure 4.13. The data reflect that for the first time, ADA ridership in 2005 exceeded that for non-ADA ridership, with over 397,000 trips for the year. The trend line reflects continued upward growth in this ridership segment.

Figure 4.13.
STS ADA, Non-ADA, and Senior Ridership Trends



4.5. Projected Ridership and Demand

Overview

In this section, projected ridership and potential demand for dial-a-ride services is presented.

Due to the complexities of dial-a-ride services provision in the study area and the variations in user populations served by each system, it was necessary to adopt multiple strategies in the projection of ridership and total demand for dial-a-ride services.

Ridership Projections

Overview. A series of ridership projections was developed for each DAR. When a DAR served multiple communities, TranSystems attempted to obtain a detailed breakdown of ridership from each community, consistent with passenger accounting practices employed of the respective DARs. Thus, we were able to separate the Southwest Valley from the total Phoenix DAR ridership. Similarly, data from each city in the East Valley DAR was used to compute a separate ridership projection for each community.

In projecting ridership, historical data presented previously in this section was used to compute a predictive regression equation for each DAR and/or community in the DAR system.

The results of this analysis are presented in Table 4.13. Separate projections were made for ADA ridership and non-ADA ridership for the period FY 2007 – FY 2010. In several instances, actual 2007 data were available and were substituted for projected data (Phoenix East Valley, and Surprise).

A total of 982,361 total DAR trips are projected in FY 2010 for ADA and non-ADA purposes. The figure represents total trips and does not reflect total boardings, which would also include PCAs and companions.

Demand Projections

The TCRP model note previously was utilized to model potential demand for ADA complementary paratransit services, by DAR region. This tool models trips, not total boardings, so companions and PCAs are not addressed in the projections.

As this tool only models demand for ADA complementary paratransit services, additional methods were employed to model potential demand among non-ADA patrons.

**Table 4.13.
Projected ADA and Non-ADA Ridership, 2007 - 2010**

Place	2006 Existing Ridership		Projected Ridership							
			2007		2008		2009		2010	
	ADA	Non-ADA	ADA	Non-ADA	ADA	Non-ADA	ADA	Non-ADA	ADA	Non-ADA
Phoenix										
Avondale										
Goodyear										
Litchfield Park										
Tolleson										
SW Valley Subtotal¹	6,592	N/A	11,562	N/A	15,731	N/A	20,101	N/A	24,470	N/A
Paradise Valley ²	104	N/A	123	N/A	110	N/A	96	N/A	83	N/A
Phoenix	255,625	114,562	263,584	103,981	308,935	112,178	334,830	112,698	360,725	113,219
Total	262,321	114,562	275,269	103,981	324,776	112,178	355,027	112,698	385,278	113,219
East Valley³										
Chandler	14,678	7,441	16,617	4,545	18,833	4,284	20,930	2,744	23,027	1,203
Gilbert	7,584	4,450	10,460	3,098	12,282	2,801	14,105	2,114	15,927	1,428
Mesa ⁴	70,319	25,915	93,785	8,120	101,204	8,120	114,737	8,120	128,270	8,120
Scottsdale	20,514	17,495	21,930	15,226	25,785	9,854	28,376	5,747	30,968	1,640
Tempe	20,091	16,867	23,040	13,064	25,754	10,119	28,348	6,742	30,943	3,365
Total	133,186	72,169	165,832	44,053	183,858	35,178	206,497	25,467	229,135	15,756
West Valley										
Buckeye	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A	N/A
El Mirage	N/A	1,466	N/A	1,572	N/A	1,670	N/A	1,768	N/A	1,866
Glendale	24,270	60,336	27,582	61,865	29,682	62,775	31,782	63,685	33,882	64,596
Peoria	469	42,091	391	42,984	325	45,466	260	47,949	195	50,431
Surprise ⁵	N/A	12,412	N/A	17,376	N/A	19,889	N/A	23,308	N/A	26,728
Sun City (SCAT)										
Sun City										
Sun City West										
Youngtown										
SCAT Subtotal	65	57,026	80	61,463	79	61,375	78	61,286	77	61,198
Total	24,804	173,331	28,052	185,259	30,086	191,174	32,120	197,996	34,154	204,818
Total - All Systems	420,311	360,062	469,153	333,293	538,720	338,530	593,644	336,161	648,568	333,793

¹ Trend line based on 2005 - 2007 actual data. Individual community breakdown not available.

² Trend line based on 2002 - 2006 actual data.

³ Trend line based on 2002 - 2007 actual data. Existing ridership breakdown does not reflect trips in Phoenix or Paradise Valley (N=2,227 in 2006).

⁴ Data based on 2002 - 2007 actual data. Projections for non-ADA are held constant based on 2007 results.

⁵ Trend line based on 2004 - 2006 actual data.

TCRP ADA Demand Model

The TCRP model was developed based on national research on systems of various sizes (ranging from New York City to small urbanized areas). Various socio-economic factors were tested for relevance as a predictive factor in a multi-variate regression analysis. After exhaustive testing, a model was developed that takes into account the following factors:

- area population;
- fares;
- outcomes of the eligibility process;
- use of trip-by-trip screening based on conditions of eligibility;
- economic conditions; and
- on-time performance policies.

The area population is the ADA service area population. This demographic was estimated using the definitions provided earlier in this report and by use of GIS based methods.

Fares represent the full fare without discounts. Based on committee deliberations, a regional fare of \$2.50 was used in the analysis. In the case of Phoenix, extensive use of a discounted pass does create an effective fare that is substantially less than the full complementary paratransit fare. The impact of this fare is noted later in this section.

The outcomes of the eligibility process means that the percent of applicants determined to be conditionally eligible is entered as a percentage. Based on the eligibility report prepared earlier in the study, of 9,995 applicants, 4,398 were found to be conditionally eligible, a rate of 44.0 percent. With a regional certification process, this rate was used in the application of the model to all DARs.

Use of trip screening is a so-called “flag” variable that is set to either “0” or “1” depending upon whether trip-by-trip eligibility is practiced. Based on the Task 2 assessments, trip-by-trip screening is not used; a “0” value was assigned to all DARs.

Economic conditions refers to the percent of the population below the poverty level.

Finally, on-time performance policies relates to the pick-up window.

Based on these parameters, ADA demand was projected for 2010.

Modeling Potential Demand for Non-ADA Service

Modeling demand for non-ADA travel was based on a demographic model. In this model, the type of users who are served by the DAR is considered. Based on a review of system policies, the following demographic groups were identified:

- elderly;
- persons with disabilities (but not ADA certified);
- general public demand response patrons.

A key factor in this element of demand modeling is accounting for potential overlap among these non-ADA populations. When an individual is found to be both elderly and has a disability, that individual is assigned to the category with the most significant transit disadvantage (in this case, to the disability category). Once the “unduplicated” demographics are established for each DAR service area, trip rates, drawn from peer systems from around the country, are used to estimate daily trip making. This figure is then annualized based on the days of service.

For those systems that are provide service to the general public, a similar process is used, but the model is based on the total service area population, not the enumerated data for a particular population subgroup.

Projected Demand, 2010

Table 4.14 provides the estimate of potential demand for ADA and non-ADA services for each system. Because of the application of different modeling techniques, the table separates those systems subject to the TCRP modeling process from those that are just general public DARs.

**Table 4.14.
Potential Demand for ADA and Non-ADA DAR Services, 2010**

Place	Existing Ridership				Potential Demand - ADA Systems				Potential Demand - General Public DARs <i>(may have small ADA component)</i>		
	2006		2007		ADA Ridership	Non-ADA Riderhip		Total	ADA Ridership	General Public Ridership	Total
	ADA	Non-ADA	ADA	Non-ADA		Elderly	Disability				
Phoenix¹											
Avondale						N/A	N/A	N/A			
Goodyear						N/A	N/A	N/A			
Litchfield Park						N/A	N/A	N/A			
Tolleson						N/A	N/A	N/A			
SW Valley Subtotal	6,592	N/A	11,562		27,482	N/A	N/A	N/A			
Paradise Valley	104	N/A	123	N/A	5,793	N/A	N/A	5,793			
Phoenix	255,625	114,562	263,584	103,981	400,109	256,539	131,892	788,540			
Total	262,321	114,562	275,269	103,981	433,384	234,227	128,179	768,309			
East Valley^{1,2}											
Chandler	14,678	7,441	16,617	4,545	78,508	15,926	10,732	105,167			
Gilbert	7,584	4,450	10,460	3,098	116,049	16,326	8,766	141,141			
Mesa	70,319	25,915	93,785	8,120	161,754	N/A	N/A	161,754			
Scottsdale	20,514	17,495	21,930	15,226	88,374	64,351	12,213	164,937			
Tempe	20,091	16,867	23,040	13,064	54,281	23,630	3,732	81,643			
Total	133,186	72,169	165,832	44,053	498,966	120,232	35,443	654,642			
West Valley											
Buckeye	N/A	N/A			N/A	N/A	N/A	N/A	N/A	N/A	N/A
El Mirage	N/A	1,466			N/A	N/A	N/A	N/A	N/A	16,805	16,805.04
Glendale	24,270	60,336						70,775	126,354	197,129.90	
Peoria	469	42,091						31,447	37,450	68,896.91	
Surprise ¹	N/A	12,412	N/A	17,376				N/A	61,223	61,223.04	
Sun City (SCAT)								4,585	20,280	24,864.41	
Sun City West								N/A	17,119	17,119.42	
Youngtown								990	2,851	3,840.75	
SCAT Subtotal	65	57,026						5,575	40,250	45,825	
Total	24,804	173,331	-	17,376	-	-	-	-	107,797	282,082	389,879
TOTAL	420,311	360,062	441,101	165,410	932,351	354,459	163,623	1,422,951	107,797	282,082	389,879

¹ Ridership for both FY 2006 and FY 2007 based on actual results.

² EVDAR existing ridership figures do not reflect Phoenix/Paradise Valley although figures are included in projected ridership and demand estimates.

Discussion of Projected Ridership and Demand

ADA Patronage

The foregoing analysis used a predictive model to trend ridership growth based on past patterns of consumer behavior. These trend lines will reflect service quality and policies currently in place to predict future ridership. The TCRP model, however, will predict ridership with only specified qualitative factors included; the model will assume that system responsiveness (e.g., good customer service, on-time performance, etc.) is experienced by the consumer. Table 4.15 reflects both predicted ridership based on trend analysis and potential demand for these same services. Figure 4.14 graphically shows these results for ADA services.

In Phoenix, the projected ridership and potential demand for services are in similar ranges. The TCRP model does project ADA trips significantly above current service levels.

Communities in the East Valley reflect the most “gap” between current or observed ridership and the potential demand for dial-a-ride services in both the ADA and non-ADA categories. Part of this gap is being met, however, through alternative services, noted in the discussion of each dial-a-ride system. Additionally, the role of STS in mitigating some of the potential demand for services must also be noted.

Additionally, the TCRP model also provides some opportunities to model “what if” scenarios. At the request of the City of Phoenix, a separate model was run to take into account the monthly pass that is currently used. The “effective fare” was estimated to be \$1.57. When this fare is used, and all other factors held constant, the following results are produced:

ADA Demand	Proposed \$2.50 Regional Fare	Effective Fare of \$1.57 (Pass)
Projected ADA Demand, 2010	400,109	572,999

Use of a discounted monthly pass results in potential additional patronage of almost 173,000 persons in the year 2010.

The TCRP model does not fit the current and projected trend lines in the East Valley. As Table 4.15 indicates, we project EVDAR patronage at just under 230,000 annual trips in 2010. The TCRP model predicts 498,966 annual trips. It is clear that alternative transportation programs (senior services, mileage reimbursement programs, taxi subsidy programs, etc.) are having a clear impact of mitigating, in part, travel on the EVDAR complimentary paratransit program. As discussed earlier in this report, these alternative programs are substantial providing more than 50,000 annual trips.

**Table 4.15.
Comparative Analysis of Observed vs. Predicted Ridership and Potential Total Demand for ADA and Non-ADA Paratransit Services, 2006 - 2010**

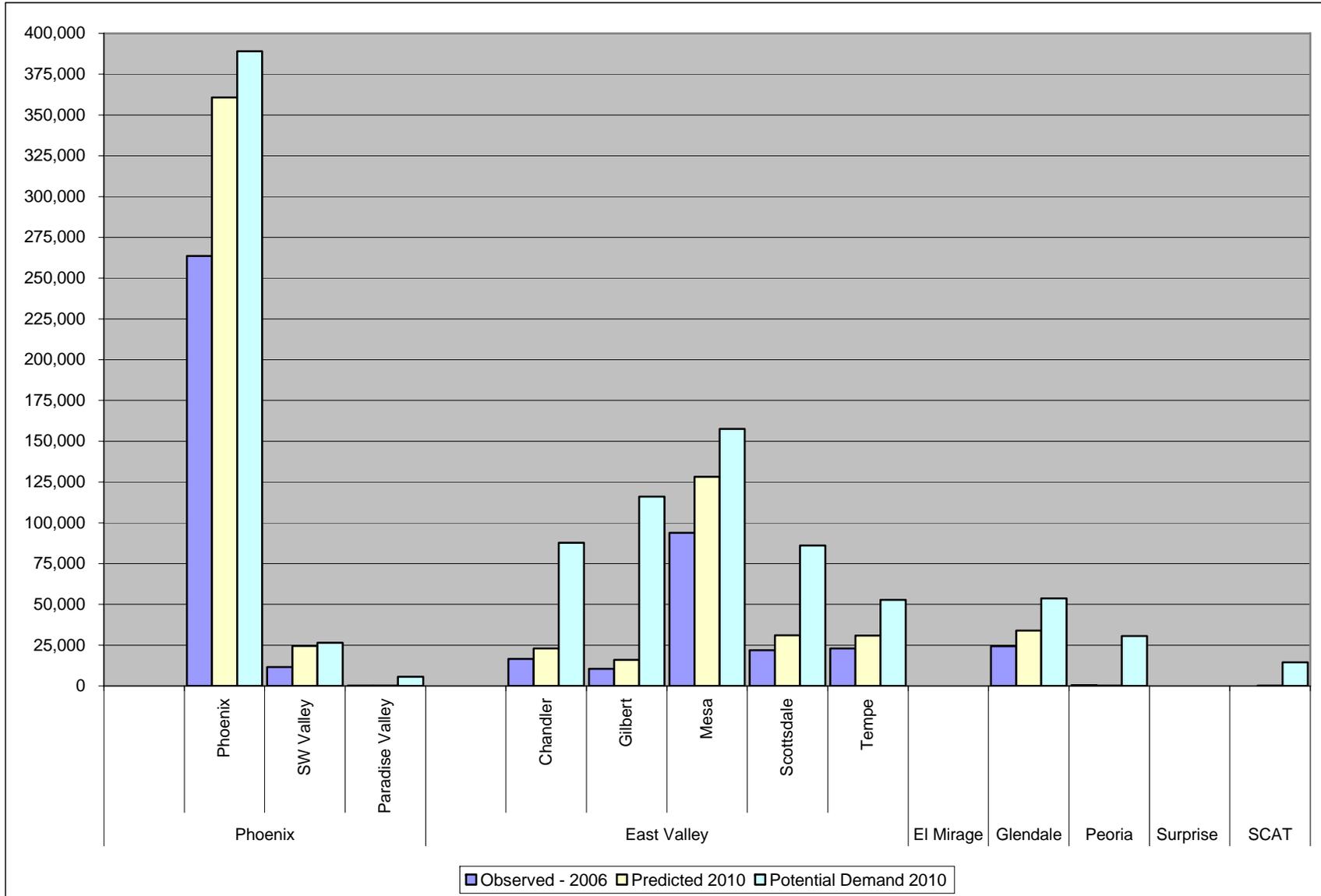
DAR City	ADA			Non-ADA		
	Observed 2006 or 2007	2010		Observed 2006 or 2007	2010	
		Predicted Ridership	Potential Demand		Predicted Ridership	Potential Demand
Phoenix ¹						
Phoenix	263,584	360,725	400,109	103,981	101,218	388,431
SW Valley	11,562	24,470	27,482	N/A	N/A	N/A
Paradise Valley	123	83	5,793	N/A	N/A	N/A
Subtotal	275,269	385,278	433,384	103,981	101,218	388,431
East Valley ¹						
Chandler	16,617	23,027	78,508	4,545	1,203	26,658
Gilbert	10,460	15,927	116,049	3,098	1,428	25,092
Mesa ²	93,785	128,270	161,754	8,120	8,120	N/A
Scottsdale	21,930	30,968	88,374	15,226	1,640	76,564
Tempe	23,040	30,943	54,281	13,064	3,365	27,362
Subtotal	165,832	229,135	498,966	44,053	15,756	155,676
El Mirage	N/A	N/A	N/A	1,466	1,768	16,805
Glendale	24,270	33,882	70,775	60,336	64,596	197,130
Peoria	469	195	31,447	42,091	50,431	37,450
Surprise ¹	N/A	N/A	N/A	17,376	26,728	61,223
SCAT	65	77	40,250	57,026	61,198	45,825
Total	465,905	648,568	1,074,823	326,329	321,695	902,539

¹ Existing ridership based on 2007 actual data.

² Mesa non-ADA set at FY 2007 observed levels.

³ "Projected Ridership" based on trend analysis. "Projected Demand" based on TCRP estimation mode for ADA potential demand and a demographic model using trip generation factors from peer dial-a-ride systems in the U.S.

Figure 4.14.
Comparative Analysis of Observed vs. Predicted Ridership and Potential Total Demand for ADA Paratransit Services, 2006 - 2010



Additionally, the role of STS in mitigating ADA demand must also be considered. STS provides a substantial level of service in the East Valley. During the week where a 100 percent sample of DAR ridership data was collected, trips from the East Valley comprised 46 percent of all STS ridership. Annualized, this constitutes about 57,000 annual trips. While not all trips would be considered ADA trips, this alternative mode clearly is mitigating some use of the complimentary paratransit system.

In the West Valley, there is a considerable gap in the TCRP model's results and observed and predicted ADA ridership. This may be explained, in part, by the City's aggressive efforts to develop complementary paratransit alternatives, the travel training program designed to move customers from paratransit to fixed route service, etc.

In Peoria, a substantial gap exists between observed and TCRP predicted ridership. This is largely explained by existing City fare policies that essentially encourages all ADA eligible individuals to ride as a general patron at a \$1.00 fare rather than as an ADA customer at a \$2.00 fare.

Non-ADA Patronage

Observation of observed ridership versus total demand for such service is problematic among the DARs that are primarily ADA services. In both Phoenix and the East Valley, non-ADA usage is reflecting flat or downward trends. Yet demand for non-ADA paratransit services is between 3.5 and 7 times the current ridership, respectively.

Additionally, the modeling process for non-ADA ridership assumes a next day reservation process. In Phoenix, non-ADA customers may obtain same day service. A review of the literature suggests that when such a qualitative enhancement is available on a dial-a-ride system (e.g., same-day versus a next day advance reservation policy), systems can anticipate a 91 percent increase in ridership.⁶

Non-ADA Demand	Next-Day Reservation Policy	Same Day Reservation Policy
Projected Non-ADA Demand, 2010	388,431	741,903

Thus, the combined impact of two public policy decisions (discounted pass plus same day reservation policy) both will have substantial impact on use and demand of paratransit services in the City.

In the East Valley, policy decisions (Mesa) and the availability of alternative transportation services, including STS, substantially reduce the gap in demand vs. actual service provision. It is clear that EVDAR will be a lessening role in the future in meeting non-ADA demand.

⁶ Lewis, David, *Making Paratransit Service Decisions When Budgets are Constrained*, Specialized Transportation Planning and Practices, 1989, Vol. 3, pp.159 – 174.

In the West Valley, it appears clear that El Mirage, as a single vehicle system, should expand its program to address increasing demand. Peoria, with rapidly increasing population and municipal service area, will have to respond with increased levels of service to ensure equitable service throughout the City's expanded jurisdiction.

Similarly, projections indicated that population growth will drive non-ADA demand in Surprise and the SCAT service area, however, the gap between current service levels and projected total demand is not as great as observed in other communities.

Long Range Demand Estimates, 2020

In order to provide a long range estimate of potential demand for ADA paratransit services, MAG population estimates and DES age cohort data were used to develop a demographic profile of *current* ADA service area boundaries.

The TCRP model was used to create these estimates. In order to provide a comparative framework, the same service related policies were used in the model's application (e.g., percentage of applications found conditionally eligible, "0" flag for trip by trip eligibility, and 30 minute pick-up window). Additionally, the \$2.50 regional fare was used in this analysis. While it is clear the ADA service zone will expand by 2020 and fare increases are likely, adoption of this approach in the modeling process provides a framework for comparison based on population growth during this period.

Table 4.16 provides the results of this analysis.

**Table 4.16.
Potential ADA Demand, 2020**

DAR City	ADA		
	Observed 2006/2007 (see Table 4.15)	Potential Demand, 2010	Potential Demand, 2020
Phoenix			
Phoenix	263,584	400,109	479,574
SW Valley	11,562	27,482	42,471
Paradise Valley	123	5,793	6,011
Subtotal	275,269	433,384	528,055
	-	-	
East Valley			
Chandler	16,617	78,508	102,423
Gilbert	10,460	116,049	155,251
Mesa	93,785	161,754	175,455
Scottsdale	21,930	88,374	100,776
Tempe	23,040	54,281	58,589
Subtotal	165,832	498,966	592,494
	-		
El Mirage	N/A	N/A	N/A
Glendale	24,270	70,775	83,913
Peoria	469	31,447	121,371
Surprise	N/A	N/A	N/A
SCAT	65	40,250	32,073
Total	465,905	1,074,823	1,357,906

Section 5. ADA Paratransit Eligibility Determination

As part of the study, a detailed review of the current process used by the RPTA to determine who is eligible for regional paratransit service was undertaken. Information was also collected about the ADA paratransit eligibility determination processes used by peer systems. A technical memorandum which presented the consulting team's observations, findings and recommendations was prepared and submitted on January 15, 2007. It was recommended that the RPTA and its member communities revise the current process used to determine ADA paratransit eligibility and that a process involving in-person interviews and functional assessments be implemented.

This section summarizes the key observations and recommendations from the January 15, 2007 technical memorandum. Section 5.1 first presents the regulatory requirements regarding ADA paratransit eligibility determination. Section 5.2 then describes the current process used by the RPTA to determine ADA paratransit eligibility. Section 5.3 presents information about processes used by peer systems and national trends in ADA paratransit eligibility determination. Section 5.4 summarizes the consulting team's observations and recommendations regarding ADA paratransit eligibility determinations. Section 5.5 then presents alternative approaches for incorporating in-person interviews and functional assessments into the current process. Estimated costs and benefits for a revised process are provided. Finally, Section 5.6 presents the recommendations of the consulting team and notes two key implementation issues.

5.1 Regulatory Requirements Regarding Paratransit Service and Eligibility

The Americans with Disabilities Act of 1990 (ADA) requires that all public entities that operate fixed route services also provide complementary paratransit services for individuals with disabilities who are unable, because of disability, to use the fixed route service. ADA complementary paratransit service must provide a level of service that is comparable to that provided by the fixed route. ADA paratransit service must be provided in the same area as non-commuter fixed route service, at the same days and hours, for all types of trips (without any prioritization), and without capacity constraints (i.e., the public transit agency must provide all trips requested by ADA eligible riders).

Beyond providing paratransit service to persons considered eligible under the ADA, there is no federal or state requirement to provide paratransit services to other individuals. Providing service to seniors, others persons with disabilities and/or the general public is a local decision.

While providing paratransit services to a broader population is a local decision, transit agencies and member communities should ensure that they are able to fully meet the requirements of the ADA before committing to serve other individuals. Because individuals who cannot use the fixed route system and are ADA paratransit eligible have a civil right to unconstrained paratransit service, they have a “first lien” on any public resources committed to paratransit programs. If ADA civil rights requirements are met, communities are then free to provide broader paratransit services.

If communities are interested in providing paratransit beyond ADA requirements (e.g., by serving seniors and other transportation-dependent persons), and if public resources are limited, it is important that the process for determining who is ADA paratransit eligible be thorough and accurate. If ADA paratransit eligibility is determined loosely, communities may then find it difficult to fully meet the demand for ADA paratransit service and to have resources available to provide broader service.

ADA Paratransit Eligibility

Section 37.123 of the USDOT’s ADA regulations requires that all transit entities that provide complementary paratransit service also have a process for determining who is “ADA paratransit eligible.” Specific criteria for what makes a person eligible for paratransit are included in the regulation. Simply stated, these criteria indicate that persons with disabilities are ADA paratransit eligible if, because of their disability, they:

- ◆ Are prevented from traveling to or from fixed route stops or stations (sometimes referred to as Category 3 eligibility);
- ◆ Are unable to use a bus route or rail station for a particular trip because the route or station is not yet accessible (sometimes referred to as Category 2 eligibility); or
- ◆ Are unable to “navigate the system,” meaning they are not able to be oriented to place or time, to problem-solve or travel safely in the community, or lack other skills needed to use the transit system (sometimes referred to as Category 1 eligibility).

Eligibility for complementary paratransit service is directly related to the inability of a person with a disability to use the existing non-commuter fixed route service. It is a functional determination. It is not based on age, type of disability, or the use of a particular type of mobility aid. Functional abilities can vary from person to person – one person who uses a wheelchair may not be able to use the fixed route service while another can; one person who is 70 years old may not be able to travel by bus, while others of this age can. The eligibility determination process needs to consider the specific travel abilities of each applicant. It is not enough to just obtain information about disability, age and mobility aids used.

As the regulatory criteria suggest, riders can be eligible for some trips (e.g., where the bus route they need to use for a trip is not accessible), and be ineligible for other trips (where routes are accessible, and they can get to and from stops and navigate the system). While eligibility is conferred on individuals, it is conferred based on the fact that there are certain ***trips*** that the person cannot make on the fixed route system. For

some individuals, disabilities may prohibit them from ever using the fixed route service. For others, however, they may be able to use the fixed route service under certain conditions. ADA paratransit eligibility can, therefore, be considered as having two elements. First, an **individual** is considered ADA paratransit eligible if there are **any circumstances** under which the fixed route system cannot be used. Second, the extent of eligibility conferred on an individual depends on the conditions and circumstances under which they are not able to travel on the fixed route service. Individuals who can never use the fixed route service are **unconditionally eligible**. Persons who can use fixed route service in certain circumstances are **conditionally eligible** and the limitations on eligibility should be determined.

Because the regulations establish this concept of trip-by-trip eligibility, it is important that the eligibility determination process be detailed enough to identify not only eligible individuals, but also to determine the conditions under which their specific trip requests would be eligible.

Requirement to Strictly Limit ADA Paratransit Eligibility

Given that ADA paratransit eligibility is a civil right, conferring eligibility should be done with careful consideration. Section 37.125(a) of the USDOT's ADA regulations requires that:

“The process shall strictly limit ADA paratransit eligibility to individuals specified in §37.123 of this part.” (Note that “§37.123 of this part refers to the section that contains the three categories of eligibility).

In explaining this requirement, further guidance is provided in Appendix D of the regulations as follows:

“The goal of the process is to ensure that only people who meet the regulatory criteria, strictly applied, are regarded as ADA paratransit eligible. The Department recognizes that transit entities may wish to provide service to other persons, which is not prohibited by this rule. However, the eligibility process should clearly distinguish those persons who are ADA eligible from those who are provided service on other grounds.”

This provision to “strictly limit” eligibility is in the regulations for several reasons. First, as a civil rights law, the main goals of the ADA are integration and independence. Making fixed route services accessible and usable and allowing persons with disabilities to travel with everyone else – not on a separate, “special” service is a main goal of the ADA. Second, it was recognized that fully complying with ADA paratransit requirements can be costly. Meeting all of the trip requests of eligible riders, without trip denials and for all types of trips, will require significant resources. In order to have the resources to be able to provide full service to those who truly need it, it is important to only confer eligibility on persons who cannot use fixed route service and only for trips they cannot make on the bus. Finally, ADA paratransit eligibility is “portable.” A person who is

determined eligible in one city can travel to any other city in America and receive 21 days of service as a visitor. It therefore is important that all transit agencies be thorough in granting ADA paratransit eligibility.

If the cost of providing fully compliant ADA paratransit service is a local concern, it is important to carefully identify those individuals who are eligible, determine when these persons can use the fixed route system, and when paratransit is necessary. Unless eligibility and appropriate limitations/conditions are determined at the outset, it may not be possible to manage the demand for this service in the future.

As the regulations suggest, “strictly limiting” ADA paratransit eligibility does not mean that others cannot be provided paratransit services. Others can be served, but they should be served under a different type of eligibility. Letters, ID cards and other documentation saying a person is “ADA Paratransit Eligible” should only be issued to persons who cannot use the fixed route service. Another type of eligibility (e.g., certification for the reduced fare ID) should be granted to individuals who do not meet the ADA regulatory criteria.

5.2 Current Paratransit Eligibility Determinations Processes and Outcomes

Eligibility for paratransit services throughout the RPTA region is determined centrally by staff at the RPTA. The RPTA has separate application forms and processes for ADA paratransit eligibility and for fixed route reduced fare eligibility. Some member communities also register seniors and general public riders outside of the central RPTA process. However, all determinations of ADA paratransit eligibility are made by the RPTA. Following is a description of current eligibility determination processes. Determination outcomes are then presented. Current staffing and costs for the centralized eligibility determination process are then presented.

RPTA Eligibility Determination Process for Seniors and Other Persons with Disabilities

As noted above, persons who are determined eligible for reduced fares on the fixed route system are also eligible for paratransit services in many communities. Fixed route reduced fare ID cards are issued to seniors (65 years of age or older), persons with certain types of disabilities, and youths (ages 6-18). Seniors and persons with disabilities who qualify for reduced fare ID cards are eligible for paratransit services in certain communities. Youths who qualify for reduced fixed route fares are not considered to be eligible for paratransit services (except in communities who provide paratransit to the general public).

Eligibility for reduced fixed route fares is determined by the RPTA using a one-page “Application for Reduced Fare Authorization Card.” The application asks for general

information (name, address, phone number and date of birth) and asks application on what basis they are applying (i.e., as a senior, youth, or person with a disability). Seniors and youths only need to provide this general information. They then must provide some form of identification at the time that the reduced fare photo ID is issued.

Seniors who have a Medicare card do not need to apply to receive the reduced fare benefit or paratransit services. They simply need to show their Medicare card when the board the bus or van.

Persons applying for a reduced fare card based on disability complete the general information portion of the application. They also then must have the remainder of the form completed by a health or rehabilitation professional. The health or rehabilitation professional must provide information on the type of disability, mobility aids used, and then must sign a verification statement and provide a license number.

The RPTA manages six sites at which applications for reduced fares can be submitted and photo IDs issued. All applicants must appear in-person at one of these sites. They can bring completed applications and other required documentation with them or can complete the application form on-site. RPTA staff also have portable photo ID equipment and will go to agency and community sites (e.g., senior centers, human service agency sites) on request. There is a \$2.50 charge for the photo ID card. If needed, DAR transportation is provided free of charge to the sites.

Reduced Fare Determination Outcomes

Table 5.1 below shows the number of persons to whom reduced fare ID cards have been issued between 2000 and 2005. It is our understanding that reduced fare cards issued since 2000 represents the total number of valid cards issued.

As shown, a total of 23,721 reduced fare ID cards had been issued through 2005. About 3,847 cards per year were issued in 2000-2002. A total of 5,138 cards were issued in 2003. Since 2003, the number of reduced fare ID cards issued each year has declined – to 3,725 in 2004 and to 3,316 in 2005.

Other Determination of Eligibility for Seniors and General Public Riders

Several member communities also register seniors and general public riders for paratransit services separate from the central RPTA eligibility process. For example, in Phoenix, seniors who are not Valley Metro reduced fare ID cardholders can call the DAR reservations number and ask to be registered for paratransit service. The reservationists simply enter them into the master rider file. Phoenix DAR staff indicated that drivers may subsequently check the riders' identification or other documents which are accepted as proof of eligibility for DAR service. In Glendale, because the general public is served by the DAR program, individuals who are not registered with the RPTA also can call and will immediately be added into the master rider file.

Table 5.1. Reduced Fare ID Cards Issued by Jurisdiction, 2000-2005

Jurisdiction	2000-2002	2003	2004	2005	Totals
Apache Junction	3	5	5	3	16
Avondale	27	10	13	7	57
Buckeye	2	2	4	1	9
Chandler	163	23	27	21	234
Youngtown	1	2	2	1	6
El Mirage	20	5	5	2	32
Gilbert	19	42	21	13	95
Glendale	783	192	157	224	1,356
Goodyear	12	2	6	6	26
Guadalupe	4	3	4	6	17
Litchfield Park	1	4	2	7	14
Mesa	1,148	561	207	209	2,125
Paradise Valley	6	2	3	0	11
Peoria	76	67	49	43	235
Phoenix ¹	7,636	3,046	1,743	2,166	14,591
Scottsdale	724	923	1,231	316	3,194
Sun City	16	9	7	11	43
Surprise	7	4	4	2	17
Tempe	819	201	193	207	1,420
Other ²	75	35	42	71	223
TOTALS	11,542	5,138	3,725	3,316	23,721

Reflects cards issued based upon residency within specific political boundaries rather than postal addresses.

1 Includes Cave Creek and Tolleson

2 Other areas in Maricopa County and adjacent areas of Pinal County

Because this preliminary report was prepared prior to the completion of individual DAR assessments, the exact process used in each DAR system for determining eligibility outside of the central RPTA process has not yet been determined. This information will be collected as individual assessments are completed and will be added to the final report.

ADA Paratransit Eligibility Determination Process

All ADA paratransit eligibility determinations are made centrally by the RPTA. The RPTA currently uses a **self-certification and professional verification** process to determine ADA paratransit eligibility. Applicants complete a six-page form that is returned to the RPTA ADA Paratransit Certification Office. The form has five sections which request: general information; information about the applicant's disability and ability to use city bus service; other functional abilities; information about any mobility aids that the applicant uses; frequent trip information; and the contact information of two or more professionals who can provide professional verification of disability and functional ability. Professionals that can be identified by the applicant include, but are

not limited to, a family physician, physical or occupational therapist, independent living specialist, rehabilitation specialist, social worker, dialysis social worker, ophthalmologist, registered nurse, or psychologist. Individuals who request application materials also receive a one-page cover letter with application instructions, a brochure explaining ADA eligibility and services, and a postage paid return envelope.

The application instructions indicate that individuals can call the certification office if they have any questions about ADA paratransit eligibility or the application. Individuals do frequently call for assistance as they are completing the form. Staff will also follow-up with applicants if forms are received and some information has been omitted or is unclear. With this personal assistance, the vast majority of applications are sufficiently complete when received or after follow-up, to allow the determination process to begin. In FY05-06, about 15% of all applications received had to be returned to applicants as "incomplete," due mainly to the lack of sufficient professional response or no response at all by a professional.

When applications are received, RPTA certification staff sends a one-page form to all professionals identified by the applicant. Some form of professional verification is obtained for every applicant before a final determination of eligibility is made. The "Professional Verification" form requests information about the nature and extent of the applicant's disability or disabilities, information about functional abilities similar to that requested in the form completed by the applicant, and information about the need for and use of mobility aids (including personal care attendants and service animals). Five different professional verification forms have been developed. One form is designed to obtain information about general functional abilities. The other four are tailored to get additional information about specific types of disabilities and health conditions, including: the degree of visual disabilities; the degree of cognitive disabilities; the severity of seizure disorders; and information about applicants receiving dialysis treatments. RPTA staff consider the disability stated by the applicant in the application form and the types of professionals identified. A decision is made about the type of information needed and the professional or professionals who are most likely to be able to provide accurate and complete information. The appropriate form or forms are then sent to the professional(s). There is also an "Eligibility Information Sheet" which is sent to the professional along with the one-page verification form.

If verification information has not been received after about one week, a reminder notice ("second and final request") is faxed to the professional(s). Follow up phone calls are made to the professional(s) within the next week if sufficient response has not been received. If information is still not received within 19 days of the receipt of the initial application, the application is returned to the applicant and a letter is sent to applicants informing them that the professional has not responded and that a decision on their eligibility cannot be completed. A letter of temporary eligibility for 30 days may be sent in cases where there is a strong possibility the professional will respond. Follow-up calls are also often made to the professionals at that time informing them that temporary eligibility has been granted to the applicant, but that a failure to provide the information requested could impact the applicant's continued eligibility. Staff reported that these

follow-up letters/contacts with applicants and professionals are usually sufficient to obtain responses from professionals before the 30 day temporary eligibility expires. It is frequently necessary to follow-up with professionals to have verification forms returned.

Staff indicated that final determinations are typically made within two business days of the receipt of completed professional verification forms. Overall, about 95% of all determinations are made within 21 days of the receipt of completed application forms from applicants. The remaining 5% of determinations are made 22-30 days from the receipt of completed application forms. These 5% of applicants are granted temporary eligibility until the process is completed.

In addition to requesting written information from named professionals, RPTA certification staff will also contact professionals as needed to discuss the information they have provided and/or to ask some additional questions specific to the applicant's disability and functional abilities.

Once complete information has been received from both the applicant and the professional(s) and any desired telephone follow-up has been made, an eligibility determination is made. RPTA staff either determine applicants to be ineligible (if they are able to travel throughout the area under all circumstances), or determine that applicants have one of the following types of eligibility:

- ◆ **Temporary** eligibility (if applicants have a disability for only a short, defined period - usually 1 year or less);
- ◆ **Conditional** eligibility (if it is determined that applicants are able to use fixed route service under certain circumstances);
- ◆ **Unconditional** eligibility (if it is determined that applicants require paratransit service for all of their trips).

Applicants who are determined ineligible or conditionally eligible have the opportunity to appeal the decision of the certification office. Appeals are heard by a five-person panel. The panel consists of three consumer representatives, one disability agency representative, and one RPTA representative. The RPTA representative is not involved in the original determination (which provides the required "separation of authority" between this person and the certification office staff).

Persons determined ADA Paratransit eligible are granted eligibility for three years. Those determined temporarily eligible are granted eligibility commensurate with the expected duration of their condition as indicated in the application. Some applicants are granted temporary eligibility if they are undergoing treatment and their disability can be expected to change. At the end of the period of eligibility granted, all applicants must reapply using the same process.

ADA Paratransit Determination Outcomes

As of July 1, 2006 (the end of FY2005/2006), RPTA records showed that a total of 9,995 individuals had been granted some level of ADA paratransit eligibility. In FY 2005/2006, an average of 275 applications were processed by the RPTA certification office each month. About half of all applications were from new applicants. The others were from current riders seeking recertification. Records for FY2005/2006 showed that 98.2% of all applicants whose applications were complete were granted some level of ADA paratransit eligibility. The remaining 1.8% of applicants were determined able to use the fixed route bus service and were denied ADA paratransit eligibility. Only about 1-2 applicants per year question the eligibility determination and request an appeal. In recent years, about 70% of the appeals have upheld the initial determination. Changes have been made to the initial determination about 30% of the time.

Table 5.2 below shows the number of ADA eligible riders in each community. It also shows the growth in the number of ADA riders in the past three fiscal years. Finally, it shows the number of ADA riders per capita in each community as of July 1, 2006.

Table 5.2. ADA Paratransit Eligibility Riders by Community, FY03/04 to FY05/06

Jurisdiction	ADA Riders as of 7/1/04	ADA Riders as of 7/1/05	ADA Riders as of 7/1/06	2005 Est. Total Population (1)	ADA Riders per Capita as of 7/1/06
Chandler	215	301	479	234,400	0.0020
Gilbert	101	144	209	189,900	0.0011
Glendale	682	771	817	239,400	0.0034
Mesa	984	1279	1939	463,200	0.0042
Peoria	65	75	77	141,000	0.0005
Phoenix	4,233	4,762	5,227	1,436,900	0.0036
Scottsdale	495	562	669	228,700	0.0029
Tempe	296	343	409	160,300	0.0026
Other	114	133	169	NA	NA
TOTALS	7,185	8,370	9,995	3,093,800	0.0032

(1) Estimates developed by the Maricopa Association of Governments (MAG).

As shown, the number of persons determined ADA paratransit eligible has increased significantly each year. The 8,370 ADA riders on July 1, 2005 represented a 13.1% increase over the number of ADA riders on July 1, 2004. And between July 1, 2005 and July 1, 2006, the number of registered riders increased by another 19% to 9,995. The most significant increases in persons determined ADA paratransit eligible in FY2005/2006 were in Mesa (52%), Chandler (59%). The increase in ADA paratransit eligibility applications in Mesa is likely due to the recent decision in Mesa to discontinue serving seniors and reduced fare ID cardholders (and anticipation of a possible change prior to July 2006). Some of the recent increase in registered riders in the past year also could be due to the passage of Proposition 400 and the decision to use this new funding to reimburse member communities for the ADA paratransit trips that they

provide. Some member communities could be encouraging DAR riders to apply for ADA paratransit eligibility.

It is interesting to note the relative number of residents in each community that have been determined ADA paratransit eligible. This comparison is shown in Table 5.2 above as the “ADA Riders per Capita as of 7/1/06.” According to RPTA certification office staff, the number of requests for certification appear to be related to the level and quality of non-ADA paratransit (sometimes called “demand service”) provided in each of the member cities. Where few capacity constraints exist for non-ADA service, fewer requests for ADA paratransit certification have been received. Riders in these areas apparently are satisfied with the DAR service they receive as a non-ADA rider and seem to see little benefit in applying for ADA paratransit. Because ADA service also is more expensive in many communities, there is no incentive to apply for ADA paratransit eligibility unless there are capacity constraints or service quality issues with the non-ADA service. The relatively high per capita ratio in Phoenix may also be a result of the very low fare that residents who are ADA paratransit eligibility pay in that community. ADA eligible riders can purchase an unlimited ride monthly pass for \$34 per month. For frequent riders, this makes the effective fare about 80 cents per trip.

Table 5.3 below shows the number and percentage of current ADA riders with unconditional, conditional and temporary eligibility. Forty-seven percent (47%) of all ADA riders have unconditional eligibility. Forty-four percent (44%) have been granted conditional eligibility. And 9% have been granted temporary eligibility.

Table 5.3. ADA Riders by Type of Eligibility, as of July 1, 2006

Type of Eligibility Granted	Number of ADA Riders (July 1, 2006)	% of All ADA Riders (July 1, 2006)
Unconditional Eligibility	4,698	47%
Conditional Eligibility	4,398	44%
Temporary Eligibility	899	9%
TOTAL	9,995	100%

While conditional eligibility has been conferred to about 44% of all applicants, trip-by-trip determinations of eligibility are currently not made. All of the trips requests by these conditionally eligible riders are currently accepted and served by the area’s DAR providers.

Review of Recent Determinations

As part of the review of the current ADA paratransit eligibility determination process, members of the TranSystems team examined 51 recent determinations. This included 33 determinations where applicants were found to be conditionally eligible, 14 determinations where applicants were found to be unconditionally eligible, and 4 determinations where temporary eligibility was conferred. The information contained in each file, including the completed application and the verification form or forms

completed by professionals were examined. The determinations made by RPTA staff were then considered.

A significant observation made by the review team was that the information contained in the 51 sample files did not appear detailed enough to accurately set conditions of eligibility. For example, one question in the application asked applicants "How far can you walk (or travel if you use a mobility aid)?" Possible answers on the form were: less than one block; 1 block; 2 blocks; 3 blocks; ¼ mile; ½ mile; ¾ mile. Almost all respondents indicated either less than one block or one block. One block was even indicated by several respondents who did not indicate physical disabilities but other types of disabilities that should not have had a significant impact on endurance and travel distance. These responses likely were an indication of how far applicants were willing to walk to get to/from bus stops rather than their true maximum travel distances. The responses also likely were influenced by applicants' bias against wanting to use fixed route service.

Applicants and verifying professionals also often indicated an inability to "cross a busy street." It was often unclear, though, whether this inability was due to cognitive issues or slow walking speeds. If the latter, it is possible that applicants may be able to cross streets with controlled (signalized) street crossings.

These issues are not unusual for eligibility determination processes that rely on paper applications. Without an opportunity to interview and/or assess applicants, it is not possible to get the level of detail needed to really understand travel limitations or to eliminate biases in responses against using fixed route bus services.

Even though RPTA certification office staff have only limited information from paper applications, the determinations being made appear to be quite accurate. For the 51 files reviewed, there were only two determinations where it appeared that applicants were granted eligibility when they probably could use the fixed route system. In one case, the applicant expressed a fear of "traveling to and from the bus stop late at night," but did not indicate a disability or functional limitations that would suggest that she could not use the bus. The professional verification form also did not indicate any limitations in functional ability that would prevent use of fixed route bus service. In the second case, the applicant indicated that there was no fixed route service in the area where they lived but did not indicate functional limitations to use buses if they did operate in the area. Based on the sample of 51 files reviewed, this suggests that perhaps 4% of current riders probably could use fixed route bus service. Again, given the limitations of paper applications, this is a fairly small percentage.

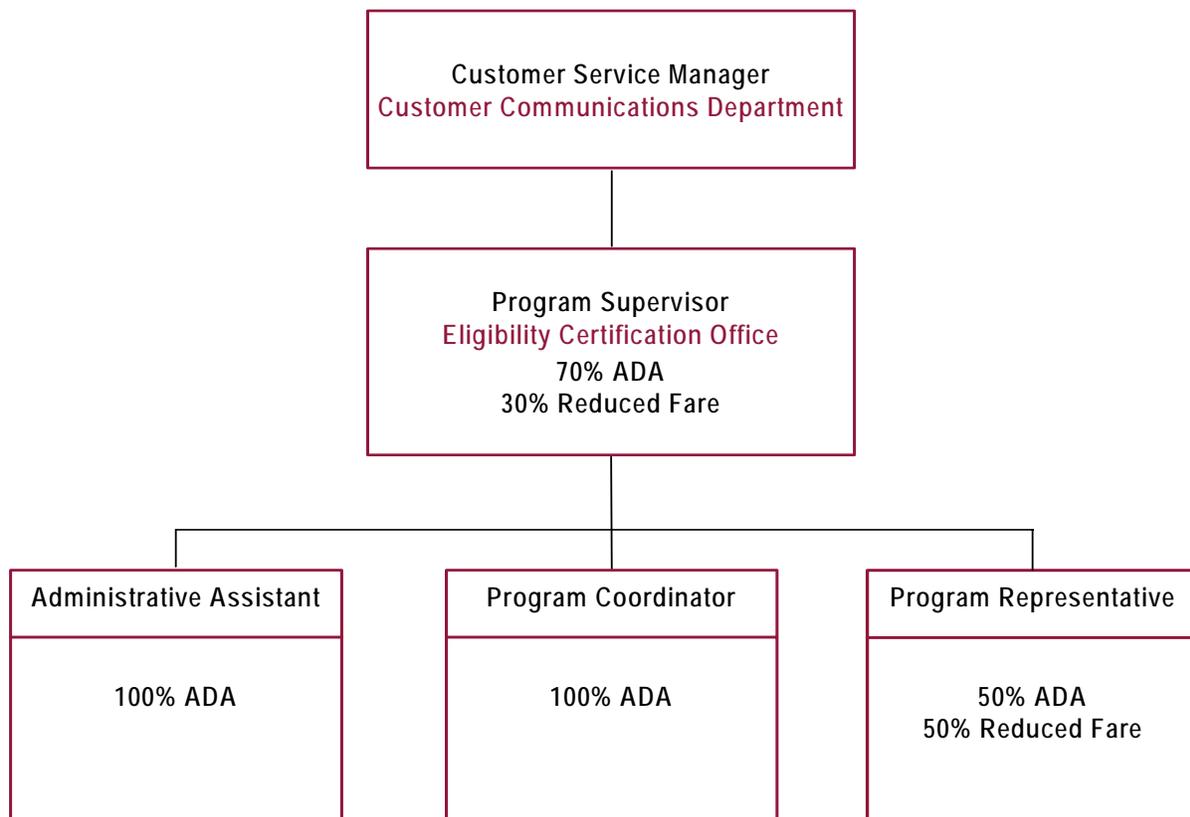
The review did, however, raise questions about decisions where applicants were granted conditional eligibility. While 21 of the 33 determinations of conditional eligibility appeared reasonable, the other 12 determinations did not seem appropriate. In these cases, there were significant limitations in functional abilities cited by verifying professionals that should have resulted in the granting of unconditional rather than conditional eligibility. Based on the 51 files examined, it appears that about a third of all

applicants given conditional eligibility probably are really unconditionally eligible. The review also indicated that many of the conditions of eligibility that are set are not detailed or specific enough to allow for trip-by-trip eligibility determinations. For example, almost all distance conditions provided eligibility if bus stops were more than one block away. This condition was used because, as noted above, almost all applicants indicated that they were only able to travel one block. It is likely that many applicants could actually travel further, but because there was no independent assessment of true walking endurance, there was no way to set a condition that was more appropriate. Similarly, many applications did not appear to identify all of the circumstances that might prevent independent travel. The applications cited one or two major issues but did not include other limitations. Because the current process relies solely on information provided by applicants (rather than on an assessment of all relevant functional skills), there was no way to thoroughly determine all appropriate conditions of eligibility.

Eligibility Determination Staffing and Costs

The Eligibility Certification Office is part of the Customer Communications Department at RPTA. Figure 5.1 below shows the current staffing within the office. For each position, it also shows the estimated percentage of time spent on various eligibility and ID programs.

Figure 5.1. Eligibility Certification Office Staffing



A Program Supervisor who reports to the Customer Service Manager manages the Eligibility Certification Office. The Supervisor spends about 70% of his time on ADA paratransit eligibility determinations and 30% on reduced fare ID determinations. Two staff members in the office work full time on ADA paratransit eligibility determinations. A third person spends half of her time on ADA determinations and the other half of her time on the reduced fare ID program and on issuing RPTA employee IDs.

In addition to reviewing ADA paratransit applications, sending and reviewing information from verifying professionals and making final ADA paratransit eligibility determinations, the staff who work on the ADA program also are involved in the process for issuing ADA paratransit monthly passes. Requests for passes are received by the office. A check of the person's eligibility is made and the passes are issued. A record also is kept of monthly passes issued to each person to ensure that multiple passes are not requested and issued.

Table 5.4 below summarizes the costs for the Eligibility Certification Office and allocates costs by each type of activity. The allocation of salaries for staff in the office are based on the estimates of time spent on each program indicated in Figure 5.1 above.

Table 5.4. RPTA Eligibility Certification Office Costs by Program

Cost Item	ADA Certification	Reduced Fare ID and Employee IDs	TOTALS
Salaries	\$137,112	\$36,030	\$173,142
Fringe Benefits	52,941	14,073	67,014
Overhead and Materials	84,223	22,389	106,612
TOTALS	\$274,276	\$72,492	\$346,768

As shown, the total cost for all programs is currently \$346,768 per year. ADA paratransit eligibility certification costs \$274,276 per year. The reduced fare ID and employee ID programs cost \$72,492 per year.

5.3 National Trends and Comparisons to Other Peer Systems

In the early 1990s, just after passage of the ADA, almost all public transit agencies that provided ADA complementary paratransit service used paper applications with professional verification to determine rider eligibility. The industry was used to using paper applications to determine reduced fare and paratransit eligibility and continued this practice for ADA paratransit.

Transit agencies soon realized, though, that paper applications did not provide the level of detail needed to determine ADA paratransit eligibility. Agencies also reported that professionals who were asked to provide verifying information rarely indicated that

applicants could use buses and often appeared to be prescribing services rather than accurately describing functional abilities.

In the mid-1990s, transit agencies began to consider adding in-person interviews and functional assessments to the eligibility determination process. It was noted that interviews and assessments provided agencies with the opportunity to obtain more detailed information from applicants and to use consistent functional assessments to more accurately determine travel abilities and limitations.

In 2003, Project ACTION, a program of the National Easter Seals Society, developed guidance on determining ADA paratransit eligibility for the industry.¹ This guidance recommended a process that had all applicants participate in an in-person interview with the option to conduct a functional assessment as needed. Detailed instructions for conducting both physical functional assessments and cognitive assessments were included in this guidance.

Most large transit systems now incorporate in-person interviews and functional assessments in their eligibility determination processes. Table 5.5 on the following pages shows the processes used by several large systems considered to be peers of Valley Metro. As shown, only two of the eleven systems surveyed (Portland and San Diego) still rely largely on paper applications completed by applicants and verifying professionals. And even Portland and San Diego ask a small percentage of applicants (2% and 5% respectively) to participate in in-person assessments. The remaining nine systems make extensive use of in-person interviews and assessments. Three systems (Seattle, San Antonio, and Tucson) ask some applicants to appear for in-person interviews and assessments. The remaining six systems ask all applicants to participate in interviews and/or assessments. Sacramento interviews all applicants. Dallas, Denver, Las Vegas, Orange County, and Salt Lake City interview all applicants and then conduct functional assessments if needed (the recommended Project ACTION process).

National research has documented the outcomes of in-person eligibility processes versus paper applications.² A synthesis study of various eligibility determination practices documented that systems that rely on paper applications find 95-99% of all applicants eligible and often do not differentiate between unconditional and conditional eligibility. Processes that use in-person interviews and functional assessments, on the other hand, typically find 50-70% of all applicants unconditionally eligible, 20-40% of applicants conditionally eligible, 10-15% of applicants eligible on a temporary basis, and 5-15% of applicants not eligible.

¹ *Determining ADA Paratransit Eligibility: An Approach, Guidance and Training Materials*, Easter Seals Project ACTION, Washington, DC, 2003.

² Weiner, R., *ADA Paratransit Eligibility Certification Practices, Synthesis of Transit Practices 30*, Transportation Cooperative Research Project, National Academy Press, Washington, DC, 1998.

Table 5.5. ADA Paratransit Eligibility Determination Processes Used by Large Transit Agencies Considered Valley Metro Peers

Transit Agency/City	ADA Paratransit Eligibility Process
Dallas Area Rapid Transit, Dallas, TX	All applicants participate in an in-person interview and in functional assessments as needed. DART conducts the interviews/assessments in-house and has hired occupational therapists and O&M Specialists for this purpose.
Regional Transit District, Denver, CO	All applicants participate in an in-person interview and in assessments as needed. Interview and assessments conducted by the local chapter of the National Easter Seals Society.
King County Metro Transit, Seattle, WA	In-person interviews and functional assessments conducted by the County Medical Center on an as-needed basis. About 47% of all new applicants are referred by Metro for assessments.
Regional Transportation Commission of Southern Nevada, Las Vegas, NV	All applicants participate in an in-person interview and assessment. Interviews and assessments conducted by a regional Center for Independent Living (CIL).
Orange County Transportation Authority, Orange County, CA	All applicants participate in an in-person interview and assessment. Interviews and assessments conducted by a local rehabilitation agency under contract to OCTA.
Tri-Met, Portland, OR	Largely paper applications completed by applicants and verifying professionals. In-person assessments are conducted for only 2% of all applicants
Regional Transit District, Sacramento, CA	All applicants participate in an in-person interview conducted by RTD staff.
Metropolitan Transit System, San Diego, CA	In-person functional assessments conducted on an as needed basis. Only 5% of applicants now participate in an assessment. MTS is exploring greater use of in-person interviews and assessments.
VIA, San Antonio, TX	In-person interviews and assessments conducted on an as-needed basis. About half of all applicants are asked to participate in assessments. Assessments conducted by a physical therapist hired by VIA.
Utah Transit Authority, Salt Lake City, UT	All applicants participate in an in-person interview and functional assessment
Sun Van, Tucson, AZ	About 90% of applicants asked to participate in an interview or functional assessment. Assessments are contracted to three different rehabilitation and service agencies.

Determination outcome information was collected from several of the above peer systems.³ Table 5.6 on the following pages shows the total number of persons determined ADA paratransit eligible in each peer city and the percentage of eligible persons per capita. It then shows the percentage of applicants interviewed or assessed in person. Finally, it shows determination outcomes - the percentage of applicants determined fully eligible, conditionally eligible and not eligible. Information for the RPTA is shown at the bottom of the Table for comparison to the peers.

One of the more interesting comparisons between outcomes in the RPTA and in peer systems is the percentage of eligible ADA riders per capita. For the peer systems, the percentage of ADA riders per capita ranges from 0.25% of the total population (in Salt Lake City) to 1.54% of the total population (in Seattle, WA). The average percentage of the population that is ADA eligible for the peer systems is 0.80%. In the RPTA area, 0.40% of the total population has applied for and been determined ADA paratransit eligible. Even though the process used by the RPTA finds 98% of applicants eligible, the percentage of the population that has applied for ADA paratransit eligibility is only about half of the average for the peer cities.

³ Collection of peer system information was still underway at the time this preliminary report was prepared.

Table 5.6. Population, Rider, and Eligibility Determination Outcome Information for Selected Peer Transit Systems

Transit System	Population and Riders			Eligibility Process Information and Outcomes (1)			
	Service Area Population	Total ADA Riders	% ADA Riders per Capita	% Applicants Interviewed/ Assessed	% Unconditionally Eligible	% Conditionally Eligible	% Not Eligible
Dallas Area Rapid Transit, Dallas, TX	2,224,300	9,000	0.40%	100%	23%	66%	11%
Regional Transit District, Denver, CO	2,545,000	30,000	1.18%	100%	83%	4%	4%
King County Metro Transit, Seattle, WA	1,788,300	27,467	1.54%	47%	80%	18%	2%
RTC of Southern Nevada, Las Vegas, NV	1,686,827	7,715	0.46%	100%	NA	NA	NA
Orange County Transportation Authority, Orange County, CA	2,751,791	26,000	0.94%	100%	NA	NA	NA
Tri-Met, Portland, OR	1,253,502	16,000	1.28%	2%	78%	13%	9%
Regional Transit District, Sacramento, CA	1,035,009	NA	NA		NA	NA	NA
Metropolitan Transit System, San Diego, CA	2,813,833	13,000	0.46%	5%	98%	NA	2%
VIA, San Antonio, TX	1,471,448	11,955	0.81%	23%	72%	18%	10%
Utah Transit Authority, Salt Lake City, UT	1,744,417	4,325	0.25%	100%	NA	NA	NA
Sun Van, Tucson, AZ	720,425	7,140	1.0%	90%	NA	NA	NA
Peer System Averages (excl. Sacramento)	1,899,984	15,260	0.80%	NA	NA	NA	NA
Valley Metro/RPTA, Phoenix, AZ	2,400,000	9,995	0.40%	0%	47%	44%	2%

(1) Note that outcomes sometimes do not add to 100% due to the way that temporary eligibility is counted or other differences in how outcomes are measured.

5.4 Observations and Recommendations

Based on the review of the current process and outcomes, as well as on information about national trends and peer system processes, the following observations and recommendations are made:

Summary of Observations

- ◆ The current RPTA process for determining ADA paratransit eligibility relies on a paper application. About 15% of applications are incomplete due to insufficient professional response. About 98% of the remaining applicants are found to be eligible, and about 2% of all applicants are found to be ineligible and able to use fixed route bus services. Of those found eligible, 47% are granted unconditional eligibility, 44% are granted conditional eligibility, and 9% are given temporary eligibility.
- ◆ Even though 98% of applicants who submit complete applications are granted ADA paratransit eligibility, a review of a random sample of applications indicated that most current riders are eligible. Based on a review of 51 randomly selected files, it is estimated that perhaps only 4% of current riders who have been conferred ADA eligibility could probably use the fixed route system. Given the limitations of paper applications, this is a fairly small error rate.
- ◆ The small error rate in determinations appears to be the result of three factors. First, the RPTA certification office staff has developed excellent forms for gaining verification information from professionals. Second, the staff appear to be knowledgeable of disabilities and related functional abilities and appears to make the most of the limited information available from the paper applications. Third, most individuals who apply for ADA paratransit eligibility in the RPTA area, and whose applications are complete, appear to be clearly eligible.
- ◆ Most peer systems studied have moved to in-person interview and functional assessment processes. All eleven peer systems studied use in-person interviews/assessments to some degree, and only two peers seem to still rely mainly on paper applications. The majority of peers require all applicants to appear in person for an interview and/or functional assessment.
- ◆ Even though the RPTA still uses a paper application process, the number of persons who have applied for and been determined ADA paratransit eligible is low compared to peer systems. A total of 9,995 persons had been granted ADA paratransit eligibility in the RPTA area as of July 1, 2006. Given the population of the area, this translates into 0.40% of the total population being ADA paratransit eligible. By comparison, the average percentage of persons who were ADA paratransit eligible in the peer systems studied was 0.80% (twice as high as the RPTA percentage). Again, it appears that for the most part only individuals who have significant

functional travel limitations have applied for ADA paratransit eligibility in the RPTA area.

- ◆ The relatively low number and percentage of ADA eligible riders in the RPTA area appears to be due to the fact that many of the DAR systems in the area have broad eligibility policies and lower fares for non-ADA riders. Many riders who are probably ADA paratransit eligible receive services under other types of eligibility, at a lower fare, and do not find it necessary to apply for ADA paratransit eligibility. This seems to be particularly true in areas where the quality of DAR service for non-ADA riders is good and where few capacity constraints exist.
- ◆ Individuals appear more likely to apply for ADA paratransit eligibility in RPTA member communities where the ADA fare is low relative to non-ADA fares, or where non-ADA service is less reliable and more constrained. This seems to be particularly true in the City of Phoenix, where the percentage of ADA riders per capita is above the region average. This appears due to the constraints on service quality for non-ADA riders. It also appears to be related to the fact that Phoenix offers an unlimited ride monthly pass for ADA riders that makes the effective fare for ADA riders less than that paid by non-ADA riders.
- ◆ While the number and percentage of ADA eligible riders is relatively low in the RPTA area, the number of individuals applying for ADA paratransit eligibility has increased significantly in the past two years. The number of persons applying for and being granted ADA eligibility has increased 34% in the past two years.
- ◆ Decisions by the RPTA and member communities appear to be creating additional demand for ADA paratransit eligibility. As the availability of non-ADA service becomes more limited (or the quality of this service is decreased), more individuals appear to be seeking ADA paratransit eligibility. RPTA eligibility office staff reported an increase in requests for ADA paratransit eligibility in Mesa, where a decision was recently made to eliminate non-ADA service. Demand for ADA paratransit service also appears to be increasing in Phoenix, where wait times for non-ADA service have been rising in recent years. The introduction of a low-cost monthly pass for ADA paratransit service in Phoenix also appears to have raised the demand as it eliminated the price differential between ADA and non-ADA service (with a pass the ADA service is now less expensive).
- ◆ The RPTA's decision to use Proposition 400 monies to reimburse member communities for ADA trips provided also appears to be having an impact on ADA paratransit demand. Member communities are reported to be encouraging riders to apply for ADA paratransit in order to increase access to Proposition 400 funding.
- ◆ While the independent review of selected RPTA application files did not find many individuals who had been granted eligibility and who likely could use the fixed route service, it did identify some issues with the use of conditional eligibility. A significant percentage of riders who have been given conditional eligibility are probably

unconditionally eligible. Based on a review of 51 recent determinations, it appears that about one-third of all applicants granted conditional eligibility are probably unconditionally eligible. Many riders with cognitive disabilities are often made conditionally eligible “when they are unable to understand and follow directions,” or “when they are not able to make a trip due to unexpected problems or changes in their routines.” Because the ability of these applicants to understand and follow directions or to problem-solve while traveling in the community likely will not change, it would be more appropriate to grant them unconditional eligibility. Setting conditions of this type probably is confusing to these applicants as well as to their guardians and caregivers.

- ◆ Determinations of conditional eligibility are not detailed enough to allow for implementation of trip-by-trip eligibility. The conditions tend to be general in nature and reliance on a short paper application does not allow all travel limitations to be identified. While 44% of eligible applicants are given conditional eligibility, they would have to be treated as unconditionally eligible. Without a more detailed review of their travel abilities, all trips requested by those determined conditionally eligible would need to be served.
- ◆ Even though a relatively loose style of ADA paratransit eligibility determination has not resulted in a high number of ADA applicants to date, there is evidence that the potential exists for demand for ADA paratransit eligibility to rise sharply in the future.
- ◆ Most other large transit systems which have experienced increasing demand for ADA paratransit service have moved to a more thorough in-person eligibility process. The survey of eleven large transit systems considered peers of the RPTA indicated that none now rely completely on paper applications. All include in-person interviews and assessments to some degree. Six have adopted a process recommended by the National Easter Seals Society’s Project ACTION program to have all applicants appear in-person for an interview and a functional assessment as needed.

Recommendations

It is recommended that a more thorough in-person process for determining ADA paratransit eligibility be considered by the RPTA and member communities for the following reasons:

- ◆ More thorough eligibility determinations are needed to ensure that applicants who qualify for ADA service and whose trips will be paid for with Proposition 400 funding do in fact meet the criteria for ADA service.
- ◆ More thorough eligibility determinations will help ensure that federally-required ADA paratransit service policies will be met and that resources will remain to allow member communities to provide non-ADA paratransit service to seniors and other transit dependent persons who do not qualify as ADA eligible.

- ◆ Accurately determining ADA eligibility also is likely to be an important part of developing a more seamless regional paratransit system. It is possible that better travel between DAR areas will be needed to meet the requirements of the ADA. The provision of improved inter-regional travel is likely to then increase demand for this service. To allow this improved travel to be affordable, it is important that it be provided to those persons who truly cannot use the fixed route service to make these inter-regional trips.
- ◆ Strict ADA eligibility determinations also will be an important consideration if the RPTA is to consider other important programs and rider benefits. For example:
 - As recommended in Section 7 of this report, free fare fixed route service should be considered for persons who are ADA paratransit eligible. A thorough eligibility determination process is needed before such a program is considered, though, as other transit systems have reported that free fare programs based on ADA eligibility can greatly increase the number of ADA applicants. Ineligible individuals are less likely to request ADA eligibility if the process is more detailed and thorough. A more thorough process also would more accurately determine if applicants are not eligible and are applying mainly for the free fare.
 - More thorough eligibility would allow the RPTA to grant permanent eligibility to persons whose functional abilities to travel by fixed route are not likely to improve in the future. This would benefit both riders and the RPTA as recertification for these riders would not be needed every three years. Other transit systems that have moved to more thorough in-person processes are now considering permanent eligibility for some riders. It is recommended that the RPTA also consider granting permanent eligibility when this is appropriate. Before such permanent benefits are considered, though, it is important to ensure that determinations are accurate.
- ◆ Finally, strict eligibility determination is required in the regulations to provide for eligibility consistency across the country and to continue to encourage the use of mainstream fixed route public transit services where appropriate.

5.5 Alternative Approaches for Implementing In-Person Interviews and Assessments

If the RPTA decides to pursue the use of in-person interview and functional assessments to determine ADA paratransit eligibility, there are several process design issues to be considered. These are detailed below. The benefits, costs and issues of each approach also are identified.

In-Person Interviews/Assessments for All or Only Some Applicants

One major process design decision is whether to require all applicants to appear in-person for an interview and assessment as needed or to prescreen applicants using a paper application form and then only require some applicants to appear in-person.

The major advantages of prescreening applicants and requiring only some to appear in person are: (1) it would save some applicants the time of attending and participating in an in-person interview and assessment; and (2) the transit agency needs to pay for fewer interviews and assessments.

The major disadvantages of prescreening are: (1) an additional step is added to the process. Applicants first submit an application form. The transit agency then has to review these forms and send letters to those for whom an assessment is needed. The assessment must then be scheduled and the results returned to the transit agency before a final decision is made. Systems report that it becomes much more difficult to complete eligibility determinations within the 21 day regulatory maximum. Some determinations may take 45-60 days and more applicants must be granted temporary eligibility; (2) Transit systems that prescreen applicants report that the process can be viewed as unequal and arbitrary. It is difficult to explain to those applicants asked to appear in-person why they must be interviewed/assessed while other people they know only had to submit a paper application form; and (3) the same issues with using a paper application to make determinations exists with using a paper form to prescreen. There can be inconsistencies, biases in responses and underestimation/overestimation of abilities that will make it difficult to accurately determine which applicants really need to be assessed.

Requiring all applicants to appear in-person can initially be more costly. More applicants must be interviewed and assessed. If photo IDs are issued to eligible riders, though, there is no difference in transportation costs between systems that prescreen and systems that require 100% in-person reviews. The percentage of riders who are not transported to an interview/assessment must still be transported to a photo ID site to get their ID passes made.

A major advantage of asking all applicants to appear in-person is that all applicants are treated the same and the public is more likely to feel that the process is equitable and objective. There also is an opportunity to discuss travel issues in detail with every

applicant and the biases and problems with relying on paper applications for prescreening is eliminated.

Processes that have all applicants appear in-person also can make determinations more quickly. There is no prescreening step. All applicants simply bring their completed applications to the interview/assessment center. They participate in the interview/assessment and then receive an eligibility determination. Photos are taken at the time of the interview so that a separate step to go and get a photo ID made is not necessary. A full in-person process is very much a “one-stop shopping” process.

Cost Estimates

Estimates of the potential costs for each approach, as well as for the current process, are provided in Table 5.7 on the following page. These estimates conservatively assume that by the time a new process is implemented there would be about 350 applicants per month. This is based on reports by RPTA staff in July 2007 that over 300 applications have been received in recent months.

For a process that would require 50% of applicants to participate in assessments, the total annual cost would be about \$674,760. This amount allows for an additional 1.5 FTEs in the RPTA’s Certification Office to manage the new process. It also assumes that 30% of applicants who are referred for an assessment would self-select out of the process – which has been the experience of other systems that have implemented in-person eligibility processes. Therefore, about 123 applicants per month would participate in in-person assessments (50% of 350 applicants referred and then 30% of these electing not to participate). Each assessment is estimated to cost about \$125, so the total cost of assessments per year would be \$184,500. In addition, 123 applicants would be transported each month to the assessment sites. Assuming about \$60 round-trip, this would mean an additional \$88,560 in transportation costs.

For a process that would require 100% of applicants to participate in interviews/assessments, the total annual cost would be about \$928,560. This amount again allows for an additional 1.5 FTEs in the RPTA’s Certification Office to manage the new process. It then allows for \$144,060 per year for in-person interviews and \$206,400 per year in in-person assessments. The interview cost is based on 350 applicants per month with 30% self-selecting out. So, about 245 applicants would be interviewed each month. With the estimated cost per interview at \$49, the annual cost would be \$144,060. The cost for assessments assumes that 30% of the determinations would be based just on the interview and 70% of those who showed for an in-person interview would also be asked to participate in an assessment. With the average cost of an assessment at about \$100, the total annual cost would be \$206,400. Note that the estimated cost per assessment in this case is lower than for the model that involves pre-screening. The lower cost would result from a higher number of assessments and resulting economies of scale.

Table 5.7. Estimated Ongoing Annual Costs for Current Versus In-Person Assessments Processes

	Annual Cost of Current Self-Certification Process	Annual Costs With Prescreening of Applicants and 50% of Applicants Participating in a Functional Assessment	Annual Costs With All Applicants Participating in an In-Person Interview and Assessment
Administrative Costs	\$274,276	\$401,700 (added 1.5 FTEs to manage new process)	\$401,700 (added 1.5 FTEs to manage new process)
Interview Costs	NA	NA. All applicants who are referred would participate only in an appropriate assessment	\$144,060 (70% of 350 applicants per month @ \$49 per interview)
Functional Assessments	NA	\$184,500 (Assumes 50% of 350 applicants per month less 30% who would select out; so 123 assessments per month at \$125 per assessment)	\$206,400 per year (Assumes 70% self-selection, and 70% of remaining applicants @ \$100 per assessment); so 171.5 assessment per month at \$100 per assessment)
Transportation Costs	\$0	\$88,560 (1)	\$176,400 (2)
TOTAL COSTS	\$274,276	\$674,760	\$928,560

(1) 123 applicants transported per month at \$60 round-trip.

(2) 245 applicants transported each month at \$60 round-trip.

It should be noted that Table 5.7 provides an estimate of annual certification costs for the first three years of the process. If more thorough in-person interviews and assessments were used for three years and highly accurate determinations were made, applicants seeking recertification would not have to participate in in-person assessments again. Recertifications would be done based on a paper application. Only new applicants would be required to participate in in-person assessments after the third year of the program.

Given that about half of all current applications are recertifications, the annual costs for contracted interviews and assessments and for transportation to and from the assessment sites would be cut in half after three years. The ongoing cost (after the first three years) of a 50% in-person process would be about \$538,156 (about \$263,954 more than the current process). For a 100% in-person process, the cost after the third year would be about \$665,130 per year (about \$390,854 more than the current process).

Savings Estimates

The estimated impact of a more through determination process on the number of applicants determined ADA paratransit eligible per month is shown in Table 5.8 below. Under the current process, 98% applicants are granted eligibility. Assuming about 350 applicants per month, this would mean that about 343 applicants granted eligibility each month.

With a 50% in-person process, half of all applicants (175) would be approved based on the prescreening. The other 175 applicants would be asked to participate in an assessment and about 123 would actually participate. Assuming 95% of those assessed were granted eligibility of some type, this would mean about 292 applicants would be granted eligibility of some type each month (a 15% reduction from the current system). About 30% of those who participate in an assessment also would likely be granted conditional eligibility with detailed enough conditions to consider trip-by-trip eligibility determinations for these individuals.

With 100% in-person interviews and assessments, all 350 current applicants per month would be asked to participate in assessments. An estimated 30% would self-elect out of the process, which means that about 245 people each month would complete the process. Assuming again that 95% would be granted some kind of eligibility, this would suggest that about 233 people would be granted ADA paratransit eligibility each month (a 32% reduction from the current process). And again, a significant percentage of applicants (about 30%) would receive conditional eligibility with detailed enough conditions to implement trip-by-trip determinations.

Table 5.8. Estimated Number of Approved Applicants per Month for Each Type of Process

	Current Process	50% In-Person	100% In-Person
# of Applications Submitted Each Month	350 (1)	350	350
# of Applicants Granted Eligibility Each Month	343	292 (15% reduction from current process)	233 (32% reduction from current process)

(1) Based on recent increase in applications reported by RPTA staff.

Over time, it could be expected that the growth in ADA paratransit ridership would be slowed by similar percentages. Actual cost savings from reduced ADA paratransit demand would vary by community. In communities with non-ADA paratransit service, those not approved as ADA paratransit eligible would likely continue to use the services as non-ADA riders. These communities would be in a better position to control and manage paratransit costs since a greater percentage of riders would be using the service as non-ADA riders. In communities where only ADA paratransit service is provided, more significant reductions in demand could be expected.

Funding

If the RPTA implements a more thorough in-person ADA eligibility determination process, it is recommended that the additional cost be funded using unallocated Proposition 400 funding. Assuming that 100% in-person process is implemented (recommended below), and assuming that the process is implemented in FY2009, the additional cost (in current dollars) would be \$654,284 for the first three years (FY2009-FY2011) and an additional \$390,854 each year thereafter. Applying a 3% inflation factor to these costs and carrying them out through 2026 (the full term of Proposition 400 funding), it is estimated that the amount of unallocated proposition 400 funding needed through 2026 would be \$10,889,966. The RPTA reports that currently there is about \$64M in unallocated Proposition 400 funding.

Qualifications of Staff Performing Assessments

Another process design consideration is the type of staff that should be employed to conduct in-person assessments. The guidance on conducting in-person eligibility processes prepared by Easter Seals Project ACTION strongly suggests that physical functional assessments be conducted by occupational therapists, physical therapists, or similarly qualified professionals. This is important because the individuals conducting assessments must be able to determine what levels of activity and assessment are appropriate and safe for each applicant. They must be able to identify signs of distress and know when to discontinue assessments. They also must be able to observe and understand gait and balance and draw accurate conclusions from these observations.

Some transit systems use social workers and/or registered nurses to conduct assessments. For safety and accuracy, though, we would recommend that the advice of project ACTION be taken and that either occupational or physical therapists be employed.

Cognitive assessments can be conducted by trained non-professionals using tools created by Project ACTION. An assessment tool known as the FACTS test (Functional Assessment of Cognitive Transit Skills) is used by many transit agencies across the country. We would recommend that social workers or others with experience working with individuals with cognitive disabilities be employed and trained to use the FACTS assessment tool.

Determining eligibility of applicants with vision disabilities can be done either by having assessments performed by Orientation and Mobility (O&M) Specialists (as is done in Tucson) or by relying on information provided by applicants and any travel trainers that have worked with them. Employing O&M Specialists can be costly. Tucson reported that it pays about \$200 per assessment for applicants with vision disabilities (although a small percentage of applicants require this kind of assessment). Most transit systems do not assess applicants with vision disabilities. Instead, they interview these applicants to learn about their travel skills and abilities and then gather additional information from any travel trainers that are identified by applicants.

In-House or Contracted Interviews and Assessments

A third consideration is whether to conduct in-person interviews and assessment in-house with transit agency staff or to contract with local agencies and companies for the assessments. A few systems (e.g., Dallas, TX) have hired occupational and/or physical therapists and make the determinations in-house. Most systems contract with outside agencies who have qualified professionals for assessments. To still maintain final control of the process, these systems often place transit agency staff at the assessment centers to conduct the initial determination and to decide if functional assessments are needed. The on-site transit agency staff then gather information from the professional assessments, combine the assessment information with their observations from the up-front interview, and make a final determination of eligibility. Systems that use this approach report that about 30% of all decisions can be made based just on the up-front interview and about 70% of applicants who come in for interviews are referred on to participate in some form of functional assessment.

Contracting and working with local rehabilitation agencies or other service organizations, rather than making determinations in-house, can also add to the credibility of the process. Riders are likely to be skeptical of an in-person assessment process – feeling that it is designed mainly to “weed out” and deny current riders. They also may be skeptical of the transit agency’s ability to accurately and fairly conduct assessments. Partnering with a reputable local rehabilitation or service agency can

help with public acceptance of the process. The outside agency is likely to be viewed as more objective and qualified to make determinations.

Number of Interview/Assessment Sites

Finally, careful consideration should be given to the number of assessment centers and their locations. Multiple sites throughout the area can reduce travel time for applicants and can lower transportation costs to and from assessments for the transit agency. On the other hand, maintaining consistency in outcomes when multiple centers and staffs are involved can be a challenge. Multiple assessments centers also require additional up-front set-up costs. While most physical assessments are conducted in the real environment, inside facilities are needed for times when travel outside is not advisable.

The \$100-\$125 unit cost of assessments estimated earlier in this report include general overhead and administrative costs of contracting agencies. They do not, however, include initial assessment center set-up costs. Mock-ups of buses, curbs and curb-cuts, and other props will need to be created. Equipment and photos will need to be purchased and taken to administer the FACTS test. It is estimated that about \$50,000 in up-front set-up costs will be required for each assessment center.

The volume of applications and the cost-effectiveness of multiple sites also needs to be considered. Currently, about 275 applications per month are being received. As noted above, 70% of these applicants (or about 193 applicants) can be expected to participate in functional assessments (30% will likely opt out of the process when asked to participate in an assessment). For a typical 21 day work month, this would mean that about 9-10 interviews and assessments would need to be conducted each day. An average assessment can be completed in about one hour. This volume suggests that one central site could probably be used to conduct all interviews and assessments. However, given the size of the service area and issues with transfers between various parts of the valley, we would recommend that two or three assessment sites be considered. If two sites were to be established, one could be on the Phoenix-Glendale border and could be used to serve the west valley as well as applicants in the northwestern and central parts of Phoenix. A second site could be located in the southwestern portion of the East Valley to serve applicants from the East Valley as well as from southern and southeastern Phoenix. Given that each site would only be conducting about 25 interviews and assessments per week, each center might be scheduled to be staffed 2-3 weekdays and 1-2 Saturdays per month. RPTA and contractor staff might even travel between the two sites to eliminate the need to fully staff both sites.

5.6 Recommendation and Administrative and Implementation Issues

Recommendation

It is the recommendation of the TranSystems team that the RPTA and its member communities implement a process that asks all applicants to appear in-person for an interview. Based on the interview, some applicants may then be asked to participate in a functional assessment. While this process has higher costs than a process that pre-screens applicants and asks only some individuals to appear in-persons, it has the major advantage of being perceived as a more equitable and fair process. It also is the most through design and is used by six of the 11 peer systems studied, including Dallas, Denver, Las Vegas, Orange County (CA), Sacramento, and Salt Lake City.

We would also recommend that the RPTA and member communities contract out for interviews and assessments rather than hire staff to perform these functions internally. Involving a local rehabilitation program or university/college occupational therapy program in the interview and assessment process would likely increase the public's trust in the process as an independent and objective assessment of travel abilities.

Finally, we would also recommend that the RPTA and member communities consider establishing two interview and assessment centers through contracts with qualified local organizations. Ideally, one site would be in the northwest part of Phoenix near the border with Glendale. The second site would ideally be in either Mesa or Tempe. Having two interview/assessment sites rather than a single central site will decrease travel time for applicants as well as lower transportation costs. At this time, though, it does not appear that three sites are needed (e.g., in the East, Central and West parts of the area) since the volume of applications from West Valley communities is not likely to be that great.

Trip-by-Trip Eligibility Determinations

One of the main goals of a more thorough ADA paratransit eligibility determination process is to accurately identify when riders with disabilities are able to use fixed route services and when paratransit services are needed. As noted earlier in this section, national experience has shown that about one-third of all paratransit riders are able to use fixed route service some of the time. Where fixed route service exists and is an appropriate option, it can provide riders with greater travel flexibility and freedom.

Once more detailed "conditions of eligibility" are identified through an in-person eligibility determination process, the RPTA and its member communities should consider using this information to assist riders in identifying when fixed route travel might be possible. The following process for doing "trip-by-trip" eligibility determinations is suggested:

Identification of Trips to be Screened. The regional Call Center could identify trips made by riders who have been determined “conditionally eligible.” Initially, this might be subscription trips or other frequently made trips. This information would be provided to the RPTA Certification Office.

Evaluation of Travel Options. One person at the RPTA Certification Office could be responsible for conducting reviews of trips made by riders who are conditionally eligible. This person would use the information about each rider’s travel abilities and limitations and would conduct an on-street review of the trip that is being made by paratransit. For example, the distances to and from fixed route bus stops that could serve the trip would be measured. The accessibility of the path-of-travel to and from the bus stops would also be assessed. This information would then be compared to the conditions under which the rider has been determined able to use fixed route service.

Contact Rider with Travel Options. If it is determined that a trip that is currently being made on paratransit could probably be made by fixed route, the RPTA Certification Office staff would contact the rider. Information from the assessment of the trip would be provided. For example, information about the bus routes and stops in the area that could serve the trip would be provided. Information about the path-of-travel and other accessibility issues also would be provided to the rider. Finally, the Certification Office staff person might offer to have someone go with the rider on the first trip or two by fixed route. Or, the staff person might make a referral to a travel training provider if the rider was interested in using the fixed route service.

Contact with riders about travel options would give each rider the opportunity to indicate why fixed route service might not be appropriate. There could be reasons, beyond those identified in the eligibility determination process, that should be considered.

Update Rider File to Reflect Trip Review Decision. Once the rider has been contacted and a decision about the trip has been made, the RPTA Certification Office would update the rider’s file for this particular trip. Information about the eligibility of the trip for paratransit service would be entered into the file. For example, if it is determined that a trip could be made on the fixed route system, the information in the rider file might read something like:

“10 Main Street to 50 Elm Street – fixed route eligible – Route 29”

Conversely, if it is determined that there are barriers that would prevent the trip from being made on fixed route, the information in the file might read:

“10 Main Street to 50 Elm Street – paratransit eligible”

Implementation of Trip Eligibility by the Call Center. As trip requests are taken by reservation agents at the regional Call Center, the agents would first check to see if the rider is “conditionally eligible.” If the rider is conditionally eligible, the agent would call-up the trip screening record in the rider’s file. The agent would then check to see if the trip being requested had been evaluated and if it was determined to be “paratransit eligible.” If it was, the trip would be booked as requested. On the other hand, if the file showed that the trip had been determined “fixed route eligible” the reservation agent would inform the rider that the file indicated that the trip could be made on fixed route. The agent could also give the bus route number that should be used for the trip. If the trip being requested was not in the file – meaning it had not yet been evaluated – the trip would be considered eligible and would be scheduled as requested.

As the above process suggests, trip-by-trip eligibility determinations need to be done in a customer-friendly, personal way. The contact with the rider in advance, to discuss the outcome of the on-street evaluation are very important. Riders should not find out that a trip is being considered “fixed route eligible” and not paratransit eligible when they call to make a paratransit trip request. The offer to go with the person for the first trip or two, or the tie-in to travel training, is also very important. Riders probably will have little experience using the fixed route service and may not be comfortable going out and trying to make a trip on the fixed route service.

It is also very important to note that trip-by-trip eligibility can only be started once an in-person interview and functional assessment process has been implemented and detailed and accurate conditions of eligibility have been established for riders. The current level of detail about conditional riders would not be sufficient to allow correct trip eligibility decisions to be made.

Staffing, Costs and Benefits

Trip-by-trip eligibility can be implemented at any level of effort that is readily affordable. To start, we would estimate that the RPTA would need to allocate one FTE to this effort in the Certification Office. With fringe benefits, this would cost roughly \$85,000. A dedicated staff person could do on-street evaluations, or one person could be added to the general staff and the duties of doing on-street evaluations could be shared among all office staff. The latter approach is recommended so that several staff could eventually be proficient in doing trip assessments. Conducting trip assessments as a part of overall duties would also add context and “realism” to other eligibility jobs, such as setting conditions of eligibility.

The Certification Office would then conduct as many trip eligibility assessments as could be done by this one FTE. As noted above, assessments could focus first on subscription and other frequently made trips. Over time, once a rider’s home environment and travel to the nearest bus stop was evaluated, a trip assessment will only then involve assessing the environment at the destination. Also, over time, the environments at frequent destinations would be evaluated and the findings could be

cataloged and applied to subsequent trips without having to go out on the street. ACCESS Transportation Systems, Inc., which has been conducting trip eligibility assessments for the Port Authority of Allegheny County (metropolitan Pittsburgh, PA) for several years, reports that doing trip eligibility determinations now only required 0.5 FTEs. The local transit system provides about 40,000 ADA paratransit trips per month (480,000 trips per year), which is roughly the same number of ADA trips provided in the RPTA area in FY2006.

In terms of benefits, a recent national research report found that the implementation of trip eligibility was the factor that had the most significant impact on ADA paratransit demand.⁴ The research studied 29 ADA paratransit systems across the country that were considered to be “representative” and which did not report any capacity constraints and found the systems that apply trip-by-trip screening have 48% lower ADA ridership than systems that do not use trip-by-trip eligibility.

Trip-by-trip reviews also provide riders with valuable information about travel options. Rider who have not been able to evaluate potential travel options can be provided with accurate and reliable information about access to local fixed route services.

Administrative and Implementation Issues

In addition to the process design considerations discussed above, other administrative and implementation issues should be considered by the RPTA and its members communities. These additional issues are discussed below.

Fixed Route Service Performance

It should be noted that a stricter and more thorough eligibility determination process will result in more persons with disabilities being requested to use the fixed route service for their travel needs. By determining more applicants to be conditionally eligible or ineligible, the RPTA and its member communities will essentially be indicating to these individuals that the fixed route service can meet their travel needs. This may include providing stop announcements to a blind applicant who is determined to be able to travel on the bus system. It will also mean reliable and safe use of ramps and securement systems for applicants who use wheelchairs or other mobility aids.

Discrepancies between the stated operating policies for persons with disabilities and actual on-street performance will become much more obvious and critical as greater number of persons with a variety of disabilities use fixed route services. Renewed efforts to ensure that all ADA operating policies on the fixed route service (including operator training, equipment maintenance, stop announcements, etc.) have been implemented must go hand-in-hand with the implementation of a more thorough eligibility determination process. A more thorough in-person eligibility process should

⁴ “Improving ADA Complementary Paratransit Demand Estimation,” Project B-28, Transportation Cooperative Research program, Transportation Research Board, Washington, DC, final report expected to be published in 2007.

not be implemented until the RPTA feels fairly certain that the fixed route system is accessible enough and usable enough to meet the needs of riders with disabilities.

Public Involvement and Input

As part of the regional paratransit study, TranSystems presented the concept of an in-person eligibility determination at a Stakeholders Workshop in December of 2006. Feedback on the concept was obtained. Most participants seemed to favor a more detailed and thorough eligibility determination process. However, some participants were opposed to the idea of moving away from a simple paper application process.

At a subsequent Stakeholders Workshop in July 2007, the TranSystems team again indicated its plan to recommend an in-person interview and assessment process as part of the final regional paratransit plan. Once again, most participants did not object to this revised approach for determining ADA paratransit eligibility. The most significant comment received on the issue was that a few participants expressed a desire to have other persons with disabilities present when applicants were being interviewed. This was proposed as a way to make sure that the applicant's eligibility was fairly determined.

In response to the suggestion received at the July Stakeholder Workshop, it was noted that the eligibility determination process would also include an appeals process and that community representatives would be involved in hearing all appeals of initial determination. Involving community representatives in daily interviews and assessments for hundreds of applicants each month would not be feasible and is not done by any of the peers or any systems we are familiar with across the country.

In addition to the initial input received at the December 2006 and July 2007 Stakeholder workgroups, it is recommended that RPTA seek additional feedback on the key process design issues from local advisory groups and from the public. This would include input on the alternative design options noted above. Changes to the eligibility determination process will eventually affect all current ADA paratransit eligible riders. Successful implementation of any new process will be made much easier if as many riders as possible have an opportunity to affect the final design of the new process.

Section 6. Regional Service Plan

As detailed in Section 2 of this report, paratransit service in the RPTA area is currently provided by seven separate DAR programs plus the STS county-based program. Each of these programs has varying service policies and operating procedures. Travel throughout the region also requires transfers between these separate DAR operations. These varying service policies and transfers were identified as a barrier to regional travel by seniors, persons with disabilities and local agencies.

This section describes an option for a more regional paratransit service. Section 6.1 details the process used to identify a variety of possible regional service designs. It then details the public process used to short-list the possible service designs and to arrive at an agreed-upon and recommended alternative. Section 6.2 provides an overview of the proposed regional service design. It describes how the service would be structured and the agencies and companies that would be involved in the administration, management and operation of the service. Detailed roles and responsibilities of each party are identified. Section 6.3 then presents the proposed service policies and operating procedures for a regional paratransit program. This includes proposed rider eligibility, service area, days and hours of operation, and fare policies. It also includes trip reservations and a variety of other service delivery policies and procedures. Section 6.4 presents proposed service performance standards for a regional paratransit program. Included are standards related to on-time performance, travel time, no-shows, and missed trips. Section 6.5 then provides estimates of likely ridership, vehicle-hours of service, fleet requirements, staffing requirements, and operating, capital and start-up costs. A methodology for allocating costs to participating member is also presented and a rough, planning estimate of likely allocations is provided.

6.1 Development and Review of Regional Paratransit Service Alternatives

The consultant team first identified several possible paratransit service design alternatives. These were developed by considering the service designs and structures used by other large public transit agencies across the country. In particular, the consultant team identified and contacted 11 selected peer systems and gathered detailed information about the paratransit service designs, policies and procedures used by these agencies. These peers, shown in Table 6.1 below, were chosen in collaboration with the RPTA and the Study's Technical Advisory Committee (TAC) for their similarities to the RPTA area as well as their reputation for having quality paratransit services.

Table 6.1. Peer Transit Systems Studied as Part of the Development of Regional Paratransit Service Design Alternatives:

- ◆ Dallas Area Rapid Transit (DART), Dallas, TX
- ◆ Regional Transportation District (RTD), Denver, CO
- ◆ King County Metro, Seattle, WA
- ◆ Regional Transportation Commission of Southern Nevada (RTC), Las Vegas, NV
- ◆ Orange County Transportation Authority (OCTA), Orange County, CA
- ◆ Regional Transit District (RT), Sacramento, CA
- ◆ VIA Metropolitan Transit (VIA), San Antonio, TX
- ◆ Tri-County Metropolitan Transit District (TriMet), Portland, OR
- ◆ City of Tucson, Tucson, AZ
- ◆ Utah Transit Authority (UTA), Salt Lake City, UT
- ◆ San Diego MTS

The advantages and challenges of each identified paratransit service design alternative and the experiences of peer systems in using each were considered. Applicability to the RPTA area, given the existing services and conditions, was also considered. The results of this analysis were then summarized in a technical memorandum titled “Task 4 Deliverable: Review of Relevant Studies, Plans and Programs.” This technical memorandum was completed on January 15, 2007, and was then distributed to members of the study’s TAC.

This initial review of a broad range of regional service designs identified five possible regional service designs. Following is a brief summary of each alternative as well as the identified advantages and challenges.

OPTION I. Current Dial-A-Ride (DAR) Structure with Regional Service Policies

Under this option, paratransit service would continue to be provided by the seven public dial-a-ride (DAR) programs now operating in the RPTA area: East Valley DAR, Phoenix DAR, Glendale DAR, Peoria DAR, Surprise DART, El Mirage DAR, and Sun Cities Area Transit (SCAT). Service areas would continue to be based largely on community boundaries, with some exceptions to meet Americans with Disabilities Act (ADA) requirements. All operating functions would remain decentralized. ADA paratransit eligibility determination would continue to be regional, but customer service would continue to be largely decentralized. Changes would be made to current service policies and practices to improve regional travel opportunities. These changes would include looking at more standardized operating policies as well as improved transfer coordination. More standardized, regional DAR policies would be developed. This would include policies related to:

- ◆ Fares
- ◆ Days and hours of operation
- ◆ Trip reservation policies and practices
- ◆ Subscription trip policies
- ◆ Pick-up “ready windows”
- ◆ Vehicle wait times
- ◆ No-show and late cancellation policies
- ◆ Rider assistance and assistance with packages
- ◆ Service performance standards (on-time, travel time, telephone holds, etc.)

Changes would also be made to facilitate more efficient and effective transfers between DAR service areas. Improvements in transfer coordination would address:

- ◆ Scheduling to drop-off times so that the timing of transfers could be more precise
- ◆ Development of a standardized method for transmitting transfer information
- ◆ Coordinated service area/GIS management
- ◆ Changes in master client database management
- ◆ Creation of “buffer zones” within which direct travel would be provided without transfers

This option might also address greater use of a regional provider for long regional trips that now involve multiple transfers.

Under this option, local communities would still decide eligibility for services. Some communities might specify ADA service only, others might include seniors and other persons with disabilities, and others might elect to provide general public service.

Advantages:

The primary advantages of this option would be that:

- ◆ It would not require major organizational changes to current systems.
- ◆ It would keep service delivery and responsibility “local.”
- ◆ There would be minimal “transition” issues to this design.
- ◆ The development of common service policies would facilitate better understanding and use of services by the riding public.

Challenges:

The primary challenges of this option would be that:

- ◆ It would still require multiple transfers for many regional trips.
- ◆ The overall service would still be quite “piecemeal” in the West Valley area.

- ◆ There would still be considerable duplication of effort and costs with multiple operations and management staffs, and multiple call centers, garages, and other infrastructure.
- ◆ Even with many policies standardized, there would still be considerable difficulty for the public understanding how to use the services throughout the region.

Peer Examples:

It was noted that none of the 11 peer systems contacted used this service design. The consultant team also could not identify another large urban paratransit system anywhere in the country that was operated in this way. If selected, this approach would continue to be unique to the RPTA area.

OPTION II. Modified DAR Structure with Regional Service Policies

Under this option, paratransit sub-regions would be created. The sub-regions would be an aggregation of communities based on public travel patterns. Three sub-regions would be created an East Valley area, a Central Valley area, and a West Valley area. Within each sub-region there would be a single service provider. The service provider in each area would be a full-service operation performing reservations, scheduling, dispatch and vehicle operations. Buffer zones would be created to allow regional travel which was only partly into another sub-region. Transfers would only be required for trips going well into another sub-region.

Administratively, the RPTA would oversee the three operations. This would include managing the contracts with the service providers, monitoring service quality, managing a regional eligibility determination process, and handling customer service functions on a regional basis. Member communities would still specify the types of service to be provided in each community (i.e., ADA, non-ADA, general public). Other service policies and operating practices would be standardized.

Advantages:

The main advantages of this option would be that:

- ◆ It would still be based largely on current operations. The East Valley and Phoenix area operations would remain largely unchanged (although management of the contracts would pass to the RPTA).
- ◆ All operating functions would be kept together at a sub-regional level
- ◆ Development of a single West Valley area and provider would create long-term capacity to meet projected growth in the West Valley.
- ◆ Consolidation of West Valley operations would create some economies of scale and reduce duplication of effort.

Challenges:

The main challenges of the option would be that:

- ◆ It would require significant organizational change in the West Valley sub-region.
- ◆ At a sub-regional level, service would be provided by a single entity which could create transition issues if a provider were to be changed.
- ◆ With all operating functions vested in one entity, service quality monitoring would be vital and could be a challenge if service was contracted and not provided in-house by a public entity.
- ◆ It would still require transfers for regional travel, but these would be reduced in number (to a maximum of two transfers).
- ◆ Three separate operating centers would still have some duplication of effort.

Peer Examples:

It was noted that two peer systems – Salt Lake City and San Diego – have paratransit designs that are somewhat like this. The UTA in Salt Lake City has three sub-regions (a North area, the greater Salt Lake City area, and a South area). The UTA operates the Salt Lake City area in-house (which is by far the largest operation). The provision of paratransit in the North and South areas is contracted out. The operators in the North and South areas are full-service operations, performing all operating functions.

San Diego has two sub-regions – the main San Diego area and a North area. There are separate operations in each area. Interestingly, both operations are contracted to the same company.

Los Angeles, Pittsburgh and Boston (not considered peers) also have paratransit services set-up in this way. Each has multiple sub-areas which reflect unique travel zones and full-service contract operators in each area. In Boston, the contracts, eligibility, and customer service are managed by the public transit agency (the MBTA). In Los Angeles and Pittsburgh, the various contract operations as well as eligibility and customer service are managed by non-operating brokers (Access Services, Inc. in Los Angeles, and Access Transportation Systems, Inc. in Pittsburgh).

OPTION III. Centralized Reservations and Scheduling with Decentralized Operations (Brokerage)

A central call center would be created under this option to take all calls for DAR service in the RPTA area. At a minimum, all calls for ADA service would be centralized. Member communities could elect to have the call center also handle their non-ADA calls, or could decide to operate non-ADA service separate from the regional system. ADA paratransit service policies would be standardized. Communities would still have the option to set their own service policies, though, for non-ADA service.

The service area would be designed to accommodate the extent of the services centralized. A single, region-wide ADA service area would be identified and seamless service would be arranged for riders calling under this program. Local, community-based service areas would be created for non-ADA service managed by the broker.

The broker that operates the call center would then have contracts with service providers who would be responsible for vehicle operations and dispatch. Some of these service providers would provide dedicated vehicles for the regional operation, while others might provide non-dedicated service (e.g., work the trips assigned by the broker onto existing runs that serve others as well). Service providers could include existing private and non-profit operators as well as communities that operate services in-house. At least one provider would need to be regional to accommodate regional ADA trips.

Administratively, the RPTA could operate the call center and serve as the broker. Or, the RPTA could procure and manage a contracted broker. If a contracted broker were to be used, the broker would be paid on a "cost plus" negotiated budget basis to better ensure service quality. Service providers operating dedicated vehicles would be paid per revenue hour. Providers operating on a non-dedicated basis could be paid per trip or per mile.

The RPTA or the contracted broker would perform regional administrative functions, including eligibility determination, customer service, and service monitoring. The RPTA or contracted broker also would then administer and manage supplemental programs and services such as a taxi-subsidy program or travel training services.

Advantages:

The primary advantages of this option were considered to be:

- ◆ It would give ADA riders one number to call for all trips.
- ◆ It would give communities the option to buy into the regional call center/brokerage for non-ADA service or continue to provide their own non-ADA service.
- ◆ It could build on and utilize several of the existing service providers.
- ◆ The model could be expanded to assist with the coordination of human service agency trips as well.
- ◆ It would be possible to arrange for seamless regional ADA travel. Alternately, some very long regional trips might be scheduled on two providers with a transfer.
- ◆ It would reduce duplication of effort in the reservations and scheduling areas.
- ◆ It would provide for greater standardization of service policies.
- ◆ It would provide for greater economies of scale in the management and delivery of service by creating a single, regional call center.

Challenges:

The primary challenges of this option would be:

- ◆ It would require organizational restructuring of current services – particularly the reservations and scheduling portions of each current operation.
- ◆ It could take several years to implement unless existing contracts in the East Valley DAR and Phoenix DAR areas could be renegotiated and the call center functions split out.
- ◆ It would separate the reservations/scheduling functions from dispatch. This can cause complications and delays for “Where’s my ride?” calls since the call center would need to contact the service provider to whom the trip was assigned to get an update.
- ◆ Since vehicle operations also would be separate, a mechanism to get feedback to central schedulers from drivers would be important.
- ◆ Having dispatch separate from the broker would create challenges with service monitoring and service quality. Without close oversight, service providers have a tendency to reschedule trips that are assigned – sometimes not to the benefit of riders.
- ◆ The success of this model would be very dependent on the selected broker. Because the broker contracts with the service providers, potential future transitions due to bidding of the service could be disruptive since so much of the service could change all at once.

Peer Examples:

It was noted that none of the 11 eleven peer system contacted by the TranSystems team operate this kind of regional paratransit brokerage. The consultant team identified a few examples of non-peer systems, some in large urban areas, which provide paratransit this way. This kind of brokerage is used in the East Bay area of San Francisco. It also is used in Houston and in Miami.

It should be noted that this was a more popular model in years past, but that several transit systems that used to operate this way reported that they have since elected to centralize the dispatch function (see Option IV below) to address the service quality and “Where’s my ride?” challenges noted above.

OPTION IV. Centralized Reservations, Scheduling and Dispatch with Decentralized Operations

This option would be similar to Option III, except that dispatching also would be centralized and the organizational relationships would be a bit different. A regional call center would handle trip reservations, scheduling and dispatch. Multiple service providers would then hire and train drivers and operate and maintain vehicles. Most vehicles would be operated exclusively for trips assigned by the central call center

("dedicated" service). A few providers, though, might be assigned trips that would be combined with other trips they were providing ("non-dedicated" service).⁵

As with Option III, all ADA paratransit trips would be handled by the central call center. Member communities could then elect to have the call center provide non-ADA services or could still operate non-ADA services separately. ADA service policies would be standardized and some non-ADA service policies would be standardized (depending on local community desires). Operating practices for the contracted service providers would be standardized.

Administratively, the RPTA would contract with one entity for call center operations. The RPTA would then also contract separately with the service providers who would be assigned runs and trips by the call center contractor. The RPTA would monitor the performance of both the call center contractor and the service providers. The RPTA also would handle customer service functions on a regional basis.

As with Option III, service regions would be created to meet the actual services being managed. A single, region-wide ADA service area would be used. Local community service areas could then be identified for non-ADA services. Other areas could also be identified if the call center also handled human service transportation under separate contracts.

Multiple service providers would be used to keep each operation a "manageable" size as well as to provide some transition and service quality protection. The service providers would operate out of garages in various parts of the service area to minimize deadheading at the start of the day, but then would operate region-wide, based on the most efficient way to schedule and serve all trips.

Advantages:

The major advantages of this option would be:

- ◆ It would provide a single telephone number and point of contact for regional DAR service.
- ◆ It would keep all key parts of the operation (reservations, scheduling, and dispatch) together. This would solve the issue with "Where's my ride?" calls that would be a problem under Option III.
- ◆ It would build on current DAR operations in the area with some restructuring of services in the West Valley.

⁵ "Dedicated" service means that the service provider would operate vehicles that would only be used to deliver trips assigned by the central call center. The vehicles would not be used for any other types of trips or to support any other contract work. "Non-dedicated" service means that the service provider would operate vehicles that would be used to deliver a variety of different types of trips. An example of a "non-dedicated" provider would be a taxi company that would deliver trips assigned by the central call center on taxis that would also be used for general public taxi trips.

- ◆ It would separate the total regional paratransit program into several manageable parts and contracts for long-term stability and maximum competition in bidding.
- ◆ The use of multiple contracted service providers would allow service to be moved to “performing” providers, an excellent tool for ensuring ongoing service quality.
- ◆ It would eliminate duplication of effort in most parts of the operation. Multiple garages would still be used, but this makes sense from a deadheading and operations management perspective.
- ◆ It would provide for greater economies of scale in the management and delivery of service by creating a single, regional call center.

Challenges:

The major challenges of this option would be:

- ◆ It would require organizational restructuring of existing services.
- ◆ It could take several years to implement unless existing contracts in the East Valley DAR and Phoenix DAR areas can be renegotiated and the call center functions split out.
- ◆ A mechanism to get feedback to schedulers and dispatchers from drivers would be important since vehicle operations would be separate.
- ◆ It would require that the RPTA play an active role in managing the various service contracts (call center plus service provider contracts).

Peer Examples:

It was noted that this model was, by far, the most popular approach among the 11 eleven peer systems contacted. Six of the 11 peers use this model, including Dallas, Denver, Las Vegas, San Antonio, Seattle, and Portland. The consultant team also found that many other transit agencies across the country are using this model. Some transit agencies who were contacted reported that they moved to this model after having service quality issues under other system designs. There was a strong sense among these providers that the ability to assign trips to service providers who were doing a good job was the best mechanism for ensuring long-term service quality (as opposed to elaborate contract penalties and incentives).

OPTION V. Single Regional Provider

Under this model, there would be a single, full-serve, “turnkey” regional paratransit provider. The provider would perform all aspects of the service – reservations, scheduling, dispatching and vehicle operations. The RPTA would manage the contract with the provider, monitor service quality, perform regional eligibility determinations and handle customer service functions.

The turnkey provider would do all ADA service as well as any non-ADA service that local communities elected to have provided as part of this regional operation.

The provider would most likely operate out of a single garage and utilize vehicles throughout the area as needed. There would be one service area (no sub-regions) for ADA service. Local, community service areas would be designated for any non-ADA service that was operated.

Service policies and operating practices would be largely standardized (although some variation would be possible for non-ADA services).

Advantages:

The primary advantages of this option would be:

- ◆ It would provide a single point of contact and phone number for all services operated by the regional provider.
- ◆ All aspects of the operation, including vehicle operations, would remain together. This is the most integrated and seamless operational design.
- ◆ It would be the most effective option for eliminating duplication of effort.

Challenges:

The primary challenges of this option would be:

- ◆ The quality of service and the success of paratransit programs would be completely reliant on the selected turnkey provider. The RPTA and its member communities would have “all of their eggs in one basket.”
- ◆ Having all of the service vested in a single company could also pose problems transition problems in future years if the contract were to be changed for service quality or cost reasons.
- ◆ The combination of all functions into a single operation also could limit competition for the contract since only a handful of national companies might have the ability and desire to compete for the contract.
- ◆ With all operating functions vested in one entity, service quality monitoring would be vital and could be a challenge since all data and operating function would be controlled by the single provider.
- ◆ It could be so large that it could be difficult to effectively manage.

Peer Examples:

This was the second most popular regional model among the 11 peer systems contacted. Four of the systems, including Orange County, California; Sacramento; San Diego; and Tucson use this model. It was noted, though, that Orange County recently changed providers and is reported to be going through a very difficult transition.

This model also is popular among smaller and mid-sized systems where separating the call center from vehicle operations is not as economical as a single, turnkey operation.

Estimated Costs of Each Option

In addition to considering the general advantages and challenges of each option, information was also collected on the costs of various service models. Cost data from nine of the 11 peer systems was obtained from the National Transit Database (NTD) for FY2006. Unit costs (i.e., cost per revenue-hour) were gathered to allow for a reasonable comparison of relative costs. The peers were then grouped by type of service design used. This included systems that utilized centralized call centers (Options III and IV) and systems that utilized a single, turnkey provider (Option V). A further delineation was made between systems that operated central call centers in-house versus those that contracted for the operation of a regional call center.

An average unit operating cost for each category of service design was then calculated. These average unit costs were then compared to FY2006 costs for the current paratransit services in the RPTA area, which would reflect Options I and II. Cost information is summarized in Table 6.2 below.

Table 6.2. Comparison of Operating Costs for Current DAR Services Versus Peers with Alternative Regional Designs

Service Design/City	Total Operating Cost per Vehicle Rev.-Hr. (FY2006)
Current RPTA DAR Services (Option I and II)	
East Valley DAR	\$55.24
Phoenix/SW/ PV DAR	\$43.70
Glendale DAR	\$80.68
Peoria DAR	\$81.19
Surprise	\$59.78
SCAT	\$31.62
El Mirage	\$50.52
Average Current Costs per Vehicle Rev.-Hr.	\$57.53
Contracted Central Call Center (Options III and IV)	
RTD, Denver	\$55.56
King County Metro, Seattle	\$71.41
Tri-Met, Portland	\$58.46
Average Cost per Vehicle Rev.-Hr.	\$61.81
In-House Central Call Center (Options III and IV)	
RTC, Las Vegas	\$64.53
UTA, Salt Lake City	\$61.38
VIA, San Antonio	\$56.30
Average Cost per Vehicle Rev.-Hr.	\$60.74
Single Provider, Turnkey Operation (Option V)	
OCTA, Orange County, CA	\$53.42
RT, Sacramento, CA	\$60.54
MTS, San Diego	\$53.06
Average Cost per Vehicle Rev.-Hr.	\$55.67

As shown, the average hourly operating costs for systems that use a central call center with decentralized operations (Options III and IV) range from \$55.56 for the Denver RTD to \$71.41 for King County Metro in Seattle. Average costs are \$60.74 for systems that operate the regional call centers in-house and \$61.81 for systems that contract out for the central call center operation.

The single provider turnkey systems examined had slightly lower costs. These ranged from \$53.06 per hour in San Diego to \$60.54 in Sacramento. The average hourly costs for systems that used a turnkey design was \$55.67.

Current DAR systems in the RPTA reported hourly operating costs for FY2006 that ranged from \$31.62 for SCAT to \$81.19 for Peoria DAR. The average hourly costs for current DAR systems was \$57.53 in FY2006. It should be noted that SCAT and Phoenix DAR reported hourly costs that are well below typical system averages. SCAT operates as a non-profit company with minimal staffing and overhead. The review of the Phoenix DAR service also indicated that it was understaffed in certain functional areas.

In general, the cost comparison indicated that there is only a slight variation in the cost of different operating designs. Similar operating functions (reservations, scheduling, dispatching, and vehicle operations) must be provided in each design. The functions may be organized to be operated in different ways, but still have similar costs. There may be a slight cost advantage to a single, turnkey design due to the fact that all functions are operated out of a single facility. Overhead costs could therefore be expected to be lower. Designs that utilized a central call center with decentralized operations had slightly higher costs than turnkey operations or current DAR services. The systems with central call centered had average hourly costs that were about 6% higher than average current DAR services. Note again, though, that current service costs are lowered by the atypical costs reported by SCAT and Phoenix. If the costs for SCAT and Phoenix DAR were more in-line with typical paratransit operations, it is likely that this slight cost differential would not exist.

Summary

All five of the above options were discussed in detail by members of the TAC at a meeting on March 6, 2007. This discussion identified Option IV as the preferred alternative. It was felt that Option I was too much status quo and did not really advance the concept of regionalization of services. Some interest was expressed in Option II, particularly as an interim approach to providing regional services should it not be possible to renegotiate existing contracts in the East Valley and in Phoenix in the short-term. There was some interest in Option III – particularly since it kept dispatch with the service providers. While Option V had the advantages of eliminating any duplication of services, the risks associated with putting all responsibility for services in the hands of a single provider were seen as a major disadvantage. There was general consensus that the risks of having a single, turnkey provider outweighed the slightly lower costs that

might be possible with a single, consolidated operation. The overwhelming opinion, though, was that Option IV was the best option for the RPTA given the current service structure and given its long-term service quality and stability advantages.

The five options above were then short-listed and presented to the broader Stakeholder group at a public meeting held on March 21, 2007. A total of 51 individuals representing riders, member communities, current service providers, disability advocacy committees and commissions, disability service organizations, and area human service agencies attended. Attendees were divided into eight working groups and information about three short-listed regional paratransit service design alternatives was provided to them. This included information about Options II, IV and V. All eight working groups identified Option IV as the preferred alternative. Major reasons cited include a single point of contact for riders and the ability to provide regional service without transfers. All working groups also were wary of a potential future problems associated with a single, turnkey operation.

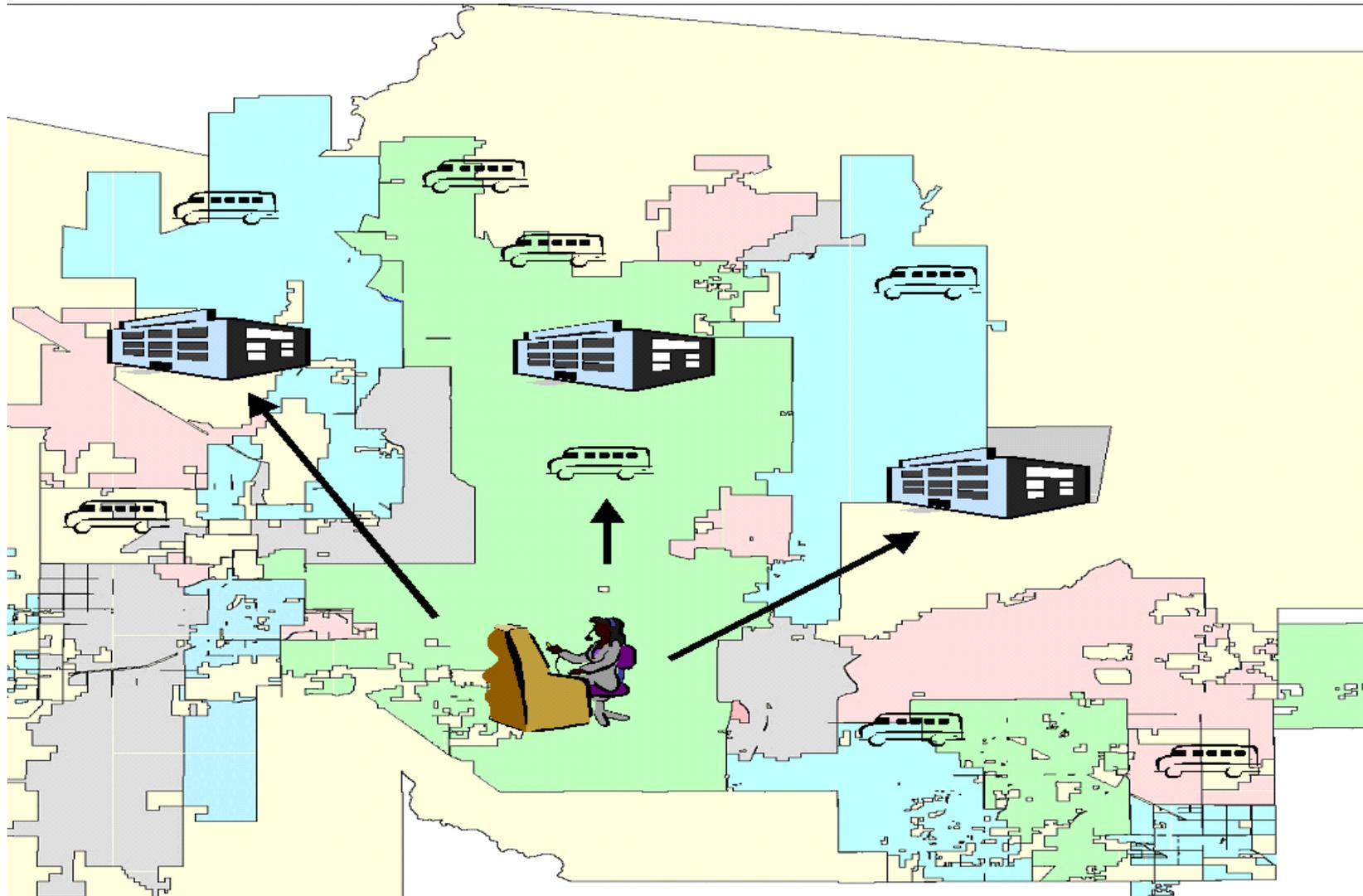
6.2 Overview of the Preferred Regional Service Design Alternative

This section provides a more detailed description of the regional paratransit service design alternative that was identified by Stakeholders and members of the TAC as the preferred option. This is the option described in Section I above as the “Centralized Reservations, Scheduling and Dispatch with Decentralized Operations” (Option IV). The various agencies and organizations that would be involved in administering, managing and operating this option are noted and the role of each is explained.

Figure 6.1 on the following page provides a simplified graphic depiction of how the preferred regional paratransit service would work. As shown, a central call center would be created. The central call center would take all trip requests, create vehicle schedules and dispatch drivers and vehicles from a central location. It is recommended that the central call center contractor be selected through a competitive bidding process conducted by the RPTA.

Service would then be provided by a minimum of three contracted providers. The providers would hire and supervise drivers, maintain vehicles, receive daily run manifests from the central call center, and check vehicles and drivers in and out of service each day. Once on the road, drivers would be in contact with the central call center and would operate under the direction of the central dispatch staff. It is recommended that the RPTA contract with the selected service providers and manage these contracts as well as the central call center contract.

Figure 6.1. Illustration of Preferred Regional Paratransit Service Design



Three very important aspects of the design that are critical to its success are:

- 1. Having separate contracts for call center and service provider functions.** It is important that the call center contractor be separate from the service providers. The call center contractor should not be a “broker” and asked to subcontract with the service providers. When there is a call center broker who then subcontracts with the service providers, there is an incentive for the call center broker to seek to subcontract with agencies and companies with the lowest possible cost. The broker makes a profit by subcontracting with service providers at a lower cost than it is reimbursed by the public transit entity. To enable providers to maintain low costs, the broker may then create schedules that are too tight or may overlook poor service performance by subcontractors.
- 2. Not allowing the call center to also be a service provider.** It is strongly recommended that the call center contractor not be permitted to also serve as one of the service providers. There is a significant potential conflict when the same company assigns trips and creates schedules and operates some of the service. It could assign the “best” and most efficient trips to themselves. Similarly, the company selected as the central call center contractor should not be associated with or be a subsidiary of any of the service provider contractors.
- 3. Keeping dispatch centralized for all “dedicated” services.** Finally, it is important that the central call center perform the dispatch function for all “dedicated” service providers. These would be providers whose drivers are only performing trips for the RPTA paratransit program. The experience around the country has been that, if dispatch is decentralized and is a function of the service providers, assigned trips are often moved around between runs on the day of service. This is often done by the service providers to cover for not having an adequate number of available drivers. It becomes very difficult when this is done to effectively monitor and control service quality. Dispatch should only be decentralized when trips are assigned to “non-dedicated” back-up or overflow service providers (as explained below).

It is recommended that at least three main service providers be contracted to provide service under the direction of the central call center. This protects against situations where a service provider goes out of business or where service quality issues might develop with a provider. Having at least three providers will allow the RPTA and the call center contractor to move trips from non-performing contractors to contractors whose performance is acceptable.

It is also recommended that the RPTA stagger the terms of each contract so that only portions of the service will be bid in any given year. This will avoid significant transfer issues.

The main service providers, which would be providing “dedicated” service to the RPTA, would be reimbursed for fixed and variable costs with variable costs reimbursed on a per vehicle revenue-hour basis. Reimbursement would be from 30 minutes before the

first scheduled pick-up to 30 minutes after the last scheduled drop-off, with scheduled breaks deducted. This would allow time for drivers to get to and from the garage location to scheduled pick-ups and drop-offs. Payment per revenue-hour (rather than per trip or mile) is reasonable given that the providers will be asked to have drivers and vehicles available for a specified run structure set by the central call center.

The main service providers should be located throughout the service area to minimize deadhead time. As shown in Figure 6.1, it is recommended that there be an East Valley, a Central area provider, and a West Valley provider. Providers would not be restricted to specific service areas. Instead, they would be expected to provide service throughout the area as needed. An effort would be made, though, to keep as many trips as possible with the local provider in each area. So, at the beginning of each day, providers would likely start-off with trips in their area. Most vehicles might stay in the sub-region where they are located. Some trips might cross-over to other areas, though. In these cases, vehicles would be allowed to make pick-ups and drop-offs throughout the region. Scheduling would be done to return vehicles to the “home” region toward the end of each shift.

Depending on the experience and capabilities of the selected service providers, one might also be identified as a regional provider. Longer, regional trips might be scheduled on this provider when possible. This provider might even have some vehicles remotely located in various parts of the service area as well as at a main garage.

In addition to the three main service providers, it is recommended that contracts be developed with two or three “back-up” and “overflow” service providers (one in each sub-area). These might include local taxi companies, private van companies, or private non-profit agencies that operate van services for seniors or persons with disabilities. These “back-up” providers would be assigned trips on a “non-dedicated” basis; that is, they would receive trips and would then schedule them into existing services and vehicles. Trips that could not be fit on to dedicated provider runs would be assigned to these providers the evening before the day of service. The “back-up” providers might also be assigned individual trips on the day of service if dedicated providers were running behind schedule or if other same day service issues developed. The “back-up” providers would be paid on a per trip or per mile basis. This back-up option would be similar to the DAR CAR service that was recently developed in the East Valley.

Implementation of a regional paratransit service would take place in two phases. In **Phase I**, ADA paratransit service would be regionalized and offered through the central call center. This would include required ADA service now provided by the East Valley DAR, Phoenix DAR, Glendale DAR, Peoria DAR and SCAT. Offering regional ADA service through the central call center would help to ensure that service is provided in compliance with the ADA regulations throughout the RPTA area. In addition, non-ADA services in the East Valley and in Phoenix would also be provided through the central call center. Glendale, Peoria, SCAT, Surprise and El Mirage would continue to provide non-ADA services separate from the regional system.

In **Phase II**, the non-ADA services in the West Valley would be coordinated through the regional call center. The decision to have non-ADA services combined with the regional system would rest, however, with each community.

It is also important to note that while regional ADA service will be offered through the regional call center in Phase I, ADA riders in the West Valley could still choose to use local DAR services. In Glendale, Peoria, Sun Cities, Surprise and El Mirage, ADA riders might elect to call the local DAR service rather than the regional system, and might do this for local trips. The regional service would be available to them, though, particularly for regional trips that would otherwise involve transfers.

It is important to note that there are long-term provider contracts already in place in the East Valley and in the Central area. In developing this regional service plan, it is assumed that these contracts can be renegotiated and that the call center functions (reservations, scheduling and dispatch) can be separated from the current operations. The current providers would continue as the main dedicated service providers in the East and Central areas. The current providers would continue as contractors to the RPTA. The regional call center contractor would then be selected through a competitive process. As part of the procurement process for a regional call center, it is recommended that prospective proposers be asked to commit to considering the continued employment of current reservationists, schedulers, and dispatchers that they deem to be qualified.

In the West area, the level of demand in Phase I would suggest that an existing provider in the area assume the role of the main dedicated service provider. This is because the level of demand in Phase I would not appear to justify the establishment of a separate new provider and bids for a separate provider would likely result in high per hour costs. Based on current service levels, about 24,804 one-way ADA paratransit trip per year are provided. This includes about 24,270 ADA trips in Glendale, 469 in Peoria, and 65 in the Sun Cities area. Assuming a productivity of about 1.5 trips per revenue-hour, this would require about 16,500 vehicle-revenue-hours of service per year. This in turn suggests about 55 revenue-hours per day, or about five peak hour vehicles in operation per day. Creating a new provider for this level of service would likely be costly. Negotiating to have an existing provider serve these trips would make more sense in the short-term. It is recommended that the RPTA invite current providers, such as STS or other existing private van companies, to bid on the provision of services in the West Valley.

Regardless of who operates as the primary West Valley dedicated service provider, STS could serve as a non-dedicated region-wide provider. STS currently operates service throughout the region. STS also has some vehicles remotely located throughout the service area. Longer, regional trips could be assigned to STS on a non-dedicated basis. These trips could then be scheduled in a coordinated fashion on to existing vehicles and runs that STS might have. A per trip rate of reimbursement for

these trips would be negotiated. This could often be a more cost-effective way to provide some long, regional trips.

Existing service providers in the West Valley could then be added if communities in the west optioned to have non-ADA trip requests handled centrally and wanted to still deliver services locally. So, for example, if Glendale opted to have the regional system handle non-ADA as well as ADA trips, the City of Glendale would be added as a contractor to provide trips in Glendale. Glendale would continue to employ drivers, mechanics, and a window dispatcher to pull-out and operate services. Router/dispatchers at Glendale would be relocated to the regional call center.

Alternately, communities in the West Valley could have the regional system handle both call center and service delivery functions. For example, El Mirage might opt to have its one vehicle operated by the regional service provider selected to handle West Valley trips. In this case, El Mirage would simply purchase service through the regional system. Similar options would be available to each West Valley community.

Table 6.3 on the following page shows the many options that are possible with various levels of regionalization of non-ADA services by West Valley communities. As shown, in Phase I there would be a regional call center contractor, three main dedicated service providers, and three non-dedicated “back-up” providers. If, in Phase II, Glendale opted to have the regional call center also handle non-ADA trips and wanted to continue to provide non-ADA trips locally, the City of Glendale would be added as a contractor. If Glendale opted to have non-ADA service handled entirely by the regional system, including service delivery, the contractor mix would be the same as the Phase I design – but with a larger operating role for the West Valley dedicated service provider.

Similar scenarios would exist for other West Valley communities. If Peoria, Surprise, El Mirage or SCAT elected to have non-ADA trips provided through the regional system, they could do so by either becoming a contracted provider of some service in their communities or by having the regional system provide both ADA and non-ADA trips for them.

As implied by the discussion above, the RPTA would be responsible for administering and managing all contracts associated with the regional system. This would include the central call center contract and all service provider contracts. RPTA staff would also be responsible for monitoring the performance of all contractors and working with the call center and service provider contractors to address any service issues that might arise.

ADA paratransit eligibility determinations would continue to be made by the RPTA. The RPTA would also manage eligibility determinations for any non-ADA riders in communities that opt to have non-ADA service provided through the regional system. Communities opting to provide non-ADA service separate from the regional system would make their own eligibility determinations for non-ADA riders in their areas.

Table 6.3. Regional Paratransit Service Alternatives and Contractor Variations

	Services Provided	Alternative 1 (Non-ADA Service In West Valley Provided by the Regional Service Providers)	Alternative 2 (Non-ADA Service in West Valley Provided by Each City)
Phase I System Design.	Region-wide ADA Non-ADA in the East Valley and in Phoenix and Glendale.	Call Center Contractor Service Provider Contractors: East Valley Contractor Central Area Contractor West Valley Contractor	Call Center Contractor Service Provider Contractors: East Valley Contractor Central Area Contractor West Valley Contractor Three Non-Dedicated Providers
Phase I Design Plus Glendale Non-ADA.	Region-wide ADA Non-ADA in the East Valley and in Phoenix.	Call Center Contractor Service Provider Contractors: East Valley Contractor Central Area Contractor West Valley Contractor	Call Center Contractor Service Provider Contractors: East Valley Contractor Central Area Contractor West Valley Contractor Three Non-Dedicated Providers City of Glendale
Phase I Design Plus Glendale and Peoria Non-ADA.	Region-wide ADA Non-ADA in the East Valley and in Phoenix, Glendale and Peoria.	Call Center Contractor Service Provider Contractors: East Valley Contractor Central Area Contractor West Valley Contractor	Call Center Contractor Service Provider Contractors: East Valley Contractor Central Area Contractor West Valley Contractor Three Non-Dedicated Providers City of Glendale City of Peoria
Phase I Design Plus Glendale, Peoria and Surprise Non-ADA.	Region-wide ADA Non-ADA in the East Valley and in Phoenix, Glendale, Peoria and Surprise.	Call Center Contractor Service Provider Contractors: East Valley Contractor Central Area Contractor West Valley Contractor	Call Center Contractor Service Provider Contractors: East Valley Contractor Central Area Contractor West Valley Contractor Three Non-Dedicated Providers City of Glendale City of Peoria City of Surprise
Phase I Design Plus Glendale, Peoria, Surprise and Sun Cities Non-ADA.	Region-wide ADA Non-ADA in the East Valley and in Phoenix, Peoria, Surprise and Sun Cities.	Call Center Contractor Service Provider Contractors: East Valley Contractor Central Area Contractor West Valley Contractor	Call Center Contractor Service Provider Contractors: East Valley Contractor Central Area Contractor West Valley Contractor Three Non-Dedicated Providers City of Glendale City of Peoria City of Surprise SCAT
Phase I Design Plus Glendale, Peoria, Surprise, Sun Cities and El Mirage Non-ADA.	Region-wide ADA Non-ADA in the East Valley and in Phoenix, Glendale, Peoria, Surprise, Sun Cities and El Mirage.	Call Center Contractor Service Provider Contractors: East Valley Contractor Central Area Contractor West Valley Contractor	Call Center Contractor Service Provider Contractors: East Valley Contractor Central Area Contractor West Valley Contractor Three Non-Dedicated Providers City of Glendale City of Peoria City of Surprise SCAT City of El Mirage

It is also recommended that the RPTA handle customer service and rider complaints for all services provided regionally. To do this most effectively, it is recommended that the RPTA staff responsible for managing the regional paratransit contracts and the staff assigned the functions of eligibility determination and customer service be co-located with the regional call center contractor.

Finally, it is recommended that the RPTA own and provide key infrastructure for the regional service including the facility used for regional call center staff as well as RPTA paratransit staff. Key infrastructure would also include the telephone system and computer hardware and software systems used by the regional call center contractor, as well as all vehicles used by the main dedicated service providers. The dedicated service providers would provide the required garage and office space needed for their operations. (The non-dedicated providers would procure and own the vehicles they operated.) Ownership of the key infrastructure by the RPTA is vital for ensuring smooth future transitions and for ensuring service quality. Should it become necessary to replace a contractor, for reasons of cost or service quality, all of the infrastructure would remain intact. Many of the operations staff would also likely remain. It would only be necessary to transition the management staff.

Roles and Responsibilities of Each Participating Entity

Following is a summary of the roles and responsibilities of each organization that would be involved in the provision of regional paratransit service. The type of contracting and reimbursement recommended for each organization involved in the regional service is also described.

Central Call Center

Central Call Center Responsibilities and Contract

The responsibilities of the regional call center contractor would include the following.

- ◆ Taking trip reservations, scheduling trips onto dedicated provider runs, developing trip lists to be assigned to non-dedicated back-up providers, and dispatching all dedicated service runs.
- ◆ The central call center contractor would handle the initial booking of all trip requests. Call center schedulers would then do final schedule clean-up and would transmit final run schedules to service providers each evening. For non-dedicated providers, a trip list or “holding run” would be transmitted.
- ◆ The central call center will handle any general information calls. Calls about eligibility will be referred to the RPTA. All rider comments and complaints will also be referred to the RPTA. To expedite this transfer, the call center phone system should be designed to allow for a direct transfer of eligibility and complaint calls to the appropriate RPTA number.
- ◆ The central call center would handle all “Where’s My Ride?” calls as well. Information about the status of trips would be looked up and provided by

reservationists or dispatch assistants where possible. Information would be obtained from dispatchers if needed.

- ◆ The call center would pay for required monthly telephone lines and service. The RPTA would provide the telephone hardware and call management system (including telephone recording equipment and search/playback software) as part of the contract.
- ◆ The central call center would also dispatch all dedicated vehicles. Vehicle operators would sign-in on the voice radio system and on the MDTs with the central dispatch at pull-out. The operators would then be under the direction of the call center dispatchers throughout the day.
- ◆ Dispatchers at the regional call center would also be responsible for maintaining regular communications with the dispatchers at non-dedicated service providers to handle any same day service issues that might arise.
- ◆ The call center contractor also would be responsible for developing the run structure for the overall system and for each service provider that maximizes productivity within service performance standards. As demand grows, the call center contractor will be responsible for reviewing the need to open new runs. Any proposed additional runs/service hours would need to be approved by the RPTA.
- ◆ If new runs are needed, the central call center would give dedicated service providers six weeks notice. This would allow for recruitment and training of new drivers.
- ◆ The call center will utilize the most current version of Trapeze software to manage the system. The Trapeze software (and subsequent updates) will be provided by the RPTA as part of the call center contract.
- ◆ If a service provider demonstrates an inability to perform assigned work e.g., leaves runs uncovered due to a lack of drivers or available vehicles), it also will be the call center contractor's responsibility to inform RPTA and suggest an alternative such as moving work to another provider or providers. Ultimately, this is the most effective way to manage the level of service performance.
- ◆ The central call center contractor also would be responsible for final reconciliation of service data and for preparation of service reports for the RPTA. Each dedicated service provider would be responsible for submitting completed manifests, maintenance reports, accident and incident reports, and other data and reports needed by the call center contractor to prepare final service reports.

The contract between the RPTA and the call center contractor would be a negotiated cost-plus contract. The contract would be based on specified responsibilities, staffing levels, and a set management fee and profit. A three-year contract with options for two additional years is recommended. The staffing levels would be reviewed each year and if changes are needed the annual budgets would be renegotiated. Telephone, utilities, software maintenance, and other direct costs would be passed-through to the RPTA at cost.

It is important that the call center contract be cost-plus, rather than per trip or another form of unit payment, so that the call center contractor does not have any built-in incentives or disincentives to how it does business. The call center contractor should

simply be operating to create the best schedules possible and to efficiently dispatch the service. A per trip or other unit payment contract could encourage the call center contractor to create schedules that are too tight.

Service performance standards would be set, including telephone hold times, on-time performance, travel times, missed trips, productivity, and complaint levels. A service productivity incentive and disincentive would be set in the contract. A monthly productivity incentive would only be paid if the other service performance standards were met.

Call Center Staffing

The call center contractor should provide the following staff:

- ◆ A General Manager.
- ◆ A Call Center Supervisor.
- ◆ Reservationists.
- ◆ Schedulers.
- ◆ Dispatchers.
- ◆ An IT and Data Manager.
- ◆ Data reconciliation clerks and administrative support staff.

More detailed staffing requirements for the “base” design as well as other options are provided in Section 6.5 of this report.

Service Provider Responsibilities and Contracts

The responsibilities of the service providers would include the following.

- ◆ Each service provider would be responsible for:
 - Hiring and training drivers.
 - Managing the pull-out process – assigning runs and vehicles.
 - Having an adequate extraboard to be able to cover any scheduled outs or call-outs for runs/trips they are assigned.
 - Maintaining vehicles used in the operation.
 - Maintaining MDTs, AVL systems, two-way voice radio systems and other technologies provided by the RPTA to operate the service.
- ◆ Non-dedicated service providers would also schedule and dispatch the trips assigned. The dispatchers at each non-dedicated provider site would be required to be in regular communication with the central call center dispatchers to check on no-shows and late rides.
- ◆ The larger dedicated service providers would perform preventative maintenance and light repairs in-house and would be required to provide a facility that would allow for this level of maintenance and repair. Heavier repairs and tire work would be performed by maintenance subcontractors. Smaller service providers could subcontract all maintenance and repairs, as appropriate.

- ◆ All service providers would be required to collect and record actual in-service data, such as pick-up and drop-offs times and mileage. Service providers would be responsible for reviewing this information for accuracy and providing it to the central call center on a daily basis for inclusion in the final trip and service information databases.

Non-dedicated service providers would be used primarily for back-up and overflow – similar to the DAR CAR contractors in the East Valley. These providers would receive a list of trips to be performed each day and would then do final scheduling and dispatching of these trips. It is recommended that no more than 5% of all trips would be assigned to back-up, non-dedicated service providers.

Dedicated service providers would be paid on a fixed cost plus variable cost basis. Fixed costs would include the costs of the garage facility, utilities, facility maintenance, facility insurance, and other set costs. Variable costs would include employee wages and benefits, fuel, parts and supplies, vehicle insurance, training costs, and other costs that would change based on the number of vehicles and vehicle revenue-hours of service assigned. This method of payment (as opposed to per trip payment) is appropriate since the providers are not creating the schedules and therefore cannot control productivity. They simply deliver the work as assigned.

The non-dedicated service providers would be paid on a negotiated per trip or per mile basis, as appropriate to their general method of billing for services. Participating taxi contractors would likely bill per mile. Private van companies used as non-dedicated providers would likely bill per trip.

Service Provider Staffing

Service Providers would be expected to have the following staff:

- ◆ A General Manager.
- ◆ “Window” dispatchers to check drivers out and in.
- ◆ Road supervisors.
- ◆ Drivers (including extraboard drivers).
- ◆ A driver trainer (or a shared trainer).
- ◆ A Maintenance Supervisor and mechanics (if maintenance performed in-house).
- ◆ Other support and clerical staff as needed.

More detailed staffing requirements for the Phase I design as well as full regionalization under Phase II are provided in Section 6.5 of this report.

RPTA Responsibilities

The RPTA would play an active role in the administration and monitoring of the regional paratransit service. Responsibilities would include the following:

- ◆ The RPTA would hold the contracts with the call center contractor as well as all of the service providers.
- ◆ As the contracting agency, the RPTA would pay the call center contractor and all service providers, would apply available funding received by the RPTA that has been dedicated to the regional paratransit program, and would then allocate remaining costs to participating member communities.
- ◆ As the contracting agency, RPTA staff assigned to the paratransit program would monitor call center and service provider services for contract compliance. RPTA staff would also review invoices from all contractors, apply any incentives and penalties and process these invoices on a monthly basis.
- ◆ The RPTA would convene weekly meetings of call center and dedicated service provider managers to discuss service performance and any issues with the service.
- ◆ All contracts should include a clause that the contractor managers will work cooperatively with the RPTA and other contractors to ensure that the service is provided in the most efficient and effective way possible. The contracts should allow the RPTA to call for the replacement of a contractor manager if the RPTA feels that the manager is not working cooperatively. Note that this is a clause used by Tri-Met in Portland and reportedly has been valuable in ensuring a good working relationship among all contractors.
- ◆ A key role of the RPTA will be to listen to all perspectives and facilitate appropriate solutions to any service problems. The call center should be encouraged to raise any issues regarding drivers or service delivery with service providers. And, the service providers should be encouraged to raise any issues regarding scheduling or dispatching with the call center. Should service issues not be resolved directly by these contractors, it would be the RPTA's role to mediate any unresolved disputes and to determine whether staff or contractors need to be replaced or their roles adjusted.
- ◆ The RPTA would assume ownership of vehicles used in the provision of regional service and would purchase all additional and replacement vehicles needed by dedicated service providers after the regional system is implemented. Non-dedicated providers will provide their own equipment.
- ◆ The RPTA will also purchase and provide the call center contractor with MDT and AVL technology as well as a two-way voice radio system. The RPTA will also equip all vehicles used in dedicated service with MDCs and AVL technology and with two-way voice radios. The call center and dedicated service providers will be responsible for executing and maintaining service and maintenance contracts for the technologies and hardware provided by the RPTA
- ◆ Non-dedicated service providers would own and provide all vehicles and other on-board equipment. Although they would not be required to have AVL and MDT

- equipment, non-dedicated service provider would have to have functioning two-way radio or cell phone capability to communicate with their own dispatchers.
- ◆ The RPTA would purchase the telephone systems needed for the central call center and will make the system available for use by the call center contractor. This will include an automatic call distribution system as well as a system to digitally record all incoming calls. The system for call recording should also allow recorded calls to be searched by day and time for monitoring purposes.
 - ◆ The RPTA would purchase and own the computer hardware and software and the necessary Trapeze licenses for the operation of the call center and the service providers. Workstations with read-only capability should be located at the dedicated service provider sites. The call center contractor and the service providers would be responsible for executing and maintaining contracts for the servicing and maintenance of all computer hardware provided. The call center contractor's service and maintenance contract with Trapeze should also cover the remote work stations at the service provider locations.
 - ◆ The RPTA would lease the space needed for the call center and for RPTA staff managing the regional paratransit service. The space would be made available to the call center contractor as part of the contract. It is important for the RPTA to own the entire major infrastructure associated with the call center to minimize future transition issues.
 - ◆ The RPTA would make all eligibility determinations and would enter new client information into the master rider file. To enable this to be done efficiently, the eligibility module available from Trapeze should be purchased and used. The call center would have access to the master rider file to be able to update addresses and phone numbers as changes are identified during service delivery.
 - ◆ The RPTA also would take all rider comments and complaints. Using telephone recordings and Trapeze trip records, the RPTA customer service staff would conduct an initial investigation. The complaint also may be forwarded to an appropriate contractor if additional input and investigation is needed (e.g., if a driver or other employee needs to be interviewed about the complaint). Acknowledgements of receipt of complaints as well as final resolution letters would be sent to customers from the RPTA customer service office by RPTA staff.
 - ◆ The RPTA would also manage an advisory committee process (detailed below).

The RPTA would need the following types of employees to administer and manage the program:

- ◆ A Paratransit Manager.
- ◆ A Fleet/Facilities Coordinator.
- ◆ Contract Administrators to monitor contractors and review monthly invoices.
- ◆ Customer service staff to manage the comment/complaint process.
- ◆ Eligibility determination staff.

More detailed recommendations regarding RPTA staffing are provided in Section 6.5 of this report.

Member Community Responsibilities and Input

While the regional paratransit service will be administered by the RPTA, participating member communities would continue to play an active role in reviewing service quality, performance, and cost.

- ◆ Member communities would have ongoing oversight of services through membership on the RPTA Board of Directors as well as the Transit Management Committee and the Valley Metro Operating Committee. Paratransit policy issues would be brought to these three existing bodies and monthly reports, which will include service statistics and service performance information, will be provided.
- ◆ In addition, the RPTA should set-up and staff a regional Committee on Accessible Transportation (CAT) that will oversee accessible fixed route service issues as well as regional paratransit service issues and performance. A committee with purview over both accessible fixed route and paratransit programs is recommended to keep a focus on a multi-modal approach to serving persons with disabilities.
- ◆ Existing transportation staff as well as local advocates and riders of the member communities would serve as members of the CAT. Each member community should be able to appoint three voting members to the CAT. The meetings should then be open to the public with anyone able to attend as a non-voting member.
- ◆ Member communities could also continue to obtain input from riders locally through local advisory committees. Input obtained through these local committees or groups could then be brought to the regional CAT advisory committee by the designated CAT members.

6.3. Proposed Regional Service Policies and Procedures

In order to ensure consistent service delivery as well as compliance with federal ADA requirements, it is recommended that certain key operating policies and procedures related to the provision of regional ADA paratransit be standardized. Some policies and procedures related to non-ADA service could vary by community and be set by each participating member community. Some policies for non-ADA service should also be standardized, however, in order to allow service to be operated efficiently and consistently.

Following is a discussion of several key service policies and procedures. Recommendations regarding standardization of these policies and procedures within a regional paratransit program are provided. It should be noted that DAR providers throughout the region have been meeting in recent months to consider standardization of certain policies and procedures. The deliberations of this group have been considered in the development of the following recommendations. Compatibility with proposed regional policies developed by this group is noted. Variations are also explained.

Eligibility

The criteria for ADA paratransit eligibility are set in the USDOT ADA regulations. The RPTA currently determines ADA paratransit eligibility for all DAR services in the region based on USDOT criteria. It is recommended that this arrangement be continued. The RPTA would also purchase the Trapeze eligibility module and would maintain an up-to-date master rider file that would include all eligible ADA riders in the region. The central call center would have access to this file to schedule trips.

If member communities opt to have the regional system provide non-ADA service, they would be able to set whatever eligibility criteria they like. RPTA staff would then accept and review applications for non-ADA service for each participating community. For ease of implementation, it is recommended that a standard definition of 65 years of age or having a Medicare card be used to define seniors, and the RPTA reduced fare ID eligibility standards be used to define a “person with a disability” if service to this population – broader than ADA paratransit eligibility – is desired.

Rider eligibilities for the expected Phase I design (ADA service plus non-ADA service in the East Valley and Phoenix) are shown in Table 6.4 below. As indicated, the Phase I regional system would serve ADA riders plus seniors and other persons with disabilities in Chandler, Gilbert, Scottsdale, Tempe, and Phoenix. General public service would then be provided if any of the West Valley communities opted to have non-ADA service provided by the regional system.

**Table 6.4. Rider Eligibility by Community for the Phase I Design
Plus Other Possible Communities**

Community	ADA	Seniors (65+)	PWD	General Public
Phase I Design				
Chandler	✓	✓	✓	--
Gilbert	✓	✓	✓	--
Mesa	✓	--	--	--
Scottsdale	✓	✓	✓	--
Tempe	✓	✓	✓	--
Phoenix	✓	✓	✓	--
Paradise Valley	✓	--	--	--
SW Communities	✓	--	--	--
Glendale	✓	--	--	--
Peoria	✓	--	--	--
Sun City	✓	--	--	--
Possible Additional Service				
Glendale	--	✓	✓	✓
Peoria	--	✓	✓	✓
Surprise	--	✓	✓	✓
Sun Cities	--	✓	✓	✓
El Mirage	--	✓	✓	✓

In operations, when a rider calls and a reservationist enters the rider name or ID number, all types of rider eligibility will be displayed. If riders are ADA eligible, their requests will first be processed as ADA requests. If ADA service is not available for the request (due to area or day/time), the request will then be processed as a non-ADA request.

Service Area

The Phase I service area would include all areas that are required to be served by the ADA plus non-ADA DAR service areas in the East valley and in Phoenix. The ADA service area would be designated as all areas that are within $\frac{3}{4}$ of a mile of non-commuter fixed routes. In accordance with USDOT ADA regulations, relatively small areas that are totally surrounded by fixed route corridors would also be included in the ADA “core service area.” The Phase I service area is shown on Figure 6.2 on the following page.

Member communities that opt to have non-ADA services provided through the regional system would be able to define the area within which service will be provided to non-ADA riders from their city. Figure 6.3 on the following pages shows the potential service area if all West Valley communities opted to have non-ADA services provided through the regional system in Phase II.

To operationalize these multiple service areas, separate service area polygons would be created within Trapeze for each non-ADA area. The software would then be programmed to determine if the trip requested is in the ADA service area or the non-ADA areas defined by each community.

In the short-term, it is recommended that the three main dedicated service providers be assigned to serve areas that currently associated with the current East Valley, Central/Phoenix, and West Valley areas. This will minimize issues in renegotiation of current contracts. By doing this, the two existing service providers in the East Valley and Phoenix areas could be guaranteed at least the current number of annual vehicle hours of service.

In the long-run, the assignment of trips would be based on travel patterns, minimizing deadhead, and trip grouping options. Specifically, it is likely that the Central/Phoenix area provider may be assigned some of the trips from the Scottsdale/East Valley area. Similarly, it is likely that the West Valley service provider might be assigned some of the trips in the Southwest communities of Avondale, Goodyear, Litchfield Park and Tolleson. These adjustments in operating area would be made over time, as demand increases, so that the volume of service now performed by existing providers would not be reduced.

Figure 6.2. Phase I Regional System Service Area
(ADA Required Area Plus Non-ADA DAR Areas in the East Valley and Phoenix)

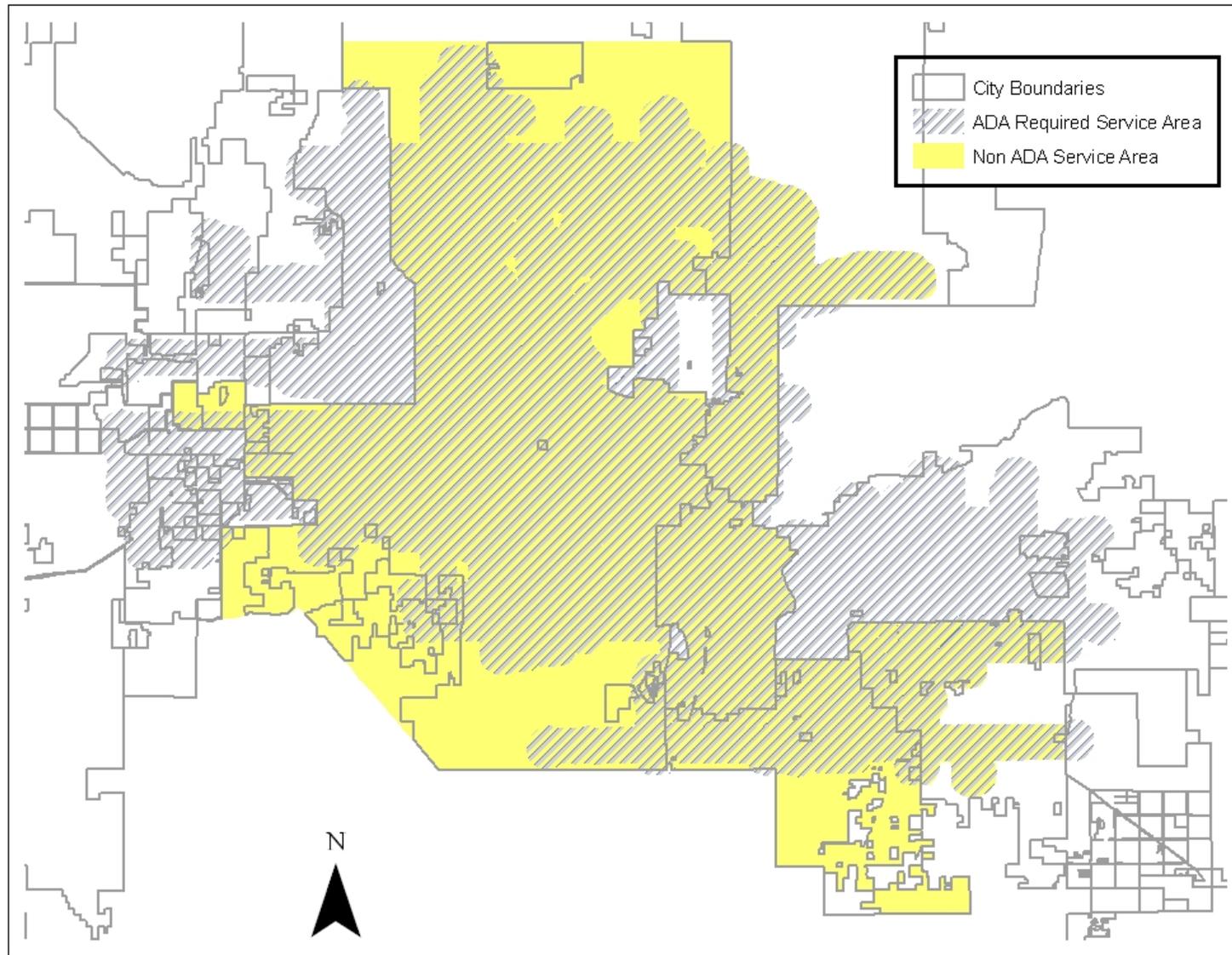
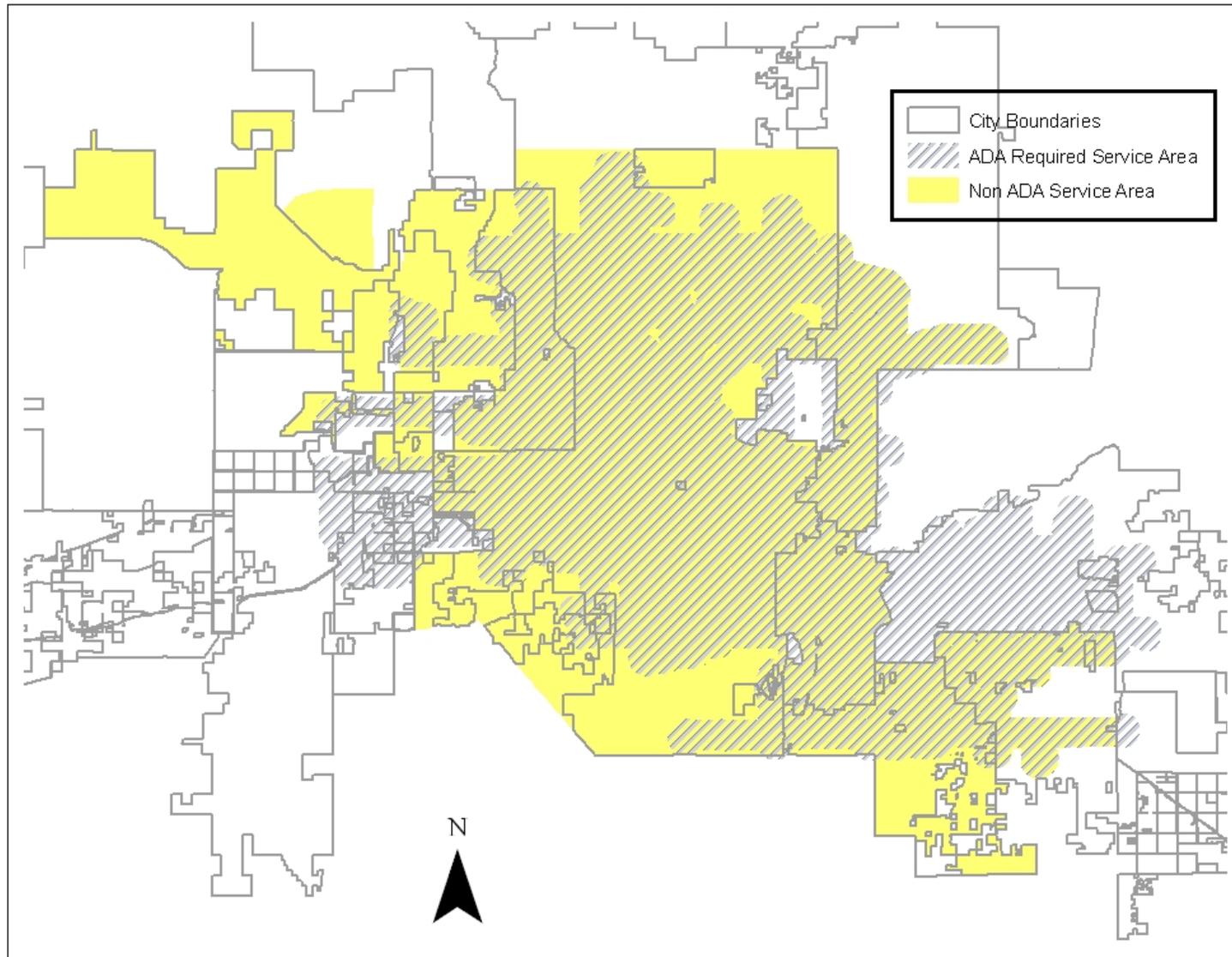


Figure 6.3. Potential Regional Paratransit Service Area If All West Valley Communities Opted to Have Non-ADA Services Provided Through the Regional Systems



All service providers would be available to provide trips throughout the region. Trips would be scheduled in such a way so as to keep vehicles and drivers from each provider in their “primary” area of operation, but some vehicles would be scheduled to travel outside this primary area as needed. The assignment of trips to vehicles would be based primarily on the most efficient grouping of rides throughout the area.

Trips would be provided without paratransit-to-paratransit vehicle transfers. It is our experience and opinion that arranging for transfers reduces rather than improves service efficiency. Vehicles used to provide longer, regional trips would, however, be scheduled to make pick-ups and drop-offs along the way (within maximum travel time parameters).

Paratransit-to-fixed route feeder service should be used where appropriate. For trips where one end of the trip is close to fixed route and accessible, a feeder option should be explored for trips over seven miles in length. If a trip requires paratransit service at both ends, a feeder option should only be considered if the trip is over 20 miles in total length. Feeder service should be provided using transfer points that have appropriate public facilities. This should include bus stops with benches and shelters and with telephone services (to allow riders to contact the paratransit call center if there are problems with the transfer). The fixed route service to which riders are connected should have a relatively short headway so that an exact connection is not needed. Instead, the rider would be taken to the fixed route stop or station and would simply catch the next fixed route bus or train. The new light rail system should provide excellent opportunity for feeder service. Finally, feeder service should be focused on ongoing, repeat trips (such as work trips). Based on the experiences of other transit systems, it is likely that feeder service will be used to provide less than 3% of all paratransit trips, but this service option will be very useful for very long regional trips.

Days and Hours of Operation

It is recommended that ADA service days and hours match the fixed route hours in the corridors that correspond to the paratransit trip origin and destination. Public information for the regional ADA service should then simply state that paratransit is provided at the same hours as the fixed route in the area of travel and that riders can either consult the fixed route schedules or call the central call center to check on the hours for their area. The public information can then also provide a general idea of the ADA hours of service by community. Table 6.5 below shows the general hours of operation for the regional ADA service.

Member communities would then be able to set whatever days and hours are desired for non-ADA service. Table 6.6 below shows the non-ADA hours for the “base” design (with Phoenix and East Valley non-ADA service), as well as the non-ADA hours should other West Valley communities opt to have this service provided regionally.

Table 6.5. Regional ADA Service Hours

Area/Community	Weekdays	Saturdays	Sundays
East Valley Area			
Chandler	4am – 12am	4am – 12am	--
Gilbert	4am – 12am	4am – 12am	--
Mesa	4am – 12am	4am – 12am	--
Scottsdale	4am – 1am	4am – 1am	4am – 1am
Tempe	4am – 1am	4am – 1am	4am – 1am
Guadalupe	4am – 1am	4am – 1am	4am – 1am
Central Area			
Phoenix	5am – 12am	5am – 10 pm	5am – 10pm
Paradise Valley	5am – 10pm	5am – 10pm	5am – 10pm
SW Communities	5:30am – 10pm	5:30am – 8pm	--
West Valley			
Glendale	5am – 10pm	5am – 10pm	5am – 10pm
Peoria	4:30am – 9pm	6am-10pm	6am-10pm
Sun City	4am – 9pm	--	--

Table 6.6. Non-ADA Service Hours for “Base” Design and Other Possible Communities

Community	Weekdays	Saturdays	Sundays
“Base” Level Design			
Chandler	7am – 7pm	7am – 7pm	--
Gilbert	7am – 7pm	7am – 7pm	--
Scottsdale	4am – 1am	4am – 1am	4am – 1am
Tempe	4am – 1am	4am – 1am	4am – 1am
Phoenix	5am – 12am	5am – 10pm	5am – 10pm
Additional Community Policies			
Glendale	7am-6pm	7am – 5pm	7am – 5pm
Peoria	6am – 6pm	--	--
Surprise	7am – 5pm	--	--
Sun Cities	7:15am – 5pm	7:15am – 2pm	7:15am – 2pm
El Mirage	8am – 4:30pm	--	--

Fares

Table 6.7 on the following page provides a summary of current DAR fare policies. As shown, ADA fares are relatively consistent throughout the region. One difference is that a monthly unlimited ride pass is offered by the City of Phoenix. This type of monthly pass is not available in any other communities. There also are inconsistencies in current policies regarding transfers to and from fixed route service.

Table 6.7 Current Regional ADA Fares

Area/Community	Rider Fare	PCAs and Companion Fares	Transfer Policies
East Valley Area			
Chandler	\$2.00	PCAs free Companions same as rider	To/from other DAR free To fixed route free 50¢ discount from FR
Gilbert	\$2.00	PCAs free Companions same as rider	To/from other DAR free To fixed route free 50¢ discount from FR
Mesa	\$2.00	PCAs free Companions same as rider	To/from other DAR free To fixed route free 50¢ discount from FR
Scottsdale	\$2.00	PCAs free Companions same as rider	To/from other DAR free To fixed route free 50¢ discount from FR
Tempe	\$2.00	PCAs free Companions same as rider	To/from other DAR free To fixed route free No discount from FR
Central Area			
Phoenix	\$2.40 \$34 monthly pass	PCAs free Companions same as rider	To/from other DAR free To fixed route free No discount from FR
Paradise Valley	\$2.40	PCAs free Companions same as rider	To/from other DAR free To fixed route free No discount from FR
SW Communities	\$2.40	PCAs free Companions same as rider	To/from other DAR free To fixed route free No discount from FR
West Valley			
Glendale	\$2.00	PCAs free Companions same as rider	To/from other DAR free No discounts to/from FR
Peoria	\$2.00	PCAs free Companions same as rider	To/from other DAR free No discounts to/from FR
Sun City	\$2.00	PCAs free Companions same as rider	No discounts to/from other DAR; Free to FR; \$1.00 discount from FR

It is recommended that single-ride ADA fares in the regional system be increased to \$2.50 and that this fare be used region-wide. In the short-term, it is also recommended that the monthly ADA pass for City of Phoenix residents also be continued.

The City of Phoenix may, however, want to reconsider its policy of making available an unlimited ride monthly pass for ADA paratransit service, or may want to consider the cost of this pass. Only two of the 11 peer systems studied offer an unlimited ride

paratransit pass, and both set a cost for the pass well above the \$34 currently charged by Phoenix. In Las Vegas, where the base paratransit fare is \$1.50, a paratransit pass is offered for \$60 per month. In Salt Lake City, where the base paratransit fare is \$2.05, a paratransit pass is offered for \$69 per month. The elimination of the monthly pass by the City of Phoenix was also recommended in a prior report and it is recommended here that the RPTA develop a regional paratransit program that does not include an unlimited ride monthly pass.

It is also recommended that policies regarding transfers to and from fixed route services be standardized. To encourage use of the fixed route system, we would recommend that ADA trip transfers both to and from be provided at no charge. This policy should apply to express as well as non-express fixed route services.

Non-ADA fares could be set by each community; however, consistency in fares reduces passenger confusion. The Trapeze system could then be programmed to attach a particular fare structure to a trip depending on type of eligibility. Table 6.8 on the following page shows the current non-ADA fares that we assume would be used by the regional call center. The policies for the “base” design are shown. Policies that might need to be included should other West Valley communities opt to have non-ADA services provided regionally are also shown.

For simplicity, we would recommend that communities consider standardizing PCA and companion fares and transfer policies for non-ADA service. We would recommend that, as with ADA service, persons with disabilities be allowed to bring a PCA free of charge and that companions pay the applicable fare. For seniors and general public riders, companions would be considered additional riders and would simply pay the applicable fare (as is done now).

As suggested for ADA riders above, we would also recommend that member communities consider offering free transfers to and from fixed route services for non-ADA riders. This would not only simplify regional policies, but would encourage greater use of fixed route services.

Finally, it is recommended that, once a regional system is established, the RPTA examine options for introducing a uniform fare media, such as “smart cards” or stored value cards to simplify the collection of fares. This type of a change typically has public information implications and it takes time for riders to get used to the new process. Given all of the other changes that will be associated with a transition to a regional service, it is recommended that fare changes be made once the regional system is up and running smoothly.

Table 6.8. Non-ADA Fares for the Phase I Design and Other Possible West Valley Non-ADA Services in Phase II

Community	Rider Fare	PCA and Companion Fares	Transfer Policies
“Base” Level Design			
Chandler	\$1.00 for 1 st zone; 50¢ each additional zone	PCAs free Companions same as rider	60¢ discount to Phoenix 50¢ discount fr Phoenix To fixed route free; 50¢ discount from fixed route
Gilbert	\$1.00 for 1 st zone; 50¢ each additional zone	PCAs free Companions same as rider	60¢ discount to Phoenix 50¢ discount fr Phoenix To fixed route free; 50¢ discount from fixed route
Scottsdale	\$1.00 for 1 st zone; 50¢ each additional zone	PCAs free Companions same as rider	60¢ discount to Phoenix 50¢ discount fr Phoenix To fixed route free; 50¢ discount from fixed route
Tempe	\$1.00 for 1 st zone; 50¢ each additional zone	PCAs free Companions same as rider	60¢ discount to Phoenix 50¢ discount fr Phoenix To fixed route free; 50¢ discount from fixed route
Phoenix	\$1.20 first zone; 60¢ each additional zone	Same as rider	60¢ discount from (but not to) Glendale; To FR bus free; No discount from FR bus
Additional Community Policies			
Glendale	\$2.00 GP \$1.00 seniors, pwd, juniors (6-13); ½ price group fares; children < 6 free	Applicable fare	No discounts for DAR or fixed route transfers
Peoria	\$3.00 GP \$1.00 seniors, pwd and children	Applicable fare	No discounts for DAR or fixed route transfers
Surprise	\$1.00 in City \$1.25 out-of-City \$1.75 to FR bus	Applicable fare	No discounts on transfers to/from other DAR; free transfer to FR bus with \$1.75 fare to bus
Sun Cities	\$3.00	Applicable fare	No discounts on transfers to/from other DAR; free transfer to FR bus; No discount from FR bus
El Mirage	\$2.00 children < 6 free	Applicable fare	No discounts for DAR or fixed route transfers

Trip Purposes

For all ADA services, there would be no trip purpose limitations or trip prioritization.

For non-ADA service, communities could set their own policies. It is assumed that communities would opt to maintain current policies regarding non-ADA trip purpose priorities. These current policies and how they would be incorporated into the “base” design as well as possible additional services for other communities are shown in Table 6.9 below.

Table 6.9. Non-ADA Trip Purpose Policies for “Base” Design and Possible Other Communities

Community	Non-ADA Trip Purpose Policies
“Base” Design	
Chandler	No formal policy. Medical priority in practice.
Gilbert	No formal policy. Medical priority in practice.
Scottsdale	No formal policy. Medical priority in practice.
Tempe	No formal policy. Medical priority in practice.
Phoenix	No limits. All trips served.
Additional Community Policies	
Glendale	No limits. All trips served
Peoria	No limits. All trips served
Surprise	Medical and work priority
Sun Cities	Weekdays no limits. Medical only on Saturday. Religious services only on Sundays
El Mirage	(1) medical; (2) work; (3) other

We would recommend that the East Valley communities formalize the practice of giving medical trips priority (Note: It is our understanding that this has been done since the review of the service was conducted by the study team). No other changes would be needed.

In operations, the priority for medical trips in the East Valley is implemented in two ways. First, the purpose of the trip is considered in decisions to grant subscription service to non-ADA riders. If capacity issues exist, subscription service may be largely limited to ongoing medical trips. Second, in the manual scheduling process, medical trips will be scheduled first. If there are then trips that cannot be accommodated, these will be trips with other trip purposes. These operating policies related to non-ADA trip prioritization could be continued by the regional call center as part of the regional paratransit program.

Trip Reservations Hours and Policies

Trip reservations hours and policies is an area where standardization will be needed in order for the regional service to function efficiently. For ADA service, there would be a need to take reservations seven days a week in order to comply with USDOT regulations. Currently, for ADA services, the hours for reservations vary significantly. In the East Valley, ADA reservations are taken 6:00 a.m. to 7:30 p.m.; in the Central area (Phoenix, Paradise Valley and the SW Communities) ADA reservations are taken 8:00 a.m. to 6:00 p.m.; Glendale takes ADA requests 8:00 a.m. to 5:00 p.m.; Peoria 7:00 a.m. to 5:00 p.m.; and SCAT from 6:45 a.m. to 5:00 p.m.

It is recommended that a regional paratransit policy that does not diminish current levels of service be adopted. It is therefore recommended that ADA trip reservations be accepted from 6:00 a.m. to 7:30 p.m. This will keep the level of service in the East Valley the same and will increase reservation hours in other communities. An additional option would be to close “next day” trip requests at an earlier time (e.g., 6 p.m.) to ensure adequate time to prepare next day schedules, and accept reservations for trips being booked two or more days in advance up to 7:30 p.m.

All areas that now provide ADA service also accept reservations up to 14 days in advance. To avoid lowering the level of service with regionalization, we would recommend that this policy be continued in the regional service design. In the near future, though, the RPTA and its member communities may want to consider going to a seven day advance reservation policy.

To make the regional service workable, we would recommend that same-day service not be guaranteed. Riders could be allowed to call on the day of service to see if same day rides are possible, but these trips would be provided on a space available basis. Same-day changes to prescheduled trips also would be provided only on a space available basis as long as they did not negatively impact other riders. We would recommend that same-day service be offered through regional taxi subsidy programs. Communities that want to continue same-day DAR service should do this separate from the regional system.

To keep the operational design from becoming too complex, we would also recommend that non-ADA trip reservation policies be standardized. To enable the regional program to guarantee that all ADA trips are accommodated, we would recommend that non-ADA trip requests be accepted only on a next-day basis. Service capacity should be designed each year to accommodate all ADA trips plus a “target” number of non-ADA trips based on funding available from each member community that has elected to provide non-ADA service. At the beginning of each day, the central call center schedulers should look at the number of ADA trips on runs in each operating area (East Valley, Central and West) for the following day. This should be compared to available capacity and an estimate of the number of non-ADA trips that can be accommodated in each area should be developed. On the day before the day of service, all ADA trips

should be accepted. If there are no automated Trapeze solutions, ADA trips should be placed on standby to be manually scheduled. Non-ADA trips should only be scheduled if there is an automated solution. Schedulers would also track run capacity on the day before the day of service and could call for non-ADA requests to be “closed” if target non-ADA trip numbers are met and capacity is tight. In the final schedule clean-up, non-ADA ambulatory trips could be moved to the “back-up” taxi and non-dedicated overflow providers to allow all ADA trips to be served. Riders, both ADA and non-ADA could then be allowed to call on the day of service to see if space is available for same day trips.

Subscription service should be provided to ADA riders as long as they are traveling at least once a week to and from the same places at the same times. Subscription service for non-ADA trips should be limited to medical, work and school trips made one or more times a week. Further limitations on non-ADA subscription service could be considered, including a wait list, if non-ADA trip capacity started to get limited.

Phone System, Trip Handling, and Scheduling

To allow riders to call the regional call center without incurring toll charges, it is recommended that an area-wide toll-free number be obtained by RPTA for the service. This number should be “owned” by RPTA and made available to the regional call center so that it could be maintained in the event of a change in call center contractors. A toll-free TTY number should also be obtained and advertised.

An automatic call distribution (ACD) telephone system should be used for the regional service. Two call groups should be set-up on this system, one for general information and reservations and one for same-day issues. A very simple set of options is then recommended for callers, with callers asked to press “1” if they have “a question about a ride scheduled for today” and “2” for “all other needs.” Callers who press “1” would be placed in the same-day call group. Callers who press “2” would be placed in the reservations and general information call group. This would give riders quick access to dispatchers for any service issues at all hours of operation.

The ACD system should be capable of producing daily and monthly performance reports. These reports should identify call volumes, hold times, and abandoned calls by hour of the day. Ideally the system should identify the percentage of calls answered within specified time periods (e.g., within 30 seconds, 60 seconds, 90 seconds, 120 seconds, etc. up to 300 seconds – 5 minutes), as well as retaining maximum hold time information. The reporting system should also provide reports on agent availability by time of day and calls per agent.

All incoming calls to both call groups should be recorded. The recording system should be purchased and owned by the RPTA and provide for a digital call database that is searchable and sortable. Calls should be able to be identified by day and time, call group, workstation, and by caller ID. This will facilitate complaint investigation by the RPTA and call center managers.

It is also recommended that each trip be scheduled based on either a requested pick-up time or an appointment/desired arrival time. In other words, riders would be allowed to state either a requested pick-up time or an appointment time to book a trip – but not both. Riders should be encouraged to use desired arrival times to book going trips where there is an appointment. Riders would then typically book return rides based on a requested pick-up time.

For going trips with stated appointments, reservationists would schedule the trip by entering the appointment time in the “LT” (latest time) field in the Destination tab of the Trapeze trip booking screen. Trip options would then be obtained with the “Activate for requested drop-off” scheduling option toggled on. This would ensure that the scheduling system recognizes the stated appointment as the latest time that the drop-off should be scheduled. A pick-up time that would get the rider to the appointment on or before the stated appointment time would then be identified by the scheduling system.

For going trips with no appointment time, where the rider requests a specific pick-up time, reservationists would schedule these trips by entering the requested pick-up time into the “Req” (requested time) field of the Origin tab in the Trapeze trip booking screen. The system would then generate a pick-up time as close to this requested time as possible.

For return trips, the requested return pick-up time should be entered into the “ET” (Earliest Time) field of the Origin tab in the trip booking screen. This will ensure that the system will not generate a trip offer that requires the rider to leave earlier than desired.

As allowed by the USDOT ADA regulations, requested trip times could be negotiated with riders. Offered times could be negotiated up to an hour before to an hour after the requested time. This negotiation must still meet the rider’s travel needs. The work group developing regional standards developed the following policy regarding trip negotiations:

“When scheduling an ADA trip, the reservationist may offer a time within one hour before or one hour after the trip time requested. The negotiation of times must be conducted as follows:

- 1) It must be a two-way communication between the reservationist and the passenger*
- 2) The time negotiated must be reasonable in terms of the conditions surrounding the passenger’s trip request.*

If the trip cannot be scheduled within one hour before or after the customer’s original requested pick-up time, the trip will be recorded as a denial. If the customer, during the negotiation process, accepts a trip outside of the negotiation window, the trip will be provided. However, the service provider will still record the unavailable trip as a denial, since it was not available within the negotiation window.”

We agree with this recommended policy and recommend that it be used in the operation of the regional paratransit service.

Pick-Up Windows and Vehicle Wait Time Policies

Policies in these areas also would need to be standardized to allow the regional system to function efficiently. Currently, the East Valley and Phoenix DAR programs use a 0/+30 pick-up window for prescheduled ADA service and Phoenix uses a 0/+60 for same day service. The East Valley also uses a 0/+45 window for non-ADA trips. Glendale, uses a -15/+15 window, SCAT a 0/+60 for same day service, Surprise a -10/+10 window, and Peoria a -20/+20 window.

Since same day service is not recommended, the 0/+60 windows used in Phoenix and Sun Cities would not apply. The vast majority of remaining riders (in the East Valley and Central area) are then used to a 0/+30 window for ADA trips. We would, therefore, recommend that, to minimize disruption of current policies, a 0/+30 pick-up window be used in the regional service design for ADA trips. A 0/+45 minute window, similar to that used in the East Valley, is then recommended for non-ADA trips.

We also would strongly recommend that call center agents quote the pick-up window rather than the exact pick-up time. This will reinforce the concept that riders should be ready any time during the stated 30-minute or 45-minute pick-up window.

The above recommendations are consistent with policy recommendations of the Valley Metro policy working group comprised of members who operate paratransit. The Valley Metro paratransit working group recommended the following:

“Reservationists will schedule ADA trips by providing a “30-minute ready window” in relationship to the scheduled pick-up time. The reservationist will define the 30-minute ready window for the customer so that it is clear as to the time period in which the vehicle should arrive. The reservationist will always quote the ready window and never give a customer the ETA or quote a pick up time. The driver will be considered on time if he or she arrives during this 30-minute time period.

Although the vehicle may arrive at any time during this 30-minute ready window, passengers must be ready at the beginning of this 30-minute period to avoid missing the ride and being counted as a no show.”

In terms of vehicle wait time policies, every system except Glendale has adopted a 5-minute wait time policy. Glendale uses a 2-minute wait time policy. National research indicates that a 5-minute wait time is used by more than three-quarters of all ADA paratransit programs. We would, therefore, recommend that the regional system policy be that vehicles will wait 5 minutes within the 30-minute pick-up window before moving on and marking riders as no-shows. This wait time recommendation is more specific than the proposed policy developed by the regional working group. That group

proposed a policy of wait times being from two to five minutes with local systems deciding the applicable wait time.

The regional work group also proposed procedures for drivers to follow should the passenger not appear. These procedures are as follows:

“Every reasonable effort will be made to locate the passenger to include the following:

- 1) The driver will verify the correct location with the Dispatcher*
- 2) Dispatch should check any special notes or comments in the passenger’s file to ensure that the driver is aware of any special directions*
- 3) In some circumstances, Dispatch will make an attempt to contact the passenger via a cell phone number or other phone number*
- 4) The driver will not leave the location until released by Dispatch”*

We agree with these suggested procedures and recommend that they be used in the regional service operation. To assist riders in knowing when vehicles will arrive for pick-ups, we would also recommend that the RPTA customize the dispatch software and purchase IVR technology to allow “call-outs” to be automatically made when vehicles are near or at pick-up locations.

No-Shows and Cancellation Policies

While it would be operationally possible to have different policies for residents of each community, we would recommend a common no-show and cancellation policy for the regional service. For ADA riders, most systems (East Valley, Glendale, Phoenix, SW communities, and Paradise Valley) have adopted a policy that a warning letter is sent for the first occurrence of 3 or more no-shows or late cancellations in a 60-day period. A suspension is then possible for a second occurrence of 3 or more no-shows in a 60-day period. Peoria uses 3 in 30 days. El Mirage uses 3 successive no-shows. Surprise uses 4 or more in six months, and SCAT has no formal policy.

The working group on regional paratransit policies also recommended the following:

“In any given 12-month period, passengers on ADA paratransit service who experience three no shows in a two-month period will receive a warning letter. If the passenger, after receipt of the warning letter, has three additional trip no shows in any subsequent two-month period that passenger may be suspended from ADA paratransit service with appeal rights. Any action to suspend service will only occur after the passenger has been sent a warning letter. All decisions regarding suspension of service will be based on a no-show pattern or practice within a 12-month period.

The definition of “subsequent” two-month period in terms of the length of time following the warning letter will be at the discretion of the transit provider.

A no show is defined as follows:

- 1. A trip in which the passenger is not present within the ready window and at the pre-arranged location, and gives no notice to the paratransit provider.*
- 2. A request to cancel a trip is at the door or not within the timeframe specified by the paratransit provider.”*

Recent FTA guidance in this area also must be considered. FTA has indicated that the policy must be sure to define a “pattern or practice” and that the frequency of no-shows (percent of total rides scheduled) should be considered. Three no-shows in a 60-day period is still a small number of no-shows for a daily rider, while it may be a pattern or practice for an occasional rider. Therefore, we would recommend that the regional system consider three no-shows in a 60 day period to be a “trigger” that would result in a review of a rider’s no-show and late cancel practices. A warning letter or suspension would only be invoked, though, if the review showed that the rider’s no-shows and late cancels constituted more than 10% of total trips scheduled.

Current definitions of “late cancels” also vary by community. A trip cancelled less than two hours before the scheduled pick-up time is a late cancel in Peoria, Phoenix, Paradise Valley, the SW area, and Surprise. A “one hour before” policy is in place in Glendale. El Mirage considers a trip to be late cancelled if the cancellation happens after the vehicle leaves the garage. No formal definition exists in the East Valley or the Sun Cities area.

We would recommend that the regional system define a late cancellation to be a trip not cancelled at least one hour before the scheduled pick-up time. This would ensure that no riders are subject to penalties they are not used to.

In terms of periods of suspension, we would recommend a 14 day suspension for a first verified occurrence; a 30 day suspension for a second occurrence, and a 90 day suspension for third and subsequent occurrences.

We also would recommend that the regional system have a “no-strand” policy. Even if riders no-show return trips, a vehicle should always be sent back to get them and return them home. All current DAR systems have such a policy.

Rider Assistance Policies

Current policies vary, although most systems provide door-to-door service. Phoenix, Paradise Valley, the SW communities, East Valley, El Mirage and Sun Cities riders always receive door-to-door service. Glendale provides door-to-door service on an “as needed” basis. Peoria and Surprise advertise curb-to-curb service only.

Recent FTA guidance requires at least door-to-door service on an “as needed” basis. Strictly curb-to-curb service does not meet ADA requirements.

Given that the vast majority of riders who will be affected by the regional service now receive door-to-door service, we would recommend that this be the policy.⁶ In operation, drivers would be instructed to provide assistance beyond the curb if it was needed, and would go to the door to attempt to locate riders if they did not appear in a short time for scheduled rides. For safe operation, drivers would also be required to not lose “effective continuing control of their vehicles”, not lose sight of the vehicle, provide assistance only to the main door of large facilities, provide assistance up or down a maximum of one step or curb, provide assistance where the path-of-travel is clear and accessible, and never provide service through the door.

Current policies regarding assistance with packages also vary widely. The East Valley allows up to six bags weighing about 15 pounds. Phoenix allows three shopping bags or six plastic bags. Peoria allows three bags with a combined weight of no more than 30 pounds. Glendale has a more general policy that sets no limit as long as the bags can be accommodated, but sets a 50 pound maximum and a requirement that the bags/parcels cannot be too bulky or unsafe to transport. SCAT uses 8-10 plastic grocery bags and then allows drivers to charge a \$3.00 cartage fee if more are transported (an option rarely used). Surprise sets a limit of six bags free and then charges 50 cents per bag after this. El Mirage has no formal limit.

To minimize the impact on current riders, we would recommend a policy of up to six bags each weighing less than 15 pounds. This would be consistent with the East Valley policy and would be somewhat more lenient than the Central area (Phoenix DAR) policy and the Peoria policy. It would be slightly more limiting than current policies in Glendale, Sun Cities, Surprise and El Mirage.

Personal Care Attendants (PCAs) and Companion Policies

To be compliant with ADA requirements, ADA riders should always be allowed to bring a PCA if they are certified in the eligibility process to have a PCA. One companion also should always be accommodated and additional companions accommodated if space is available.

The work group that has been discussing standardized regional paratransit policies has also recommended that the need for and authorization of PCAs be determined as part of the ADA certification process. If a PCA is not identified during the ADA certification process and the passenger requests a trip to be accompanied by a PCA, the PCA will be allowed. The passenger will be advised to contact the ADA Certification office to request a review of their PCA status. The passenger may

⁶ It should be noted that there was not unanimous support for door-to-door service. Some DAR system representatives supported door-to-door service on an “as needed” basis only. Public comment supported door-to-door service.

also be sent a letter and application form allowing them to provide appropriate information regarding their need for a PCA to the ADA Certification office. We would concur that these recommendations be adopted as part of the regional paratransit service design. For simplicity, we would recommend that this policy apply to non-ADA riders as well.

Service Refusal Policies

We would recommend that the standard ADA policy concerning the refusal of service be adopted for the regional system – for ADA as well as non-ADA riders. This policy is that a rider can be refused service if their behavior is illegal, violent or seriously disruptive. Suspensions would be immediate and could be appealed.

6.4. Proposed Regional Performance Standards

This section recommends service performance standards for the regional paratransit program. For each standard, information about regulatory requirements and FTA guidance is first presented. Information about current DAR standards is then presented. Standards suggested by the regional working group that has been meeting in recent months to develop standard policies and procedures are also noted. Recommended standards are then presented.

It should be noted that these recommended standards should be presented to riders with disabilities and the public for input. Final standards should consider rider and public input.

Trip Denial Policies

Regulatory Requirements

Section 131(f)(3) of the USDOT regulations states that a type of capacity constraint considered discriminatory includes “any operational pattern or practice that significantly limits the availability of service to ADA paratransit eligible persons.” Part i(B) of this section notes that one such pattern or practice is a “substantial number of trip denials.” Additional interpretations and guidance on this section have been provided over the past seven years. In *Liberty Resources v. SEPTA*, the Federal District Court in Philadelphia indicated that more than five trip denials a day was considered “a substantial number.” And in *Anderson v. RGRTA*, the Court indicated that RGRTA (the public transit provider in Rochester, NY) had to provide all trips requested one day in advance (i.e., no trip denials for trips requested one day in advance). The FTA also provided written guidance in a letter dated March 23, 1999 from Chief Counsel Reilly to

Mr. Stephen Gold, Esq., that it expects grantees to have sufficient capacity to meet 100% of the demand at all times.

In the same March 23, 1999 letter, the FTA also provided guidance on how grantees should define and count “trip denials.” It indicated that an inability to provide service within an hour of the requested time was a kind of trip denial and “the individual’s acceptance of an alternative time slot does not change the character of the discriminatory act.” It also indicated that an inability to provide a ride both to and from a destination was considered a denial. That is, if a transit system offers a ride to a destination but indicates that a return ride is not available, it must consider this to be two one-way trip denials if the person decides not to make the trip (in the past, some systems would count this as one denial and one “refusal” of a valid trip offer by the rider).

There are no regulations governing the denial of non-ADA trip requests.

Current DAR Standards

The current DAR programs all indicated that they have a zero trip denial policy for ADA trips and most did not report any ADA trip denials in 2006. The Phoenix DAR did report 3,659 ADA trip denials in 2006 and the TranSystems’ review of the program indicated that another 9,984 trips appear to be negotiated more than an hour from the requested time (also a form of trip denial), which suggests about a 4% trip denial rate. Independent monitoring by LIFE also indicated about a 4% ADA trip denial rate. In recent months, the City of Phoenix has implemented trip scheduling changes that are reported to have eliminated all ADA trip denials.

Most current DAR programs do not have a formal trip denial policy for non-ADA trip requests. Phoenix does have a policy to not deny any non-ADA trip requests and SCAT also indicated a policy of always offering some trip option for all non-ADA requests. Other programs have some small number of denials for non-ADA trip requests and serve non-ADA trips on a space available basis after meeting ADA trip needs.

Valley Metro Paratransit Working Group Recommendations

A policy that addresses both advance reservations and trip denials has been developed by the regional working group. The trip denial portion of this recommended policy states that:

“...agencies providing paratransit services must plan and budget to meet 100% of the ADA trip demand at all times.”

Recommended Standard

In keeping with USDOT ADA regulatory requirements, it is recommended that the regional paratransit program be designed and operated to meet 100% of the demand

for ADA paratransit service. Planning and budgeting each year should provide the capacity - equipment and operating budget – to allow the ADA service to be operated without trip denials. This recommendation is consistent with the regulatory requirement as well as the proposed policy developed by the regional working group.

Also in keeping with USDOT regulations, a trip would be considered to be “denied” if it could not be provided within one hour of the requested time.

Non-ADA trip requests would not be guaranteed and would be served on a space available basis. The level of non-ADA service and the number of non-ADA trip denials in each community would depend on the funding available from each community for services above and beyond ADA service.

Telephone Hold Times

It is recommended that the RPTA adopt a telephone performance standard. This standard should be included in the call center contractor contract. The call center contractor should be required to maintain adequate staffing to meet the standard. If telephone standards are not met in two successive months, the contractor should be required to add call takers or take other actions to bring the telephone performance in line with established standards.

Regulatory Requirements

Section 37.131(f)(3) of the USDOT’s ADA regulations states that “Any operational pattern or practice that significantly limits the availability of service to ADA paratransit eligible persons” can be considered a “capacity constraint.” In recent assessments of ADA paratransit compliance conducted by the Federal Transit Administration, long telephone hold times, busy signals and other telephone access problems have been considered types of “operational practices” that fall under this general regulatory requirement.

There is no specific indication in the regulations of what might be an acceptable level of telephone service. In recent ADA paratransit compliance reviews, though, FTA has indicated that standards that set average hold times for any hourly period of the call-in day at two-and-a-half minutes, and set a goal of achieving this standard 95% of the time, might be reasonable. This type of standard might be reasonable in systems where the phone system only reports average hold times. FTA also has indicated that a standard that sets a maximum hold time and then sets a goal to achieve this standard a high percentage of the time might be a preferred approach for systems that have phone management reports that can generate maximum as well as average hold times. In either case, FTA has not set an “acceptable” standard and typically indicates that a standard should be set with community input and the performance tracked by transit systems.

There are no regulations governing telephone performance for non-ADA riders. However, in operations it would be difficult to have a separate standard for ADA and non-ADA service since telephone calls are served in an integrated fashion.

Current DAR Standards

The majority of the current DAR programs do not have a formal telephone performance standard. This includes El Mirage, Peoria, SCAT and Surprise. Glendale reported an informal standard of maintaining an average hold time of no more than two minutes. Phoenix has a formal contract provision calling for average hold times to not exceed two minutes. And the East Valley rates telephone performance on an “A” to “F” scale with “A” being average hold times of 1:30 or less and “F” being average hold times of more than 2:15.

Valley Metro Paratransit Working Group Recommendations

The recommended regional policy regarding telephone service performance developed by the regional working group states that:

“Telephone on-hold times, for those calling to reserve an ADA trip, should average no more than two minutes.”

Recommended Standard

To be consistent with the current standards in Glendale, Phoenix and the East Valley, we would recommend that the regional paratransit service be operated so that average hold times do not exceed two minutes. We would also recommend that average hold times be measured by hour of the day rather than by day, week or month. Measuring hold times by hour is very important. If times are measured by the day, the average is skewed by all the hourly period where no calls are taken and the hold times are zero. We would also recommend that average hold times be measured separately for each call group in the ACD system. Finally, to allow for some hourly periods when there are unexpected peaks in calls (bad weather times, etc.), we would recommend that a goal; be set to meet the two minute average hold time standard for 95% of the hourly periods when calls are received. This goal would apply to all call groups (i.e., call-takers, where’s my ride? and information requests).

On-Time Performance

Regulatory Requirements

Section 131(f)(3) of the USDOT regulations states that a type of capacity constraint considered discriminatory includes “any operational pattern or practice that significantly limits the availability of service to ADA paratransit eligible persons.” Part i(A) of this section notes that one such pattern or practice is a “substantial numbers of significantly untimely pickups for initial or return trips.”

While the regulations only cite “untimely pickups,” FTA has considered untimely *arrivals* (where riders have indicated appointment times or desired arrival times) to also be covered by this section of the regulations.

It is important to note that the regulations do not define what is considered “timely” and what is considered “late.” This definition has been left to the discretion of local transit systems. Industry practice is discussed below.

FTA also has provided some guidance that indicates that systems should strive to be on-time 100% of the time. FTA has recognized, though, that this might not be possible even under the best operating policies and system management. Recent guidance letters appear to allow for some untimely service where circumstances are beyond the control of the transit agency. Recent compliance reviews of ADA paratransit services appear to be focusing on operating policies and practices that might cause service to be untimely. If all reasonable efforts are made to provide capacity, to create reasonable schedules, to cover all created runs in a timely way, and to control and dispatch service effectively, the existence of a small percentage of late pick-ups or late drop-offs has not been considered a violation of the regulations. The actual operating practices, in effect, become more important in determining compliance than the number or percentage of late trips.

There are no regulations governing the on-time performance associated with non-ADA service. Again, though, since ADA and non-ADA service will be provided in an integrated, coordinated fashion, it would be operationally difficult to have a separate standard for ADA and non-ADA trips. To achieve the standard for ADA trips, the overall service would need to be operated according to the on-time performance standard.

Current DAR Standards

Several current DAR programs do not have formal on-time performance standards. This includes El Mirage, Peoria, SCAT and Surprise. Glendale has set a standard of performing at least 95% of trips on-time. Phoenix has a contract requirement that ADA trips be performed on-time at least 90% of the time. Phoenix does not have a formal non-ADA on-time standard, but if non-ADA trips are performed more than 120 minutes after the time requested, the fare is waived. The East Valley program rates on-time performance on a scale from “A” to “F” with an “A” rating meaning that trips were provided on-time 97% of the time or better, and an “F” rating meaning on-time performance was 87.9% or lower. Most current programs base on-time performance measurement on pick-ups. Only the East Valley has established an on-time drop-off standard. That standard is that drop-offs should be made no later stated appointment times. The same performance scale is applied.

As indicated earlier in this report, the pick-up window used to measure on-time performance varies by system. The East Valley and Phoenix DAR programs use a 0/+30 pick-up window for prescheduled service and Phoenix uses a 0/+60 window for

same day service. Glendale, uses a -15/+15 window, SCAT a 0/+60 window for same day service, Surprise a -10/+10 window, Peoria a -20/+20 window and El Mirage a -15/+15 window.

Valley Metro Paratransit Working Group Recommendations

The working group has developed a recommended regional standard for on-time arrivals. This recommended standard is as follows:

“A passenger should arrive at their destination no later than the stated time of their appointment. In addition, the passenger should be scheduled to arrive at their destination no earlier than 30 minutes prior to their stated appointment time.”

Recommended Standard

It is recommended that the regional paratransit service adopt a 0/+30 on-time pick-up window. It also is recommended that the regional service adopt a -30/0 on-time drop-off window for trips that have stated appointments or desired arrival times and are booked based on desired arrival time.

It is then recommended that the contracts with the call center and the service providers identify a range of acceptable performance. Performance would be considered acceptable if pick-ups and drop-offs were made on-time 92-95% of the time. An incentive payment should be included in the contracts for performance that exceeds 95% and a disincentive/liquidated damage should be included for performance below 92%. The call center and service providers should then be required to propose and implement corrective actions if performance is below 92% for three successive months.

In keeping with FTA guidance on this issue, the RPTA also should carefully monitor all aspects of the operation to ensure that there are no operation patterns or practices that are contributing to untimely pick-ups or drop-offs.

For operational consistency, it is recommended that this on-time performance standard be applied to all regional paratransit services – ADA as well as non-ADA.

Missed Trips

Regulatory Requirements

Section 131(f)(3) of the USDOT regulations states that a type of capacity constraint considered discriminatory includes “any operational pattern or practice that significantly limits the availability of service to ADA paratransit eligible persons.” Part i(B) of this section notes that one such pattern or practice is a substantial number of missed trips.

In recent compliance reviews, the FTA has indicated that trips that are not made by riders when vehicles arrive late should be considered missed trips (i.e., carrier failures) rather than passenger no-shows.

There are no regulatory requirements regarding missed trips for non-ADA trips.

Current DAR Standards

The East Valley DAR and Glendale DAR consider a trip to be missed if the vehicle arrives late (i.e., outside the pick-up window) and the ride is not taken – consistent with recent FTA guidance. In Phoenix, a pre-scheduled trip is considered to be missed if the pick-up is made very late (i.e., more than 60 minutes after the scheduled pick-up time). The other DAR systems do not have a formal definition for missed trips. None of the current DAR programs has set a goal related to missed trips.

Valley Metro Paratransit Working Group Recommendations

The regional working group has developed a recommended regional definition of a missed trip. This definition is as follows:

“A missed trip is any scheduled trip that arrives late, after the ready window expires, and the passenger is not transported due to the lateness of the vehicle. This trip will not be counted as a no show or late cancel – thus penalizing the passenger.”

A performance standard related to missed trips has not been developed by the group.

Recommended Standard

It is recommended that the definition of a missed trip currently used by the East Valley and Glendale, and recommended by the regional working group, be used as the definition for the regional paratransit program. That is, a trip should be considered to be missed if the vehicle arrives after the on-time pick-up window and the trip is not taken – either the rider is not there or the rider at that time decides not to take the trip. Trips performed very late (e.g., more than 60 minutes after the scheduled pick-up time) should be tracked as a separate on-time category rather than being considered “missed.”

It is also recommended that the RPTA and member communities adopt a goal of having no more than 1% of trips missed. The call center and service provider contracts should include a disincentive should missed trips exceed 1% of scheduled rides and an incentive payment should missed trips be less than 0.5% of scheduled rides.

It is recommended that this standard be used for both ADA and non-ADA services.

Travel Time

The RPTA should also adopt a formal travel time standard for the regional paratransit service. This standard should be included in the call center contractor contract and the call center contractor should be required to schedule and deliver trips based on this standard.

Regulatory Requirements

Section 131(f)(3) of the USDOT regulations states that a type of capacity constraint considered discriminatory includes “any operational pattern or practice that significantly limits the availability of service to ADA paratransit eligible persons.” Part i(C) of this section notes that one such pattern or practice is a “substantial number of trips with excessive trip lengths.”

“Excessive trip lengths” are not defined in the regulations. Establishing this standard is a local matter. FTA has, however, provided some indication of what might be acceptable in recent compliance reviews of ADA paratransit services. Generally, FTA has determined whether paratransit rides are of a reasonable length by comparing them to fixed route rides with similar origins, destinations, and times of travel. The actual fixed route travel time for a trip is first developed using the local fixed route trip planning service. This time includes waiting for buses if transfers are required. Some additional time is then added to the actual fixed route travel time to account for the time it would take to walk to and from the bus stops and wait for the bus at the origin. This expanded fixed route travel time is then compared to the on-board paratransit time. If the paratransit time is not more than 15-20 minutes longer than the enhanced fixed route time, FTA generally has not considered the paratransit ride time to be “excessive.”

FTA generally has not been supportive of “absolute” standards (e.g., no more than 90 minutes), or percentage comparisons to fixed route travel (i.e., no more than twice the fixed route time for a similar trip). These standards tend to “break down” for shorter trips or for very long trips. For example, if a comparable fixed route trip took only 10 minutes, it would not be reasonable to expect paratransit operators to complete similar trips in a shared-ride system in less than 20 minutes and it certainly would not be reasonable for the paratransit ride time to be “up to 90 minutes.” Similarly, if fixed route travel required two hours, it would not be reasonable to have someone on-board a paratransit vehicle for four hours (using a “twice the fixed route time” type of standard.

There is no regulatory requirement concerning on-board travel times for non-ADA trips. Operationally, though, since ADA and non-ADA services are integrated, a consistent standard for both services would be reasonable.

Current DAR Standards

Several different on-board ride time standards have been established. The most detailed standard has been created in the East Valley. Maximum travel times have been created and set as parameters in the scheduling software based on trip distances. Acceptable maximum travel times range from 30 minutes for trips up to two miles in length, to a maximum of 150 minutes for trips 24 or more miles in length.

Phoenix DAR has established service zones in the City of Phoenix and allows trips to be up to 40 minutes long per zone (up to 110 minutes). In Paradise Valley and the Southwest Area, a flat 60 minute ride time maximum is used.

Glendale DAR also uses a single 60 minute travel time maximum for trips within the City. Surprise DART uses a 90 minute maximum travel time for both local and out-of-city trips. The other systems do not have maximum travel time standards or scheduling parameters.

For trips that involve transfers between DAR systems, a regional policy has been adopted by the East Valley, Phoenix, Glendale, Peoria and SCAT DAR systems. The policy calls for ride times of no more than 60 minutes for each DAR region traveled.

Valley Metro Paratransit Working Group Recommendations

The regional working group developed the following suggested regional travel time policy:

“The ride time on an ADA paratransit service trip will equal the comparable time that it takes to ride fixed route service from the same origin to the same destination.

A ride time will become excessive if it exceeds the time that a comparable trip takes on the city bus to include travel time to the bus stop, five-minute wait at the stop for the bus, time traveled on the bus (buses), and travel time from the bus stop to the destination.”

Recommended Standard

For ADA trips, the formal standard should be that paratransit ride times should be no more than the fixed route ride time plus an allowance for walking to and waiting for the fixed route service. This would then be consistent with the approach being promoted by the FTA. This would also be consistent with the standard recommended by the regional working group.

To operationalize this policy, the Trapeze system should be set so that maximum ride times could be no more than an appropriate multiple of direct ride time. The Trapeze

system allows an on-board ride time table to be created in this way. For example, for trips that would take 0-30 minutes to complete if traveling direct, a maximum on-board time setting of 60 minutes could be defined. This on-board ride time table also allows a ride time “multiple” to be set. That is, the system could be set to have on-board ride times be no more than two times or one-and-a-half times the direct ride time.

It is recommended that for trips with direct ride times of 0-30 minutes, a multiple of twice be used with a maximum of 60 minutes. For trips with direct ride times of 31-45 minutes, a multiple of twice with a maximum of 90 minutes should be set. For trips with direct ride times of 46-60 minutes, a multiple of twice with a maximum of 120 minutes should be set. And for trips with a direct ride time of 61 minutes or more, a multiple of one-and-a-half times with a maximum of 150 minutes should be set. For most trips, this will allow the shared-ride time to be twice the direct travel time. For very long trips, though, the standard will require that somewhat more direct service be provided so that on-board ride times do not exceed two-and-a-half hours for even the longest possible trip. Before these settings are used, it is recommended that they be tested with real trip data to determine the impacts on the generation of trip options and on service productivity.

It is then recommended that the call center contractor and the RPTA periodically analyze the longer trips in the system compared to fixed route travel times for similar trips. This periodic analysis will determine whether or not the Trapeze settings used to operationalize the standard are appropriate. Adjustments should then be made accordingly.

For simplicity, it is recommended that non-ADA ride times be measured the same way. A common definition of a “reasonable travel time” should not depend on whether a trip is ADA eligible or not.

6.5. Estimated Demand, Capacity, Fleet Requirements and Costs

This section provides estimates of the number of trips that would be provided by the regional paratransit program. It also provides an estimate of the number of vehicle-hours that would need to be operated and the size of the fleet that would be needed to provide a regional service. These estimates are provided for the Phase I design as well as for a full regional system (which assumes West Valley communities eventually elect to have non-ADA trips provided through the regional system). This section also includes a discussion of staffing that will likely be needed at the RPTA, the regional call center, and the service providers.

Regional service costs and funding are also discussed. A methodology for allocating costs to participating member communities is also presented. It should be noted that exact cost estimates depend on several variables that are difficult to quantify at this point. The main variables are the renegotiation of current contracts with the East Valley

and Phoenix DAR providers, and transition costs that would be associated with adjustments to those contracts. These issues are discussed in this section but will need to be the subject of negotiations between the contractors, the RPTA and the City of Phoenix. Attempts to quantify these variables before negotiations are initiated do not seem to be advisable or appropriate at this point in time. Instead, general cost estimates based on data from peer systems have been developed and are presented in this section.

Estimated Ridership

Table 6.10 below shows FY2006 ridership for the DAR services that are expected to be part of the Phase I regional paratransit design. It also shows FY2006 non-ADA ridership in the West Valley communities. This additional ridership would be included in the regional program if any or all of these communities opted to have the regional system provide their non-ADA service. Table 6.10 then provides estimated ridership for each area FY2010. Ridership estimates for FY2010 reflect recent trends in each area and the analysis of trends detailed in Section 4 of this report.

The following assumptions about future ridership were made:

- ◆ ADA ridership in the East Valley has been increasing significantly in recent years and non-ADA ridership has been decreasing. Based on the trend-line analysis in Section 4 of this report, an increase in ADA ridership of 80% between FY2006 and FY2010 is expected. Even though trend-line analysis shows non-ADA ridership decreasing, for planning purposes, non-ADA ridership is assumed to remain constant at the most recent (FY2007) levels (44,053 trips).
- ◆ Total ridership in the Phoenix/Paradise Valley/SW area has increased by 84% in the past six years. ADA ridership has increased by 118% during this time. Non-ADA ridership has remained somewhat constant and actually decreased from FY2006 to FY 2007. Continued ADA growth is estimated, but at a slightly lower rate. A 42% growth in ADA ridership is predicted for Phoenix between FY2006 and FY2010. As detailed in Section 4 of this report, non-ADA ridership decreased slightly from FY2006 to FY2007. For planning purposes, though, non-ADA ridership is assumed to remain constant at the FY2007 level (103,981 trips). Significant growth in ADA ridership (273%) is predicted for the Southwest communities, based on recent trends and on expected population growth in the area. A slight reduction in ADA ridership (already very minimal) is predicted for Paradise Valley.
- ◆ Ridership in Glendale has remained relatively constant in the past few years and actually fell slightly in 2006. This appears to be due to the development of other transportation options. Level ADA trip growth is estimated for FY2007-FY2010 and only slight increases in non-ADA ridership.
- ◆ Ridership in Peoria was relatively constant from FY2000 through FY2005. In the past year, though, ridership increased significantly (by 26%). ADA ridership remained constant, though, at about 500 trips per year. Continued growth in this

area is expected. An 18% increase in non-ADA ridership is estimated between FY2006 and FY2010.

- ◆ Ridership in the Sun Cities area has fluctuated slightly over the past six years, has been relatively constant during this time, and fell slightly in the past three years. Ridership is expected to recover somewhat, but will likely remain at about 60-62,000 trips per year in FY2007-FY2010.
- ◆ Ridership in Surprise was relatively constant from 2000 through 2004, but has increased significantly (70%) in the past two years. Continued growth is expected in this area. Trend-line analysis in Section 4 shows a potential 112% increase from FY2006 to FY2010. This trend-line is affected by the extraordinary growth in the last two years.
- ◆ Ridership in El Mirage has remained relatively constant over the past six years. While additional demand exists in this community, ridership is expected to remain at about 1,866 trips per year unless additional vehicles, staff and service capacity is added.

Table 6.10. Current and Estimated FY2010 DAR Ridership

Community/Service	FY2006 Ridership		FY2010 (est) Ridership (1)	
	ADA	Non-ADA	ADA	Non-ADA
Phase I Ridership Estimates				
East Valley:				
Chandler	14,678	7,441	24,063	4,545
Gilbert	7,584	4,450	16,644	3,098
Mesa	70,319	25,915	134,042	8,120
Scottsdale	20,514	17,495	32,362	15,226
Tempe	20,091	16,867	32,335	13,064
Sub-Total East Valley	133,186	72,168	239,446	44,053
Phoenix/PV/SW Communities:				
Phoenix	255,625	114,562	362,168	103,981
Paradise Valley	104	NA	83	NA
SW Communities (total)	6,592	NA	24,568	NA
Sub-Total Phoenix/PV/SW	262,321	114,562	386,819	103,981
Glendale ADA	24,270	NA	27,600	NA
Peoria ADA	469	NA	552	NA
SCAT ADA	65	NA	110	NA
Total Phase I Ridership	420,311	186,730	654,527	148,034
Possible Additional Phase II Non-ADA Ridership				
Glendale Non-ADA	NA	60,336	NA	64,596
Peoria Non-ADA	NA	42,560	NA	50,431
Surprise Non-ADA	NA	12,578	NA	26,728
SCAT Non-ADA	NA	57,091	NA	61,198
El Mirage Non-ADA	NA	1,466	NA	1,866
Total (All DAR Services)	420,311	360,761	654,527	352,853

(1) Assumes the regional program is started at the beginning of FY2010. Additional regional ridership is included in estimates for this year.

These estimated ridership levels are based on recent trends in ridership in each community (see Section 4 of this report). Assuming that the regional paratransit service is started in FY2010, the ridership levels indicated in that year should be used to estimate the amount of service that would be provided by the regional paratransit program.

As shown, a total of 781,072 one-way trips were provided by all DAR services in the region in FY2006. This included 607,041 trips in the East Valley, Phoenix, Paradise Valley, and the SW Communities, as well ADA trips in other communities - the services that would be part of the Phase I regional service design. Assuming that the regional service is started in FY2010, additional inter-regional ridership was also estimated for that year. As detailed in Section 6.2 of this report, the proposed regional service design would no longer require vehicle-to-vehicle transfers between cities and sub-regions. Some transfers may still be used for very long trips, but these would be based on scheduling efficiencies rather than required transfer policies. Transfers would be the exception rather than the rule. As a result, additional regional travel would be facilitated and demand for regional travel would likely increase.

To estimate the likely increase in regional paratransit trips, general public travel patterns on the fixed route service were compared to current DAR travel patterns.⁷ These travel patterns are shown in Table 6.11 below. As shown, DAR riders make fewer regional (out-of-area) trips than general public fixed route riders. The differences are more pronounced in the East Valley and the West Valley than they are in Phoenix/Central area. In the East Valley, 33.9% of general public fixed route trips are to places outside the East Valley while only 6.7% of DAR trips are outside of this sub-region. In the West Valley, 71.7% of general public fixed route trips are outside of this sub-region, while only 9.2% of DAR trips are outside the sub-region. In the Phoenix/Central area, 11.2% of general public fixed route trips are outside the area while 8.6% of DAR trips are to places outside the sub-region.

Table 6.11. Comparison of General Public Fixed Route Travel Patterns and Current DAR Travel Patterns

	East Valley	Phoenix/Central	West Valley
Fixed Route Trips			
% Local	66.1%	88.8%	28.3%
% Regional	33.9%	11.2%	71.7%
Total	100%	100%	100%
Current DAR Trips			
% Local	93.3%	91.4%	90.8%
% Regional	6.7%	8.6%	9.2%
Total	100%	100%	100%

⁷ For a more detailed discussion of general public fixed route travel patterns and current DAR travel patterns, see "Task 2 Report: Overview of Dial-A-Ride, Taxi Subsidy and Mileage Reimbursement Programs in the RPTA Area" which was prepared as part of this study.

It is likely that some of these travel pattern differences are due to long travel times experienced by DAR riders who must transfer one or more times to make inter-region trips. It is also possible, though, that some of this difference is due to the differences in the types of trips made by DAR versus general public fixed route riders. For example, fewer work trips (which are likely more regional) are made by DAR riders than general public fixed route riders.

The ridership estimates in Table 6.10 above assume that a greater percentage of inter-regional trips will be made under the regional service design. It is assumed that the current differences in regional travel between general public fixed route riders and DAR riders will be halved. So, for example, while currently there is a 27.2% difference in the East Valley in regional travel (33.9% versus 6.7%), it is assumed that this difference will be reduced to 13.6% and that paratransit riders will make 20.3% of their trips outside the area rather than the current 6.7%. In the West Valley, where the current difference is 62.5% (71.7% versus 9.2%), it is assumed that the difference will be reduced to 31.2% and that 40.4% of paratransit trips will be regional rather than the current 9.2%. In the Phoenix/Central area, where the current difference is 2.6% (11.2% versus 8.6%), it is assumed that the difference will be reduced to 1.3% and that 9.9% of paratransit trips will be regional rather than the current 8.6%.

These assumptions suggest that ridership will increase above and beyond the growth seen in recent years. As noted above, natural growth of 10% per year is expected in the East Valley based on recent ridership trends. An additional increase of 13.6% can be expected due to greater regional travel (the difference between 20.3% regional travel and the current 6.7% regional travel). In the Phoenix/Central area, ridership is expected to increase by 14% per year based on recent trends. In addition, ridership is estimated to increase by 1.3% due to a modest increase in regional travel. In the West Valley, ridership is expected to increase by 31.2% due to additional regional travel. This would be in addition to natural growth based on recent trends.

The additional percentage increases in ridership due to increased regional travel are applied to all trips in the East Valley and the Phoenix/Central area. This is done since ADA and non-ADA riders can currently travel out of the area. In the West Valley, the percentage increases due to additional regional travel are applied only to ADA trips since non-ADA service is typically provided only within each city.⁸

Finally, the ridership estimates in Table 6.10 above assume that changes in regional travel patterns will take place over time. It is assumed that travel patterns will adjust over a three year period. Additional regional ADA ridership of 4.5% (one-third of 13.6%) is therefore included for the East Valley in FY2010. Additional regional ADA ridership of 0.4% is included in FY2010 for the Phoenix/Central area. And additional regional ridership of 10.4% (for ADA trips only) is included in FY2010 for West Valley communities.

⁸ Depending on cost constraints faced by member communities, it would also be possible for communities in the East valley to restrict non-ADA travel just to the East Valley sub-region. This would result in a lower number of regional trips and lower costs.

Taking both natural expected growth and increased regional travel into consideration, it is estimated that if the regional paratransit service is started in FY2010 and is based on the Phase I design, a total of 802,561 trips would be provided. If all West Valley communities opted to have their non-ADA service provided through the regional program under Phase II, regional paratransit ridership could be as high as 1,007,380.

Estimated Vehicle-Hours of Service

Table 6.12 below shows the number of vehicle-revenue-hours of service operated by each community in FY2006. The service hours are again divided among those programs expected to be part of the Phase I regional paratransit design and West Valley communities that might opt to have non-ADA services provided through the regional program under Phase II. Revenue-hours for ADA versus non-ADA services were developed by pro-rating total reported revenue-hours in FY2006 using the percentage of ADA versus non-ADA ridership.

Table 6.12. Current and Estimated DAR Vehicle Revenue-Hours

Community/Service	FY2006 Rev-Hrs.	FY2010 (est) Rev-Hrs (1)
East Valley (ADA and Non-ADA)	121,607	172,088
Phoenix, Paradise Valley and SW Communities (ADA and Non-ADA)	283,516	369,594
Glendale ADA	8,582	10,140
Peoria ADA	120	154
SCAT ADA	22	39
Total ("Base" Regional Design)	413,847	552,015
Glendale Non-ADA	21,012	22,496
Peoria Non-ADA	11,918	14,122
Surprise Non-ADA	6,554	13,927
SCAT Non-ADA	21,780	23,347
EI Mirage Non-ADA	1,613	2,053
Total (All DAR Services)	476,724	627,960

(1) Assumes the regional program is started at the beginning of FY2010. Additional revenue-hours are included for additional regional trips provided at a lower productivity.

As shown, a total of 476,724 vehicle revenue-hours of service were provided by the DAR programs in 2006. This included 413,847 revenue-hours operated for services that would be included in the Phase I regional paratransit design.

Estimates of revenue-hours for FY2010 were developed using the estimated growth in ridership included in Table 6.11. In FY2010, slightly lower productivities are applied to

account for the increased number of regional trips that are predicted. For example, in the East Valley and the Phoenix/Central areas, a productivity of 1.0 trips per vehicle revenue-hour is assumed for the additional regional trips. This productivity is then applied to the number of additional regional trips and combined with vehicle hours for other services. In West Valley communities, a 2.0 productivity is assumed for ADA trips in the Phase I design as these trips would be operated separate from the current services. The 2.0 productivity is similar to the productivity reported by STS for its current, regional services.

As shown, a total of 552,015 revenue-hours are estimated for Phase I in FY2010. If all West Valley non-ADA services are included in the regional system in Phase II, the estimated revenue-hours for all services would be 627,960.

Therefore, it is estimated that if the regional paratransit service is started in FY2010 and is based on the Phase I design, a total of 552,015 vehicle revenue-hours of service would need to be provided. If all West Valley communities opted to have their non-ADA service provided through the regional program in Phase II, the needed capacity could be as high as 627,960 revenue-hours.

Estimated Fleet Size and Capital Needs

Table 6.13 below shows the number of vehicles operated by East Valley DAR and Phoenix DAR in FY2006 to deliver the number of vehicle revenue-hours noted in Table 6.12 above. It also estimates the number of vehicles that likely would be needed by Glendale, Peoria and SCAT to deliver ADA trips in these areas. This estimate is based on a simple percentage of ADA trips versus total trips applied to the total fleets. For example, Glendale DAR operated 21 vehicles in 2006 and ADA trips accounted for 29% of total trips provided. The number of vehicles estimated for the ADA service is therefore six (.29 times 21).

Table 6.13 also shows the estimated number of vehicles needed in FY2010 to meet the predicted demand for service in each community and to operate the number of vehicle revenue-hours required. The estimates of additional vehicles in Table 6.13 are based on the estimated percentage increases in revenue-hours needed in each area in each year.

As shown, the estimate suggests that 253 vehicles would be needed to operate the Phase I regional service, and 308 vehicles would be needed if the regional design was used to provide all ADA and non-ADA services in the region.

Table 6.13. Current and Projected Fleet Needs

Community/Service	FY2006 Vehicles	FY2010 (est) Vehicles (1)
East Valley (ADA and Non-ADA)	63	89
Phoenix, Paradise Valley and SW Communities (ADA and Non-ADA)	120	156
Glendale ADA	6	8
Peoria ADA	0	0
SCAT ADA	0	0
Total (“Base” Regional Design)	189	253
Glendale Non-ADA	15	16
Peoria Non-ADA	10	12
Surprise Non-ADA	7	15
SCAT Non-ADA	10	11
El Mirage Non-ADA	1	1
Total (All DAR Services)	232	308

(1) Assumes the regional service is started in FY2010

Assuming the regional paratransit service is started in FY2010, it is estimated that a total of 237 vehicles would need to be operated by service providers as part of the Phase I regional paratransit design. This would include 89 vehicles by the service provider located in the East Valley, 156 vehicles by the service provider in the Phoenix/Central area, and 8 vehicles by the service provider located in the West Valley. If all West Valley communities opt to have the regional system provide their non-ADA service in Phase II, a total of 308 vehicles would need to be operated – 89 in the East Valley, 156 in the Phoenix/Central area, and 63 in the West Valley.

All vehicles would also need to be equipped with MDT and AVL technology and equipment. Fortunately, the current East Valley and Phoenix DAR service providers already have this equipment on their vehicles and the equipment is similar (Orbital TMS Smart MDT systems). It will therefore be possible to simply use this equipment as part of the regional paratransit program.

In the West Valley, STS does not have MDT and AVL technology on their vehicles. They are planning to add this technology in 2007. Assuming that the RPTA negotiates with STS to be the initial regional service provider in the West Valley, it would be advantageous to have them procure MDT and AVL systems that are similar to those now used in the East Valley and Phoenix. This equipment could then be easily integrated into the new regional operation.

All vehicles also would need to have two-way voice radio equipment. Veolia and MV Transportation, the current East valley and Phoenix DAR contractors each have a 450 MHz two-way radio system. Assuming that the RPTA negotiates with these two

companies to serve as the initial regional service providers in their areas, these existing radio systems could be used for the regional system. The RPTA should consider purchasing these existing systems from the two companies as part of the redesign of service and the move to a regional program under the administration of the RPTA.

STS currently uses Nextel walkie-talkies for two-way voice communications. To allow the vehicles operated on a dedicated basis by STS for the regional service in the West Valley to be integrated into the regional dispatch system, the RPTA would need to buy mobile radios for vehicles operated on a dedicated basis by STS. These mobile radios should tie into the existing 450 MHz base stations that would be purchased from Veolia and MV Transportation. An additional repeater site in the West Valley may also need to be added as part of the regional two-way radio system.

Alternately, if STS is only operating ten vehicles (the Phase I design), the RPTA could elect to simply continue the use of the Nextels in the short-term and purchase new radio equipment when the West Valley operation is expanded to serve non-ADA trips in some of all communities.

The Trapeze software licenses currently held for the East Valley and Phoenix DAR operations could also be transferred to the RPTA as part of the negotiation and implementation of the regional services. The East Valley licenses are already held by the RPTA. The Phoenix licenses are held by the City of Phoenix. It should therefore be possible to negotiate with Trapeze to have the licensee held by these two public entities reassigned to the RPTA. Some reprogramming services will be required for the regional service – including new service area polygons and a new fare matrix. The regional eligibility module will also need to be customized and implemented.

While there is existing computer hardware in use in the East Valley and Phoenix operations, we would recommend that new servers and workstations be purchased. This is recommended so that the regional call center can be fully set-up and used as a training site without interrupting the existing operations. The transition will be much easier if duplicate systems can be run during the transition period.

As noted earlier in this report, an ACD telephone system also will be needed. It is recommended that the hardware and software for this system be owned by the RPTA and made available to the call center contractor. The call center contractor would then purchase the telephone lines and monthly service and support needed for the regional operation. While there are existing systems in the East Valley and Phoenix operations, we would again recommend that a new system be purchased. This will allow the phone system to be installed during the transition period without interrupting the existing operations.

Staffing

RPTA Staffing

As noted in Section 6.2 of this report, the RPTA will need to develop a paratransit staff to oversee and manage the regional program. The following staff are recommended:

- ◆ A Paratransit Manager.
- ◆ A Fleet/Facilities Coordinator.
- ◆ Contract Administrators to monitor contractors and review monthly invoices.
- ◆ Customer service staff to manage the comment/complaint process.

It is recommended that the RPTA employ five Contract Administrators (CAs). This would allow for one CA to manage the regional call center contract and review call center contractor invoices. It would also provide for four CAs to oversee the three service provider contractors and review invoices submitted by them. Two of these four CAs should focus on invoice reviews, service statistics, performance, penalties and incentives, etc. The other two could then do field observations.

Another three staff should be employed for Customer Service (CS) functions. This would include the handling and investigation of customer comments and complaints.

It is recommended that the Paratransit Manager and Contract Administrators be located in the same building as the regional call center contractor. This will allow them to observe the operation first-hand and manage the service more effectively. The additional Customer Service staff would be housed at the current RPTA central customer service office. Some eligibility staff would be located at the RPTA's main offices while others might be co-located with the contractor(s) hired to assist with in-person functional assessments if the recommendation to move to an in-person eligibility determination process is implemented.

RPTA staff currently employed to manage the East Valley DAR service should be assigned new duties under the regional program. It is also recommended that the RPTA consider employing existing member community transportation staff whose responsibilities may be reduced as a result of regionalization of paratransit services under the RPTA.

Call Center Staffing

As noted in Section 6.2 of this report, the contractor that would provide regional call center staffing would need to have the following types of employees:

- ◆ A General Manager.
- ◆ A Call Center Supervisor.
- ◆ Reservationists.
- ◆ Schedulers.
- ◆ Dispatchers.
- ◆ An IT and Data Manager.
- ◆ Data reconciliation clerks and administrative support staff.

To get an idea of the number of reservationists, schedulers and dispatchers that would be needed, the six peer systems that operate services in the same way as is proposed for the regional RPTA system were contacted. Information about the number of reservationist FTEs, scheduler FTEs and dispatcher FTEs at each location was obtained. Table 6.14 below provides this information. Table 6.14 also shows the total number of trips per year handled by the call center staff at each system. An average number of FTEs for each 100,000 trips provided is then calculated.

As shown, about 4.0 FTE reservationists, a 0.7 FTE scheduler, and 2.6 FTE dispatchers are reported by the peers for every 100,000 trips per year. Applying these staffing ratios to the estimated Phase I regional system design ridership, it is estimated that the regional call center for the Phase I design would require 29 FTE reservationists, 5 FTE schedulers, and 19 FTE dispatchers. If all West Valley communities opted to have non-ADA service provided through the regional system (the full regional system design), about 38 FTE reservationists, 7 FTE schedulers, and 25 FTE dispatchers would be needed.

Table 6.14 also shows current DAR staffing levels in these areas for comparison. As can be seen, the communities and services that would become part of the Phase I regional design now collectively have 25 FTE reservationists, only 2 FTE schedulers, and 19 FTE dispatchers. The Phase I regional system would therefore require that an additional 4 FTE reservationists and 3 FTE schedulers be available. It is likely that with normal growth, at least this number of additional reservationists and dispatcher would already be hired by FY2010. The current operations tend to run with few schedulers, though, so additional schedulers might need to be hired at the time that the regional system is implemented.

A similar situation would exist if a full regional system design were to be implemented. Currently, all DAR systems have 32 FTE reservationists, 4 FTE schedulers and 22 FTE dispatchers. It is estimated that for a full regional system with adequate staffing to address current telephone hold times and scheduling needs, an additional 6 FTE reservationists, 3 FTE scheduler, and 3 FTE dispatchers would be needed. Again, it is

likely that at least this number of reservations and dispatch staff would be available at the time of the implementation of the regional system. Additional schedulers would need to be hired, though, unless the current operations increase their staffing levels in this area.

Table 6.14. Call Center Staffing Information

System	Trips/Year	Reservationist FTEs	Scheduler FTEs	Dispatcher FTEs
DART, Dallas	591,885	30.1	NA	23
RTD, Denver	427,959	22	4	13
Metro, Seattle	1,057,990	21	9	24
RTC, Las Vegas	567,104	29	1.5	15.5
VIA, San Antonio	917,237	30	7	14
Tri-Met, Portland	780,957	23	4	14
Average Staffing per 100,000 trips	NA	4.0	0.7	2.6
Phase I Regional Design	802,561	29	5	19
Current Services In Phase I Design (1)	607,041	25	2	19
Full Regional System (2)	1,007,380	38	7	25
Current – All DAR Services (3)	781,072	32	4	22
<p>(1) Includes ridership and call center staffing in the East Valley DAR and Phoenix DAR systems in 2006. It is assumed that all Glendale, Peoria and SCAT staff would remain with those operations to operate non-ADA services</p> <p>(2) Full regional system assumes all West Valley communities opt to have non-ADA trips channeled through the regional call center.</p> <p>(3) Includes ridership and call center staffing in East Valley, Phoenix, Glendale, Peoria, SCAT, Surprise, and El Mirage DARs in 2006. Does not include STS ridership or staff.</p>				

Service Provider Staffing

As noted in Section 6.2 of this report, each service provider contractor involved in the regional paratransit program would need to have the following types of employees:

- ◆ A General Manager.
- ◆ “Window” dispatchers to check drivers out and in.
- ◆ Road supervisors.
- ◆ Drivers (including extraboard drivers).
- ◆ A driver trainer (or a shared trainer).
- ◆ A Maintenance Supervisor and mechanics (if maintenance performed in-house).
- ◆ Other support and clerical staff as needed.

If the Phase I regional design were implemented, current contractors – Veolia, MV Transportation and STS – have adequate staffing in most of these areas. The review of current services did indicate, though, a shortage of drivers in some areas. Additional drivers would need to be provided by current contractors for the regional program.

Operating Costs

An estimate of the ongoing operating costs for a regional service were developed by gathering cost data from peer systems that operate paratransit services using the proposed regional design. Peer systems that operate paratransit programs of a similar size to that projected for the RPTA area were used.

Table 6.15 on the following page provides estimates for ongoing annual operating costs for the Phase I design as well as a full Phase II regional design. Separate estimated costs are provided for the regional call center and for service provider operations in each sub-region. Ranges of costs (a low estimate and a high estimate) are provided for each item.

Call center cost estimates were developed by analyzing call center cost data obtained from Tri-Met in Portland, Oregon and King County Metro in Seattle, Washington. Both of these transit agencies contract for call center operations similar to those proposed for the RPTA area. The Tri-Met call center handles about the same number of trips per year that are predicted for the RPTA Phase I design. The Seattle call center handles more trips, so costs were scaled down to the level estimated in the Phase I design.

The costs from Tri-Met were \$2,114,910 for FY2006. This figure was inflated 3% each year to FY2010. The Tri-Met budget also did not appear to include rent for the facility, so \$125,000 was added for this item. The inflated FY2010 estimate, with a facility allowance, is \$2,509,100 and is included in Table 6.15 as the low estimate.

Data from King County Metro showed an annual FY2006 cost of \$2,173,109. This was again inflated by 3% per year to FY2010. It also did not appear to include facility costs, so the same allowance of \$125,000 per year was added. The resulting estimate of \$2,574,603 is included in Table 6.15 as the high Phase I design estimate.

Both sets of costs were then inflated to reflect the higher number of trips predicted under the Phase II full regional system. A higher facility allowance of \$150,000 was included. The resulting adjusted estimate based on the Tri-Met data of \$2,844,295 is included as the low estimate for the full regional system. The estimate of \$2,918,313 based on King County Metro cost data is included as the high estimate for the full regional system.

Information about service provider rates of reimbursement was also collected from King County Metro and Tri-Met. These rates were based on recent competitive bids. This information showed that service provider costs in FY2006 ranged from \$43.40 per

Table 6.15. Estimated Year 1 (FY2010) Ongoing Annual Operating Costs for Regional Paratransit Service Design Options

	Phase I Design	Full Regional System
Regional Call Center		
Low Estimate	\$2,509,100	\$2,844,295
High Estimate	\$2,574,603	\$2,918,313
East Valley Operation	Est. Rev-Hrs/Yr: 172,088	Est. Rev-Hrs/Yr: 172,088
	Cost/Hr (low): \$48.84	Cost/Hr (low): \$48.84
	Cost/Hr (high): \$55.49	Cost/Hr (high): \$55.49
Low Estimate	\$8,404,778	\$8,404,778
High Estimate	\$9,549,163	\$9,549,163
Phoenix/Central Operation	Est. Rev-Hrs/Yr: 369,594	Est. Rev-Hrs/Yr: 369,594
	Cost/Hr (low): \$48.84	Cost/Hr (low): \$48.84
	Cost/Hr (high): \$55.49	Cost/Hr (high): \$55.49
Low Estimate	\$18,050,970	\$18,050,970
High Estimate	\$20,508,771	\$20,508,771
West Valley Operation	Est. Rev-Hrs/Yr: 10,333	Est. Rev-Hrs/Yr: 86,278
	Cost/Hr: \$56.28	Cost/Hr (low): \$48.84
		Cost/Hr (high): \$55.49
Low Estimate	\$581,541	\$4,213,818
High Estimate	\$581,541	\$4,787,566
TOTALS	Est. Rev-Hrs/Yr: 552,015	Est. Rev-Hrs/Yr: 627,960
Low Estimate	\$29,546,389	\$33,513,861
High Estimate	\$33,214,078	\$37,763,813

vehicle-hour to \$49.30 per vehicle-hour. These rates were based on design assumptions that are similar to those proposed – the providers only deliver service and maintain vehicles; they do not perform reservations, scheduling or dispatch functions; vehicles are provided by the public entity; and the service providers are responsible for providing the facility. The FY2006 rates obtained from Tri-Met and King County Metro were then inflated by 3% per year to FY2010. A range of unit costs of \$48.84 to \$55.49 was then used to develop service provider costs in the East Valley and Phoenix/Central area. The same cost estimates were also used to estimate service provider costs in the West Valley for the full regional system. A slightly higher unit cost was used to estimate West Valley service provider costs (\$56.28) in the Phase I design. This unit cost figure is based on an estimate by STS that operating costs for a small, 8 vehicle dedicated fleet would be about \$50 per hour. This current \$50 rate was then inflated 3% per year to estimate FY2010 costs.

As shown, it is estimated that the total operating cost for the first year (FY2010) operation of the Phase I service would range from a low of \$29,546,389 to a high of \$33,214,078. For the full regional service, including all West Valley non-ADA as well as ADA services, the cost is estimated to range from \$33,513,861 to \$37,763,813.

Start-Up Costs

The above annual operating costs for the first year of operation do not include start-up costs for the new regional call center. These start-up costs include facility modifications and furnishings, system hardware and software, Trapeze system customization, a new telephone system, and two-way radio base stations, antenna and installation. Table 6.16 below provides an estimate of start-up costs for the Phase I system call center. These estimates are based largely on a detailed recent analysis conducted by the RPTA as part of an application for New Freedoms funding for a call center.

Table 15. Estimated Start-Up Costs for Phase I Service Call Center

Item	Quantity	Unit Cost	Subtotal
Facility modifications and office furnishings			\$400,000
Computer Work Stations & Printers	50	\$2,150	\$107,500
Desktop Software	50	\$750	\$37,500
Database Server	1	\$48,000	\$48,000
Oracle Database	1	\$30,000	\$30,000
Trapeze Scheduling Servers (Production and Test)	2	\$10,000	\$20,000
Trapeze Map Server	1	\$7,000	\$7,000
Domain Server	1	\$9,000	\$9,000
Redundant Power and AC for Server	1	\$15,500	\$15,500
IVR Automation	1	\$251,500	\$251,500
Network Infrastructure	1	\$254,000	\$254,000
Trapeze software customization			\$300,000
Telephone System with MIS and recording capability	1	\$210,000	\$210,000
Two-way Radio Base Stations with installation	6	\$4,000	\$24,000
TOTAL COST:			\$1,714,000

Other transition costs such as hiring and training of call center staff are typically included in base proposal costs. These would be covered as part of the ongoing call center operating costs detailed in the previous section.

As shown, it is estimated that call center start-up costs for the Phase I service would be about \$1,714,000. It is also estimated that an additional 10% would be needed for the slightly larger full regional service call center – or about \$1,885,400.

RPTA Administrative Costs

Cost estimates for the additional RPTA administrative staff described earlier in this report are provided below in Table 6.17. Total costs are shown as well as current expenditures for administrative staff. Two currently funded positions could be assigned new positions in the Regional paratransit service and would not require additional funding. The RPTA Paratransit Program Coordinator for the East Valley operation could become one of the Contract Administrators. A current Customer Service Representative position is currently filled by a Veolia employee. This person and the funding for this position could be shifted to the RPTA under the new regional paratransit program. Estimated additional administrative costs, beyond these two existing positions is estimated to total about \$923,600. This cost would be about the same for either the Phase I or full Phase II regional service.

Table 16. Estimated RPTA Annual Costs for Administration of a Regional Paratransit Service

Position	#	FTE Cost (salary, fringe and OH)	Total Cost (FY2010)	Amount Currently Funded (FY2006)	Estimated Expense for Current Staff (FY2010)	Additional Funding (FY2010)
Paratransit Manager	1	\$166,900	\$166,900	0	0	\$166,900
Contract Administrators	5	\$114,000	\$570,000	\$114,000	\$128,305	\$456,000
Lead Customer Service Rep.	1	\$70,800	\$70,800	0	0	\$70,800
Customer Service Rep.	2	\$63,700	\$127,400	\$63,700	\$71,695	\$63,700
Adm. Assistant	1	\$84,900	\$84,900	0	0	\$84,900
Fleet/Facilities Coordinator	1	\$103,600	\$103,600	0	0	\$103,600
Total			\$1,123,600	\$177,700	\$200,000	\$923,600

Capital Costs

Phase I Design

If it is assumed that existing fleets in the East Valley DAR and Phoenix DAR programs will be expanded appropriately between now and the time that the regional service is implemented, most of the vehicles needed to operate the regional services in each of these areas should be available at the time of the change to a regional model. This should include about 89 vehicles in the East Valley and about 156 vehicles in the Phoenix/Central operation. To meet the fleet requirements of the Phase I design (see Table 6.13 above), another 8 vehicles would be needed for the regional West Valley operation.

Assuming that 20% of the estimated fleet of 245 vehicles made available at the beginning of FY2010 would need to be replaced in FY2010, FY2011, FY2012, FY2013, and FY2014, the RPTA would need to purchase 49 replacement vehicles in each of these years. Also, assuming that the service would grow by about 10% per year for the first five years, the RPTA would need to add 25 expansion vehicles in FY2011, 28 expansion vehicles in FY2012, 31 expansion vehicles in FY2013, and 34 vehicles in FY2014. Table 6.18 below shows the number of replacement, and expansion vehicles that will be required for the five year period from FY2010 through FY2014. Total capital costs, assuming a \$60,000 per vehicle cost in FY2010 and a 3% cost increase each year thereafter are also shown. The split between federal capital assistance and local match is also shown.

Table 6.18. Vehicle Needs and Costs for Phase I Regional System, FY2010-FY2014

	FY2010	FY2011	FY2012	FY2013	FY2014
Total Fleet Size	253	278	306	337	371
Replacement Vehicles	49	49	49	49	49
Expansion Vehicles	8	25	28	31	34
Total Capital Cost	\$3,420,000	\$4,573,200	\$4,901,358	\$5,245,090	\$5,605,034
Federal Share (80%)	\$2,736,000	\$3,658,560	\$3,921,086	\$4,196,072	\$4,484,027
Local Share (20%)	\$684,000	\$914,640	\$980,272	\$1,049,018	\$1,121,007

Phase II Full Regional System

If all West Valley communities opt to provide non-ADA services through the regional system, a total of 308 vehicles would be operated starting in FY2010. This would include 89 by the East Valley service provider, 156 by the Phoenix/Central service provider, and 63 by the West Valley service provider.

Assuming that 20% of the fleet of 308 vehicles operated at the beginning of FY2010 would need to be replaced in FY2010, FY2011, FY2012, FY2013, and FY2014, the RPTA would need to purchase 61-62 replacement vehicles in each of these years. Also, assuming that the service would grow by about 10% per year for the first five years, the RPTA would need to add 31 expansion vehicles in 2011, 34 expansion vehicles in FY2012, 37 expansion vehicles in FY2013, and 41 vehicles in FY2014. Table 6.19 below shows the number of replacement, and expansion vehicles that will be required for the five year period from FY2010 through FY2014. Total capital costs, assuming a \$60,000 per vehicle cost in FY2010 and a 3% cost increase each year thereafter are also shown. The split between federal capital assistance and local match is also shown.

Table 6.19. Vehicle Needs and Costs for Full Regional System, FY2010-FY2014

	FY2010	FY2011	FY2012	FY2013	FY2014
Total Fleet Size	308	339	373	410	451
Replacement Vehicles	62	61	62	61	62
Expansion Vehicles	0	31	34	37	41
Total Capital Cost	\$3,720,000	\$5,685,600	\$6,110,784	\$6,425,235	\$6,955,644
Federal Share (80%)	\$2,976,000	\$4,548,480	\$4,888,627	\$5,140,188	\$5,564,516
Local Share (20%)	\$744,000	\$1,137,120	\$1,222,157	\$1,285,047	\$1,391,129

Summary of Costs and Proposed Funding

Table 6.20 on the following page provides a summary of RPTA administrative costs, call center start-up costs, call center operating costs, service provider costs, and capital costs for the first year of operation of a regional paratransit program. Costs are shown for both the Phase I design and the full regional system. Low and high cost estimates are provided for call center operating costs as well as for service provider operating costs.

As shown, additional RPTA administrative costs are estimated to be \$923,600 in the first year of the regional program. This cost would be the same for either the Phase I service or the full regional service. It is proposed that these administrative costs be funded with unallocated Proposition 400 funding. After year one, it could be expected that these costs would increase by about 3% per year.

Call center startup costs for the Phase I design are estimated at \$1,714,000 and at \$1,885,400 for the full regional service. It is recommended that the RPTA use unallocated Proposition 400 funding for this one-time start-up cost.

A range is provided for the annual call center operating costs for the first year. For the Phase I design, the cost range is estimated to be between \$2,509,100 and \$2,574,603. For the full regional service, the range is estimated at between \$2,844,295 and \$2,918,313. After the first year, it could be assumed that annual call center operating costs would increase at a rate of about 5-10% per year in the near future. Initially, these costs would be allocated to member communities along with provider operating costs. It is recommended, though, that the RPTA explore the option of using federal Section 5309 capital funding to cover 80% of the call center costs. Federal capital funding can be used to fund "Mobility Manager" services. In our opinion, the regional call center, which would coordinate the provision of ADA, senior and general public paratransit costs, would qualify as a "Mobility Manager." If this were done, only 20% of the call center costs would then be allocated to member communities.

Annual service provider costs for the first year are estimated at between \$27,037,289 and \$30,639,475 for the Phase I design. Service provider operating costs are estimated at between \$30,669,566 and \$34,845,500 for the full regional service. It is proposed that all of these costs be allocated to member communities based on the amount of service received by resident. As is currently done, member communities would use several different available funding sources to cover these costs. This would include fares collected from riders and credited to each member community, LTAF funding, Proposition 400 funding that has been allocated to the member communities, T2000 funding, city general fund monies and other funding deemed appropriate by each member community.

Finally, an estimated \$3,420,000 in capital costs are expected in the first year for the Phase I design and \$3,720,000 is estimated in year one for the full regional service. As

is currently done, these costs would be funded with 80% federal S.5307 funding. The remaining 20% would be allocated to member communities – again based on the amount of service delivered to residents.

Table 6.20. Summary of Year One (FY2010) Costs and Proposed Funding for Phase I Design and Full Regional Paratransit Service

	Phase I Service Design	Full Regional Service
RPTA Administrative Costs	\$923,600	\$923,600
Proposed Admin. Funding:		
Unallocated Proposition 400	\$923,600	\$923,600
Call Center Start-Up Costs	\$1,714,000	\$1,885,400
Call Center Start-Up Funding:		
Unallocated Proposition 400	\$1,714,000	\$1,885,400
Call Center Operation Costs	\$2,509,100 - \$2,574,603	\$2,844,295 - \$2,918,313
Call Center Operation Funding:		
Member Communities	\$2,509,100 - \$2,574,603	\$2,844,295 - \$2,918,313
Service Provider Operations Costs	\$27,037,289 - \$30,639,475	\$30,669,566 - \$34,845,500
Member Communities	\$27,037,289 - \$30,639,475	\$30,669,566 - \$34,845,500
Capital Costs	\$3,420,000	\$3,720,000
Capital Funding:		
Federal S.5307 Capital	\$2,736,000	\$2,976,000
Member Communities	\$684,000	\$744,000
Total (All Costs)	\$35,603,989 - \$39,271,678	\$40,042,861 - \$44,292,813
Funding:		
Federal S.5307 Funding	\$2,736,000	\$2,976,000
Unallocated Proposition 400	\$2,637,600	\$2,809,000
Member Communities (Prop 400 allocations & other local funds)	\$30,230,389 - \$33,898,078	\$34,257,861 - \$38,507,813

As Table 6.20 indicates, a total of \$2,637,600 would be required for Phase I in the first year from unallocated Proposition 400 funding to cover the added RPTA administrative costs as well as the call center start-up costs. After the first year call center start-up, only the additional RPTA administrative costs would need to be covered by Proposition 400 funding. Assuming that administrative costs increase 3% per year from FY2010 through FY2026, the total amount of unallocated Proposition 400 funding needed through FY2026 is estimated to be \$21,835,302. Currently, the RPTA has indicated that about \$64 million of the expected Proposition 400 funding remains unallocated.

Allocation of Costs to Member Communities

Given the way that public transit services are currently funded in the RPTA area, a mechanism must be developed to allocate the costs of the regional paratransit service among participating jurisdictions. When developing such a plan, it is recommended that the following objectives be established in developing the cost sharing plan:

- Cost distribution must be equitable, reflecting the relative consumption of services by community;
- Cost distribution should be relatively simple and easily understood by elected and technical representatives of the participating jurisdictions;
- Data necessary to compute the allocation of costs should be based on readily available data.
- Data for cost allocation computations should be uniformly available and collected/computed in a consistent manner among dial-a-ride operations.
- Data necessary to compute the allocation of costs should be verifiable and subject to audit oversight.

While these objectives are direct and straight forward, they are often difficult to implement. Issues of fairness and consideration to existing methodologies that may be in place are paramount. Any time a new allocation methodology is employed, some existing entities may face favorable or unfavorable fiscal impact as a result of application of a new methodology.

Conventional approaches to cost allocation have recognized that fully allocated variable operating costs are a function of both time (hours) and distance (miles). This methodology is often best applied in computing the fully allocated costs of a particular transit service but can fail tests of simplicity when applied to allocation of cost between communities when services may involve multi-loading or ridesharing on particular vehicle runs. Thus, typical approaches, attempting to achieve simplicity, may use the following units of service to allocate costs:

- Passenger trips;
- Passenger hours;
- On-board passenger-miles; or
- Direct distance passenger-miles.

Table 6.21 below summarizes the main data challenges as well as positive and negative attributes of each method of cost allocation. It is recommended that the latter method – direct distance passenger miles be used for its equity attributes, ease of calculation, and lack of any significant negative attributes. It is further recommended that passenger miles be attributed to communities based on the place or residence of the riders. In this way, each community will only be assessed for services provided to its residents. This will be particularly important since riders in Phoenix will have access to an unlimited ride monthly pass, while riders in other communities will not.

Table 6.21. Attributes of Typical Cost Allocation Measures

Allocation Unit	Data Element	Positive Attributes	Negative Attributes
Passenger trips	Single one-way unlinked passenger trip	Simple, relatively easy passenger accounting requirements, easy to understand.	Short trips subsidize long trips; does not work well when different size of jurisdiction
Passenger hours	On/off time stamps for each passenger trip or manual recording if MDT/MDC devices not present	Time based allocation methods perceived as accurate as labor (a time based expense) is most significant operating expense.	Complex passenger accounting; penalizes residents in outlying areas; creates inequities when multi-loading, an efficient practice, prolongs passenger travel times. Inequities in areas with more severe traffic congestion
On-board passenger miles	On/off odometer stamp for each passenger or manual recording if MDT/MDC devices not present	Perceived as very accurate and equitable. Distance based measure can be easier to verify/audit than time based allocation measures.	Creates inequities when multi-loading, an efficient practice, prolongs passenger travel distances. Can discourage ridesharing or multi-loading, an efficient practice.
Direct distance passenger miles	Direct distance between origin and destination as calculated by automate scheduling system.	Perceived as very accurate and equitable. Distance based measure can be easier to verify/audit than time based allocation measures.	No significant negative attributes.

There are currently some issues with developing estimated allocations of cost based on direct passenger miles. Upgrades to the existing base maps in existing software are needed to ensure that calculations based on the actual street network are accurate. Some of the current providers also do not have complete enough databases of completed trips to allow an automated calculation to be done. It is recommended that work on the current base maps be done to make them as accurate as possible in the regional system. The start-up costs estimated above include an allocation for the needed upgrades, customization and map work.

Estimated Allocations for FY2010 Phase I Service

While a complete and accurate region-wide database of trips was not available to allow allocations based on direct passenger miles to be run, the study team developed an alternate approach to estimate the likely costs that would be allocated to participating member communities. This alternate approach allocated costs based on the number of trips expected to be provided in each community. The number of trips predicted for each community was then adjusted by the estimated productivity of the service in each area. This adjustment using productivities was done to reflect the differences in trip lengths and ride-sharing in each community.

An estimated allocation for the Phase I service design was developed for the first year of the regional service (FY2010). Table 6.22 shows the results of this rough estimate of cost allocations. Estimated FY2010 ridership is first shown for each community that would participate in the Phase I regional service. The percent of the total ridership is then calculated for each community.

Productivities for each current DAR operation are then shown. As shown, the Phoenix DAR operated in FY2006 at a productivity of 1.44 boardings per vehicle-revenue-hour. The East Valley DAR operated at a higher productivity of 1.77 boardings per vehicle revenue-hour. It is assumed that the East Valley and Phoenix providers would continue to operate at similar productivities under the regional service model. Productivities for only the ADA service in the West Valley is assumed to be 2.0 trips per vehicle-revenue-hour, which reflects the higher productivities of the Glendale, Peoria and SCAT systems adjusted down to reflect the more regional nature of the ADA service that would be provided in these areas.

A “productivity adjustment factor” is then calculated for each community. This adjustment factor is the ratio of productivities for that community compared to the estimated system-wide regional service productivity. This adjustment factor is used to take into account the differing service efficiencies in each community that reflect different trip lengths and different levels of trip grouping (both which are then reflected in the service productivity).

The share of the FY2010 ridership is then multiplied by the productivity adjustment factor to determine the share of system-wide costs that would be allocated to each community. These allocation percentages are then multiplied by the total estimated

system-wide costs for the regional call center, the service provider operating costs, and the local community 20% share of anticipated capital costs. Note that the average of the low and high estimates of the call center and provider operating costs are used for these estimates. Table 6.22 then shows the estimated allocation of all costs (call center, provider operating costs and local share of capital costs) for each community.

To compare this to current costs, Table 6.22 then shows the reported total operating costs in each community in FY2006 and estimates what the FY2010 costs would be based on the current system. This is done by inflating FY2006 costs by the percentage increase in ridership predicted and inflating costs by 3% each year (which was done when estimating the regional system costs). Note that these “Estimated FY10 Ops. Costs with Existing DAR and Predicted Growth” numbers show estimated operating costs only and should be compared to the estimated regional call center and operating costs (excluding the regional capital costs).

As shown, the estimated allocation of regional call center and regional operating costs to Phoenix, the Southwest communities and Paradise Valley is higher than estimated costs based on current DAR services. This appears to be due to two factors. First, the current cost of the Phoenix DAR provider is very low. Second, productivities for the Phoenix DAR are lower than in other areas (possibly due to longer average trip lengths and less grouping of trips).

Estimated regional costs allocated to the East Valley are lower than estimated FY2010 costs based on the current system. This is due to the fact that the current DAR provider costs are relatively high as well as the fact that the current service operates at a higher productivity due to shorter trip lengths and more grouping of trips.

Estimated regional costs allocated to Glendale are slightly higher than the estimated FY2010 costs for the current service. This is due to the lower estimated productivity for providing just the ADA trips compared to the average productivity of all services in Glendale. It should be noted, though, that it is possible that the actual productivity of ADA trips in Glendale is lower than the system-wide average productivity and that Glendale’s current costs for ADA trips is really higher than is estimated based just on a straight pro-rating of the trips.

Estimated regional costs to Peoria are also higher than the estimated FY2010 costs for the current system. Again, as in Glendale, this is due to the lower estimated productivity of delivering just ADA trips. As in Glendale, it is possible that the actual productivity of ADA trips is lower than the system average and that current costs for ADA trips are higher than shown.

Finally, regional costs for Sun City are higher than current SCAT costs. This is due partly to the very low cost of the current SCAT service. At the same time, ADA trips provided by SCAT might actually have a higher cost than the average trip provided (due to the fact that ADA service is sometimes provided during the early morning and early evening, when the rest of the SCAT service is not operating. Separating ADA service

from non-ADA service could allow SCAT to reduce its service hours to only non-ADA hours and potentially lower service costs.

It is important to note that Table 6.22 provides a rough estimate of the first year costs that would be allocated to each community for the Phase I design. Because of data limitations, this estimate is based on an alternate method of cost allocation – not the recommended method. As suggested in the “Allocation of Costs to member Communities” section above, it is recommended that costs be allocated based on direct passenger-miles of service for trips taken by residents of each member community. Prior to the actual start-up of a regional service, the RPTA should gather additional data from each DAR service and make the software improvements needed to allow direct passenger-miles of service to be used and to be able to attribute passenger-miles to residents rather than trip origins.

It is also very important to note that the allocations in Table 22 are for cost estimates for FY2010. To make a fair comparison to current system costs, communities should use estimated ridership and costs expected in FY2010 rather than current ridership and costs. It is also important to realize that the costs shown in Table 22 include all costs – both capital and operating costs. In making comparisons, member communities should identify both types of current costs.

Additional Phoenix Cost and Policy Considerations

As noted in Section 6.3 of this report, it is recommended that non-ADA service be provided on a space available, advance reservation (next-day) basis. Section 6.4 then recommends that high standards be set for the provision of this service. It is recommended that an on-time performance standard of 92-95% be adopted.

This represents a change to the way non-ADA service is currently provided in Phoenix. Currently, non-ADA riders in Phoenix receive guaranteed same-day service. The quality of this same-day service, though, is not good. The review of the Phoenix DAR service indicated that on-time performance for non-ADA trips was only 60% in FY2006. In FY2007, on-time performance declined further to only 50%.

The costs and allocations for the Phase I regional system assume that the number of non-ADA trips provided in Phoenix in the first year (FY2010) would be equal to the number of non-ADA trips reported to have been provided in FY2007. A total of 103,981 non-ADA trips are included in the cost and allocation calculations in Table 6.22. To provide these trips at the level of quality recommended (92-95% on-time), it will be important that service be provided on a next-day, space available basis. Once the on-time performance is improved, the demand for non-ADA service can be expected to

Table 6.22. Estimated First Year Member Community Cost Allocation for the Phase I Regional Service Using Trips By Community Adjusted for Productivity Differences

	Estimated FY2010 Ridership (1)	% FY10 Ridership	Productivity (2)	Product./ Adjustment Factor (3)	FY10 Share (4)	Estimated FY10 Call Center Costs	Estimated FY10 Operating Costs	Estimated FY10 Capital Costs	Estimated FY10 Total Costs	Current FY06 Operating Costs	Est FY10 Ops. Cost with Existing DAR and Predicted Growth
Est. FY10 Operating Cost						\$ 2,541,852	\$ 28,838,382	\$ 684,000	\$ 32,064,234		
Phoenix/Central	490,800	61.1542%	1.4400	1.0955	66.2036%	\$ 1,682,797	\$ 19,092,039	\$ 452,832	\$ 21,227,668	\$ 12,439,977	\$ 18,233,351
Phoenix	466,149	58.0827%	1.4400	1.0955	62.8784%	\$ 1,598,276	\$ 18,133,119	\$ 430,088	\$ 20,161,484		
SW Communities	24,568	3.0612%	1.4400	1.0955	3.3140%	\$ 84,236	\$ 955,691	\$ 22,667	\$ 1,062,594		
Paradise Valley	83	0.0103%	1.4400	1.0955	0.0112%	\$ 285	\$ 3,229	\$ 77	\$ 3,590		
Subtotals	490,800	61.1542%	1.4400	1.0955	66.2036%	1,682,797	19,092,039	452,832	21,227,668		
East Valley	283,499	35.3243%	1.7734	0.8895	31.0516%	\$ 789,286	\$ 8,954,783	\$ 212,393	\$ 9,956,462	\$ 6,717,959	\$ 10,397,257
Chandler	28,608	3.5646%	1.6499	0.9561	3.3745%	\$ 85,775	\$ 973,156	\$ 23,082	\$ 1,082,013	\$ 783,388	\$ 1,140,375
Gilbert	19,742	2.4599%	1.4488	1.0888	2.6519%	\$ 67,409	\$ 764,778	\$ 18,139	\$ 850,326	\$ 487,183	\$ 899,543
Mesa	142,162	17.7135%	1.9254	0.8193	14.3696%	\$ 365,254	\$ 4,143,958	\$ 98,288	\$ 4,607,500	\$ 2,823,764	\$ 4,694,964
Scottsdale	47,588	5.9295%	1.7849	0.8838	5.1888%	\$ 131,891	\$ 1,496,361	\$ 35,491	\$ 1,663,743	\$ 1,317,560	\$ 1,856,651
Tempe, incl Guadalupe	45,399	5.6568%	1.6162	0.9760	5.4668%	\$ 138,958	\$ 1,576,536	\$ 37,393	\$ 1,752,887	\$ 1,306,064	\$ 1,805,723
Subtotal	283,499	35.3243%	1.7734	0.8895	31.0516%	789,287	8,954,790	212,393	9,956,470	\$ 6,717,959	\$ 10,397,257
Glendale	27,600	3.4390%	2.0000	0.7887	2.6805%	\$ 68,135	\$ 773,018	\$ 18,335	\$ 859,487	\$ 684,892	\$ 794,037
Peoria	552	0.0688%	2.0000	0.7887	0.0536%	\$ 1,363	\$ 15,460	\$ 367	\$ 17,190	\$ 10,770	\$ 12,923
Sun City	110	0.0137%	2.0000	0.7887	0.0107%	\$ 272	\$ 3,081	\$ 73	\$ 3,425	\$ 785	\$ 1,359
TOTALS	802,561	100.0000%	1.5775	NA	100.0000%	2,541,852	28,838,380	684,000	32,064,232	\$ 19,854,382	\$ 29,438,927

- (1) Includes increased ridership based on recent trends plus first year increases in regional travel. Additional regional travel can be expected in FY2011-2012. In the East Valley, about 6,874 additional regional trips can be expected in FY2011 and FY2012. In Phoenix and the SW communities, an additional 3,340 regional trips can be expected in FY2011 and FY2012. In the West Valley, and additional 5,324 regional trips can be expected in FY2011 and FY2012.
- (2) Productivity is based on boardings per revenue-hour. Phoenix/Central is FY2006. East Valley is FY2007.
- (3) Productivity Adjustment Factor is systemwide average productivity divided by productivity for that community
- (4) FY10 Share is FY10 Ridership times Productivity Adjustment Factor

increase. And, we would not recommend that the RPTA assume responsibility for continuing to provide non-ADA service to Phoenix residents which is on-time only 50-60% of the time.

Significantly higher costs and allocations could be expected if the City of Phoenix chooses to have same-day, guaranteed, non-ADA service provided as part of the regional system. As noted in Section 4 of this report, it is estimated that the demand for non-ADA service in the City of Phoenix would be about 388,431 trips in FY 2010 if service were provided at good quality and in an advance reservation basis. If good quality same-day service were provided, it is estimated that the demand for non-ADA service in Phoenix would be 741,903 trips in FY 2010. This is more than seven times the current non-ADA ridership.

If same-day, guaranteed service is provided with good quality in the City of Phoenix as part of the regional system, the Phase I system-wide ridership could increase to as high 1,440,483 trips, the total operating and capital costs could increase to \$57,550,746 and the allocation to the City of Phoenix would increase to \$45,909,189.

Section 7. Related and Supplemental Services

In addition to implementing a regional paratransit service, it is strongly recommended that the RPTA and its member communities work to expand travel options for persons with disabilities, seniors and other transit dependent populations. Some of the transportation options and programs that have been effectively implemented by peer systems include:

- ◆ Travel training to facilitate greater use of the fixed route service;
- ◆ Free fixed route bus and rail fares for riders who qualify as ADA paratransit eligible;
- ◆ Taxi subsidy programs; and
- ◆ Paratransit-to-fixed route “feeder” services.

Implementing these types of services and programs will not only improve mobility for riders with disabilities and seniors, but will provide more cost effective alternatives to relatively costly paratransit service. Each of these options also promotes greater use of general public transit and taxi service, which is consistent with the goals of the ADA to provide services to persons with disabilities that are integrated rather than separate.

It should be noted that the RPTA and some of its member communities have already implemented some of these types of services and programs. Travel training has been provided by some local communities and agencies. Several different taxi subsidy programs are also currently available. And several communities have started local community bus programs.

Possible options for implementing each of these service and programs, or for expanding existing programs, are provided in this section. Information about programs implemented by peer systems is also provided.

It should also be noted that an informal group has been created in the RPTA area to work on the expansion of supplemental transportation programs and services. This group, which has adopted the name of TransACT (Transportation Alternatives for Community Travel), attended a national workshop sponsored by Easter Seals Project ACTION (ESPA), which promoted the implementation of supplemental services. TransACT has collected information about programs and services in other cities and has begun to develop a possible action plan for the RPTA area. The RPTA and member communities should consider supporting the work of this group and utilizing these individuals to promote the development of supplemental services and programs.

7.1 Travel Training Programs

Providing instruction and training in the use of fixed route services has been proven to be an effective way to facilitate greater use of mainstream public transit in many communities across the country. A number of national reports have documented that this is a very cost-effective way to help expand the transportation options available to seniors and persons with disabilities. Several of the peer systems contacted also indicated that they administer effective travel training programs.

Some agencies and communities in the RPTA area has developed limited travel training programs. Following is a description of the programs that now exist. Information about peer system travel training programs is then presented. Recommendations for expanded regional travel training efforts are then provided.

Current Travel Training Programs

Background

Research, conducted with a grant from Project Action identified the barriers to bus use by people with disabilities and older adults in the Phoenix metro area. High on the list were lack of familiarity and fear of getting lost, both of which could be overcome.

One-on-One Bus Training

Based on this finding, a travel training manual was developed and a Peer Travel Training program for people with disabilities and older adults was initiated in Phoenix. Experienced bus users with disabilities are recruited and trained to help their peers to use the bus. Through a series of incremental steps, students move from complete dependence on their trainer to independent bus use. Trainers receive hourly compensation.

This program, now operated by LIFE is the only formal one-on-one travel training program in the valley that is offered by public transit. It currently includes a special travel training element for people with developmental disabilities. The cities of Phoenix and Scottsdale contract with LIFE for this service. Organizations that serve people with disabilities and older adults are encouraged to refer people to LIFE for this training.

For people who are sight impaired, Orientation and Mobility Training is provided by two agencies, Arizona DES Rehabilitation Instructional Services and Arizona Center for the Blind and Visually Impaired.

Special requests for individual bus training may be accommodated by RPTA staff or the staff of various other city transit departments.

Group Training

LIFE in addition to individual training provides group training directed to people with disabilities and older adults. Classes are provided at the group's facility and tailored to the particular audience. Following one or two presentations, the group is taken on a trip using either a dedicated vehicle or more often the regular bus system.

RPTA provides extensive group instruction in using the bus. Students in elementary schools and high schools, with and without disabilities are provided with classes in using the bus and if resources permit, a bus is made available for demonstration.

In the past couple of years the RPTA has conducted a series of workshops to familiarize older adults with bus travel. The program began in Glendale and is now in Phoenix and Mesa. Workshops are held at Senior Centers. Following the workshops, field trips are taken to destinations attractive to the recipients. Incentive gifts are provided to use on the bus including tote bags, water bottles, umbrellas and free bus tickets.

Recommendation

Currently the requests for bus travel training are sparse. Making travel training a condition of Dial-a-Ride eligibility would enable people to try the bus. If this turned out to be a poor option for a given individual, this would be readily apparent during training. On the other hand, for others, exposing them to the bus in a comfortable and safe manner with a peer trainer could open up the possibility of independent travel.

Peer System Travel Training Programs

Several of the peer systems offer free travel training programs for their customers with disabilities who wish to ride fixed route buses and trains. Several peer transit agencies have developed travel training programs including DART, King County Metro, Orange County DART, OCTA, and TriMet. They are highlighted below.

King County Metro

To facilitate use of the fixed route system by persons with disabilities, King County Metro has implemented several different travel-training programs that address the needs of persons with various disabilities. This includes one-on-one "destination training" for persons with cognitive disabilities, and individual and group system "orientation training" for seniors and persons with physical disabilities who have never used the system. Metro contracts for individual destination and system orientation training.

Metro pays for successfully completed individual trainings. This encourages the contractor to carefully assess people for the potential to learn to use the fixed route system. Individual, one-on-one "destination training" is successfully provided to about 180 persons a year. The contract calls for a reimbursement of \$1,638 per successful

training, or \$1,093 for a second training to a different destination for a previously trained rider. This price includes the cost of assessing participants' travel potential, the training itself, and a six-month assessment report of participants' fixed route travel.

Group "orientation training" involves two or three partial days of instruction and is often done in cooperation with local senior centers and schools. On the first day, participants are given several hours of classroom training that covers all issues associated with using the bus service. This includes reading route maps and schedules, figuring out fares, planning a trip, and important bus service policies. At the end of the first day, participants plan an actual trip to be taken on the second day. The group meets and travels to a bus stop, boards and rides the bus to a selected location, spends time on this outing, and then returns on the bus. If necessary, a second trip can be taken. This group training is provided primarily to Special Education classes at schools and to various senior centers and programs. The contractor provides about 50 group trainings a year. Typically, each group has about 8-10 participants. Metro paid \$437 for each group orientation training session completed by the contractor.

Instruction in using accessible buses is also available. A bus is taken to the local VA hospital twice a month. At one session, individuals who are interested in learning how lifts and securement systems work meet the bus at that site. At the second session, the bus is ramp equipped since Metro is now purchasing only ramp accessible vehicles. Metro also provides paratransit service to those who need lift training. Metro pays the contractor \$437 for each lift training session conducted. Approximately six people can be trained per session.

Finally, the contractor makes presentations on fixed route and other Metro services to community groups and agencies. About 48 of these "outreaches," attended by about 1,200 people, are conducted each year. Metro pays the contractor \$437 for each completed "outreach" presentation.

For riders with vision disabilities or who are deaf-blind, the contractor has a sub-contract with the local Lighthouse for the Blind and Community Services for the Deaf and Blind. These agencies provide specialized training. To further encourage people with vision disabilities to use fixed route, Metro received a grant from the state of Washington in the FY 2005-2007 biennium specifically to fund travel training for this population. These trainings are not reflected in this report. Metro provides free bus identification kits for people who are blind or deaf-blind to help them use the fixed route system.

A detailed analysis of Metro's Travel Training efforts showed a net savings of \$226,777 in 2005 when compared to providing the same volume of trips on paratransit. When riders continue to use the fixed route system in following years the savings are even greater.

DART, Dallas (excerpted from DART website)

DART Paratransit Services offers Travel Training to people with disabilities wishing to ride public buses and trains to reach a wide variety of destinations. DART's Travel Training Program is available free to persons with disabilities who are able to use accessible fixed-route bus and rail transportation. Certified Paratransit riders travel free when using fixed-route bus or rail service.

The Travel Training Program uses qualified instructors to take riders step-by-step through learning how to ride buses, trolley-buses and trains. The program also teaches participants all of the practical skills to travel the DART System with confidence and safety. Training for bus and rail transit services does not make passengers ineligible for ADA paratransit services.

Orange County (CA) Mobility Planning Services Program (excerpted from OCTA website)

OCTA's Mobility Planning Services (MPS) Program is intended to enrich people's lives by promoting creative solutions that enhance independence and mobility in the community. Not only does MPS enhance independence and mobility for individuals, it is also a strategy that OCTA has elected to use to better manage ACCESS service demand and to improve the transportation alternatives available to seniors and persons with disabilities. There are two phases to this project, (1) "The Bus Stops Here" mobility training program, and (2) Train-the-Trainer/Technical Support. The purpose of the Mobility Training Workshop is to provide mobility training to:

- ◆ ACCESS riders who have restricted eligibility (trip-by-trip or conditional).
- ◆ Persons who do not qualify for ACCESS service (denied).
- ◆ Seniors who do not qualify for ACCESS and could use the fixed-route system, but are unfamiliar with the services available to them.

The intent of the workshop is to teach individuals with or without disabilities how to utilize their community's public transportation system, thereby becoming as independent as possible.

The Train-the-Trainer program is designed to promote greater use of fixed route services by clients of various human services agencies in the county. Train-the-Trainer Workshops and Technical Support provides two (2) days of education to train non-profit organizations, social service agencies, and other community resources in providing Mobility Training Workshops for people with disabilities and seniors.

TriMet's RideWise Program (excerpted from TriMet's website)

RideWise provides travel training and education for senior citizens and people with disabilities. By providing information on transportation choices, personal trip planning and instruction in riding buses and MAX trains, *RideWise* helps passengers build the

confidence and skills needed to use all the transit options available at TriMet. Specifically, RideWise provides:

- ◆ Information on transportation services available.
- ◆ Help in choosing the mode of transportation that best fits the type of trip to be taken.
- ◆ Personal and group orientation in boarding actual TriMet buses and MAX trains using vehicles not in service.
- ◆ Personal and group travel training with a *RideWise* volunteer or staff member using in-service vehicles.
- ◆ Follow-up support and training as needed.

RideWise is a unique partnership between TriMet and Ride Connection, a non-profit community service organization that coordinates transportation services among more than 30 providers. There is no charge for most *RideWise* services, although donations are accepted.

Recommended Program for the RPTA Area

In addition to the travel training efforts already underway in the area, it is recommended that a regional effort be coordinated by the RPTA. Specifically, it is recommended that the RPTA implement the following travel training programs:

One-on-One Training. It is recommended that the RPTA execute contracts with 4-5 local agencies that agree to assist with one-on-one training of paratransit riders. Each contract should specify a set cost per rider referred. Contracts should be executed with various agencies so that training to riders with a variety of disabilities can be provided. This should include one or more agencies that can provide training to riders with cognitive disabilities, one or more agencies that can provide training to riders with physical disabilities, and one or more agencies that can provide training to riders with vision disabilities. Agencies selected should have experience in providing one-on-one travel training and should have the staff expertise to provide this training safely and effectively. Assuming an average cost per rider trained of \$1,500 and allowing for 200 trainings per year, these 4-5 contracts should total about \$300,000 per year. The RPTA could request New Freedoms funding to help support this program.

Potential trainees should be identified as part of the in-person eligibility determination process. In addition to determining each rider's ADA paratransit eligibility, the process would assess applicants' appropriateness for travel training and potential to be successfully travel trained. If the interview and assessment indicate that an applicant could benefit from travel training and has the potential to be successfully trained, eligibility would be granted for a limited period of time (e.g., one year) and travel training would be encouraged. Information about available programs would be made available to the applicant, and the applicant would be referred to an appropriate training contractor.

Group Training. Two possible types of group, classroom training are possible. One is currently being used by the City of Glendale and one by Sun Tran in Tucson, AZ. A brief description of each type of program is provided below.

Glendale Model. The City of Glendale currently provides workshops and sponsors bus outings that help older adults to become familiar with using local bus services – particularly the local, community GUS buses. The workshops are provided between October and May at participating senior centers, senior apartment housing, etc. Training is provided in three phases:

Phase One includes introduction to Transit Lifestyle, with survey of each participant's current transportation habits. Students board a Valley Metro bus to learn and try all features of the bus. Phase One also includes workshop "Introduction to Trip Planning" and group field trip on local Valley Metro bus.

Phase Two workshop includes further instruction on planning a bus trip. Also introduces participants to "Frequent Rider Game." A round-trip Valley Metro group bus field trip is taken.

Phase Three includes round table discussion; what is working, how can we help; etc. Includes a round-trip group field trip on Valley Metro bus. Each student participates in "graduation to Transit Lifestyle" that includes gifts.

To promote the workshops, Glendale has sometimes provided gift certificates to local stores that can be used as part of sponsored outings. The workshops have reportedly been effective in promoting use of the local GUS buses and encouraging seniors to use the GUS buses in addition to local DAR services.

Tucson Model. The City of Tucson, through its Transportation Department and Sun Tran and Van Tran services, works with L.I.F.E., Inc. to sponsor about 18 training workshops each year. The workshops are designed for people with disabilities as well as older adults. Attendance is free and a courtesy Van Tran paratransit ride can be arranged. Spanish translation is available for each session.

The program encourages bus operators and passengers to "walk in each other's shoes." Operators learn to assist passengers; people with disabilities and older adults learn the job duties of bus operators. Each four-hour training program includes:

- ◆ A discussion regarding the Americans with Disabilities Act requirements;
- ◆ Scenarios, using PowerPoint, of how bus operators and passengers can assist each other;
- ◆ Instruction provided by Customer Service Representatives of the Sun Tran system on how to purchase fares, how to read a Ride Guide (Bus Book), etc.;
- ◆ A group trip on a city bus to the transit center and then a tour of the transit center;
- ◆ Customer Service Representatives discussion of features of the buses, including: how to request a stop; the voice annunciator; where to locate number of bus, etc.;

- ◆ Other information and questions are discussed through use of topic cards.

Participants in the program are referred by the ADA eligibility office. This includes applicants who are denied ADA eligibility, receive conditional ADA eligibility, or who were scheduled for a functional assessment and did not show for the appointment. Outreach presentations by LIFE's Mobility Coordinator also recruits attendees from senior centers, disability advocacy agencies, as well as behavioral health organizations.

Fixed Route Bus Orientations. The RPTA should make fixed route buses and drivers available during off-peak hours for outings by local senior and disability organizations. Each participating agency could be given one or two days a month when a vehicle and driver would be provided. Trips would be provided within the RPTA area between the hours of 10:00 a.m. and 2:00 p.m. The agency could plan the trip desired and would inform the RPTA of the details of the trip at least one week in advance.

Available spare vehicles would be used. Available extraboard drivers would also be used. This way, the bus orientations would have minimal cost (basically the fuel and maintenance associated with the trip).

This type of bus orientation has proven successful in other systems at introducing seniors and persons with disabilities to the bus system. It also gives riders with disabilities an opportunity to use lifts and other access equipment in a controlled situation – again increasing familiarity and comfort level with accessible bus service.

7.2 Free Fixed Route Fare Programs

Another proven way to encourage greater use of fixed route services is to provide free fares on the fixed route system. Following is a discussion of some of the fare incentive programs offered by peer systems as well as recommendations for the RPTA area.

Peer Free Fare Programs

Two of the peer systems contacted as part of this study indicated that they provide free fixed route fare programs. These are the UTA in Salt Lake City and DART in Dallas. Our research also identified four other systems, not part of the peer list, that provide free fixed route service. These are the transit systems in Baltimore, Boston, Ft. Lauderdale, and Los Angeles.

Baltimore, Dallas, Los Angeles, and Salt Lake City provide free fixed route service to any person who has an ADA paratransit ID card. Other systems limit free fares to a subset of ADA paratransit eligible riders, as follows:

- ◆ In Boston, free fixed route service is provided only to current ADA paratransit riders who successfully complete a travel training program. The free fares are used as an incentive to encourage riders to participate in travel training.

- ◆ In Ft. Lauderdale, paratransit riders must agree to no longer use the paratransit service in order to get free fixed route service.⁹

The following impacts and benefits of the free fare programs were reported by the transit agencies:

- ◆ Boston reported that 300 people had been granted passes for free fixed route service after successfully completing travel training. They indicated that free fares were helpful in encouraging current riders to participate in training. They also reported that 80% of training graduates either used paratransit less often or had switched to only using the fixed route service.
- ◆ Ft. Lauderdale reported that, since the program was implemented in 1996, 111 paratransit riders had opted to get free fixed route service and no longer use paratransit.
- ◆ Los Angeles estimated that the free fare program had resulted in a paratransit cost savings of about \$5M per year (about a 10% reduction). They also noted, though, that they were receiving more applications for ADA paratransit eligibility as a result of the free fare benefit.
- ◆ Salt Lake City reported a 6% reduction in paratransit ridership attributed to a combination of the free fare program and stricter eligibility determinations.

A TCRP report in 1997 that studied a free fare program in Bridgeport, CT estimated that at least 6% of their paratransit demand was shifted to the fixed route service due to free fares.¹⁰ They also reported, however, a 23% increase in ADA paratransit applications submitted and that many persons who were registered for and using fixed route service under their half-fare program shifted to the free fare program.

Recommended RPTA Program

It is recommended that the RPTA implement a regional program that would allow all riders determined to be ADA paratransit eligible to ride fixed route buses and trains free of charge. It is very important, though, that such a program only be implemented after an in-person eligibility determination process is started. The national experience suggests that applications for ADA paratransit eligibility would increase significantly if the RPTA implemented a free fixed route service without requiring applicants to appear in-person for interviews and functional assessments.

Photo IDs should be issued as part of the ADA paratransit eligibility determination process. These photo IDs should then be used as identification to qualify riders for free bus and train service.

⁹ There is some question whether it would be appropriate to require that people forfeit their rights to paratransit in exchange for the economic benefit of free fixed route service.

¹⁰ "Evaluating Transit Operations for Individuals with Disabilities," Transit Cooperative Research Program, Transportation Research Board, Washington, D.C., 1997.

If the RPTA does not implement an in-person ADA eligibility determination process, fare incentives should be limited to things like:

- ◆ Providing free monthly passes to individuals who are paratransit riders and who are participating in travel training or who have successfully completed travel training; or
- ◆ One month bus service promotions that might provide free fixed route service to paratransit riders for a limited time.

Costs and Benefits

Free fare programs have marginal cost. This includes the cost of processing and providing an ADA photo ID card. If done as part of the in-person eligibility determination process, staff cost and transportation cost would already be covered. Additional cost would be limited to the photo ID equipment and supplies.

As indicated above, the national experience is that free fixed route fare programs typically result in 5-15% of paratransit riders shifting to the fixed route service. Assuming 500,000 ADA paratransit trips per year, a 10% shift to fixed route, and a per trip paratransit cost of \$30, a free fare program could save 41.5 million per year.

7.3 Taxi-Based Programs

Peer System Taxi Programs

As transit systems struggle to meet the travel needs of older adults and people with disabilities, taxi subsidy programs have found a permanent place in the public transit family of services. These programs, called user-side subsidies, differ from contracted service in that the public transit subsidy is provided directly to the user of service in the form of a coupon or voucher. Participants arrange their trips with a taxi company of their choice and pay the portion of the taxi fare not covered by the voucher. Several taxi subsidy programs in peer cities are summarized in Table 7.1 on the following page and are described below.

King County Metro Taxi Scrip

The King County Taxi Scrip Program serves low-income King County residents age 18 to 64 who have a disability or age 65 and over. Eligible residents can buy up to six books of taxi scrip each month from Metro at a 50% discount. Each \$10 book of taxi scrip costs \$5. Seven taxi companies accept taxi scrip. Taxi scrip is used to pay the fare instead of cash. Scrip may be used at any time. To register for taxi scrip, passengers must have a Regional Reduced Fare Permit (i.e., a senior or disabled bus pass), be a King County resident age 18 or older, and be low income.

Table 7.1. Taxi Subsidy programs in Four Peer Cities

Program	Program Provider	Area Served	Eligibility Guidelines	Fare Media	% of subsidy	Program Cost	Trips Provided	Taxi Company Providers
King County Taxi Script Program	King County Metro Seattle Washington	All of King County	65 + disabled (not limited to ADA) low income (70% of median income)	Books of Taxi Script (6 books of \$10.00 script per month) sold at 50% discount	50% (average subsidy cost-\$8.18)	Total cost \$733,101 Cost to King County Metro \$366, 559	44,811	Seven taxi companies
Denver RTD Access-a-Cab	Denver RTD	Greater Denver and Longmont area	ADA certified for Access-a-Ride service	User pays first \$2.00 and any amount over \$9.00 as metered (4 trips per day)	Subsidy of \$7.00 per trip regardless of fare	\$420,000 excluding administrative costs	60,000	Three taxi companies
Orange County Transportation Authority Taxi Service	Orange County California	People with current ACCESS eligibility	User pays \$2.25 and anything over \$10.00					
San Antonio VIA		ADA certified	Vouchers 50 per month					

The definition of a person with a disability is somewhat broader than the ADA paratransit eligibility criteria and includes “Any individual who has a medically determinable physical or mental impairment that can be expected to last for not less than three months and who is unable to use mass transportation services as effectively as persons not affected.” Low income is defined as having an annual income at or below 70% of the median income for the State of Washington. Scrip can then be used to purchase transportation at standard meter rates from any of the taxi companies that participate in the program. There are no trip purpose limitations and same day service can be requested at any time or in any part of King County, where participating taxi service is provided.

In addition to providing mobility for persons who are not ADA paratransit eligible, the Taxi Scrip program gives ADA paratransit eligible persons additional travel flexibility. Many persons who are ADA paratransit eligible and who use the ACCESS program also purchase taxi scrip. They use taxi service for same day trips or when direct, non-shared-ride service is desired.

The Taxi Scrip Program is also a cost-effective way to provide service for persons who are ADA paratransit eligible persons. The average total trip cost was \$16.36 and average Metro trip subsidy was \$8.18. The total program expense was \$733,101, with a cost to Metro of \$366,550 (50% of the total cost).

For riders, the taxi scrip program is considered “Premium” service. With a 50% subsidy of the fares, the cost of taxi trips is typically higher than the base ADA paratransit fare.

Denver Regional Transit District access-a-Cab

Denver RTD provides subsidized same-day taxi service for individuals who are determined to be eligible for the access-a-Ride program, the RTD’s ADA paratransit service. Two taxi companies in the greater Denver area and one taxi company in the Longmont area participate in the program.

To request access-a-Cab service, riders call the RTD paratransit Call Center on the day they wish to travel. First Transit, the Call Center contractor for the ADA paratransit service, manages the access-a-Cab program and has integrated access-a-Cab calls with the access-a-Ride program. Requests for taxi rides are accepted seven days a week from 6:00 a.m. to 9:00 p.m. Callers can make a general taxi request or can specify the taxi company they wish to use. Call Center staff enters trip information into an automated reservations system and then forward the trip requests to the appropriate taxi company. Pickups are made within one hour of the time of the call.

A rider can request up to four access-a-Cab trips in any 24-hour period.

Riders are responsible for paying the first \$2.00 of the fare and any amount on the meter over \$9.00. The RTD provides a subsidy of up to \$7.00 per trip. The fare for

standard ADA paratransit service is \$2.30 in the Denver area and \$1.60 in the Longmont area. So, taxi trips with total fares under \$9.00 cost a little less more than paratransit service in Denver and a little more than paratransit trips in the Longmont area.

RTD staff reported that about 60,000 access-a-Cab trips are provided per year and that this number has remained pretty constant over the past two years.

The two taxi companies in the Denver area operate accessible minivans as well as standard taxis. There are no accessible taxis in the Longmont area, however.

OCTA Same-Day Taxi Service

Orange County Transportation Authority offers a same-day taxi service for customers with current ACCESS eligibility. These trips are not reserved in advance and are scheduled the same day a customer wishes to travel at the time they wish to travel. The fare is \$2.25 upon boarding the taxi — the same fare as a regular ACCESS trip. At the end of the trip, any amount left on the taxi meter over \$10.00 will be paid by the customer.

San Antonio VIA Taxi Voucher Program

In contrast, when VIA in San Antonio makes changes to its routes that result in eliminating bus service from an areas, customers who were approved for VIATrans ADA paratransit service on or before January 28, 2003, become eligible to receive up to 50 vouchers per month to use for taxi service for trips they need to take.

Current Taxi Programs in Maricopa County

Taxi User-Side-Subsidy programs are hardly new in Maricopa County. The first was launched in 1984. Only recently however has this approach gained wide acceptance in the Valley. Since 2000, taxi programs have been initiated by the cities of Scottsdale, Mesa, and Glendale. Recently RPTA initiated a regional taxi program in which all cities in Maricopa County were invited to participate. Mesa, Chandler and Gilbert have joined to date. Phoenix, Glendale and Scottsdale have retained discrete services. In January 2007, Surprise started a Cab Coupon program for its residents. Tempe is considering a taxi program. As with most of the programs in the US, the taxi programs in the Valley serve as supplements to Dial-a-Ride service rather than as ADA complementary paratransit.

In addition to supplementing Dial-a-Ride, subsidized taxi trips can be a catalyst for coordination among public transit agencies and human service agencies that serve people with disabilities and older adults. An example is the Phoenix Dialysis Transportation Program. More than half of the dialysis patients receiving a taxi subsidy are also subsidized by the Arizona Kidney Foundation. This program was developed in

cooperation with the Arizona Kidney Foundation and remains a successful partnership with close communication. This can be a model for additional partnerships between human service agencies and public transit.

Not surprisingly, since they sprang from a common core, the various taxi programs in Maricopa County share much in common. They all serve people with disabilities and older adults. And they all provide individual rather than shared trips. In most but not all programs users are free to choose the taxi company they use. In most cases the user pays a share of the trip cost. Programs vary in the manner in which they provide the subsidy, the types of trips that are eligible, the user cost and the fare media. Some of the programs use all of the taxi services in the region, others use specified taxi companies. Table 7.2 on the following pages illustrates the similarities and differences among the taxi programs in the Valley Metro region.

Recommended Expansion of Taxi Programs in the RPTA Area

We recommend operating taxi programs as *premium services* with a percentage rather than a fixed cost to participants. Charging a percentage of the fare encourages participants to find the best service at the lowest cost, which experience has shown, is necessary to manage demand. With current taxi prices a subsidized taxi trip will cost participants more than the Dial-a-Ride fare. This cost differential is a major element in managing demand.

We recommend providing the taxi option to people over 65 and those with disabilities, subsidizing 75% of the trip and limiting the number of vouchers or coupons provided to each participant. Currently most programs in Maricopa County provide 75% of the taxi fare with the user paying 25%. Scottsdale provides an 80% subsidy. The number of vouchers or coupons allowed per-month varies widely with systems.

The fare media we recommend for these expanded programs is prepaid coupon books containing ten \$1.00 coupons with a limit of 20 coupon books a month which eligible people could purchase for $\frac{1}{4}$ their value. These could be used in any combination. Vouchers work well for repetitive trips to the same location such as dialysis, but for broader programs with ad hoc trips, coupons have been shown to be more appropriate. For dialysis the number of coupon books could be increased to 27 as Scottsdale currently provides. In the near future, a paperless system should be considered to replace the paper coupons.

Since Taxi Programs don't involve lump-sum capital expenditures their costs are reasonably predictable. Costs are based on the combination of three elements, the amount of the subsidy, the number of trips allowed to each participant and the number of participants

Table 7.2 Taxi Subsidy Programs in Maricopa County

Program	Program Provider	Area Served	Eligibility Guidelines	Fare Media	% of Subsidy	Program Cost	Trips provided	Taxi Providers
7/1/05-6/30/06								
Phoenix Employment Program Initiated in 1984	City of Phoenix contracted to LIFE	Phoenix	Disability that prevents use of Transit	Preprinted Vouchers Usually 42 per month	75% of taxi fare up to \$15.00 +15% gratuity	\$62,021 including 21% admin	3,760 trips 22 people	Open to all Taxi Companies- 4 companies used
Phoenix Dialysis Program Initiated in 1999	City of Phoenix contracted to LIFE	Phoenix	Dialysis Trips	Preprinted Vouchers Usually 27 per month	75% of taxi fare up to \$15.00 +15% gratuity	\$184,513 including 29% admin	13,334 trips 105 people	Open to all Taxi Companies- 7 companies used
Scottsdale Cab Connection Initiated in 2000	City of Scottsdale	Either origin or destination must be in Scottsdale	People with disabilities, people 65+	Preprinted vouchers 20 per month	80 % of fare up to \$10.00 including gratuity of \$1.88	\$370,000 + \$80,000 admin+ \$10,000 supplies	38,000 trips	Open to all Taxi Companies- 3 companies used
Scottsdale Cab Connection			Dialysis patients	Preprinted vouchers 26 per moth	100%	Included in total	Included in total	
7/1/05-6/30/06								
Glendale Taxi Subsidy Program Initiated in 2005	City of Glendale	Glendale	Repetitive medically necessary trips (dialysis, cancer therapy etc)	Preprinted vouchers (Name and addresses)	75% of fare up to \$15.00 per trip plus 15 % gratuity	\$27,912 including 29% admin (for both programs)	877 trips 29 people	Open to all Taxi companies- 3 companies used
			Victim assistance trips	Blank vouchers filled in by Police officers	Up to \$50.00 per one way trip		2	Total Transit only

Program	Program Provider	Area Served	Eligibility Guidelines	Fare Media	% of Subsidy	Program Cost	Trips provided	Taxi Providers
Mesa Coupons for Cabs, from 2002, merged with East Valley Ride Choice in 2006	City of Mesa	Mesa	Non-driving Mesa residents 65+ or with a disability	\$10.00 coupon book/up to 6 books a month	80% of fare	\$120,160 38% admin	679 people registered, 7663 trips	Open to all taxi companies
East Valley Ride Choice Reimbursement Program	City of Mesa		Non-driving Mesa residents 65+ or with a disability	n/a	40 cents a mile up to 300 miles per month	\$114,106 including 36% admin	192 people, 31,800 trips	Volunteers who are reimbursed for mileage
*Budget 2006-2007								
East Valley Ride Choice Coupons for Cabs, Mesa, Gilbert, Chandler	Cities of Mesa, Chandler, Gilbert		Non-driving Mesa residents 65+ and people 18-64 with a disability	\$10.00 coupon book/up to 6 books per month	75% of fare Admin varies by city	2006-2007 Budget \$461,125	*People registered as of 3/07 Mesa 450 Chandler 32, Gilbert 24	Two taxi companies: Total Transit and AAA

*East Valley Ride Choice, Coupons for Cabs was too new to have annual information.

The Surprise Taxi Coupon Program started after the period covered in this study. This program, provided by the Community Initiatives Department offers Surprise residents cab rides, initially for dialysis trips and ADA qualified individuals and later for residents 60 and over and those with low incomes. \$80,000 is budgeted for the first year of service. This is a contracted service with one taxi company rather than a user-side-subsidy where participants select their taxi provider.

Ambulatory (non-wheelchair) trips may be provided by taxi at a lower cost than Dial-a-Ride trips. Generally the cost of taxi trips is something over half that of Dial-a-Ride trips. To avoid a trade-off in trip quality in our deregulated taxi environment, it is best to pay meter rates and include a gratuity of 15%.

In the Valley Metro area the average cost of taxi trips varies widely. In Scottsdale where the trips are short (4 miles on average) the cost is *\$12.10 a trip. The Phoenix Dialysis program has an average trip cost of *\$17.85. Glendale, a new program, has a trip cost of *\$32.00. Mesa's coupon program had an average trips cost of *\$16.00. Seattle posts a per trip cost of *\$8.18 and Denver trips cost *\$9.03 (admin estimated).

Having determined the percentage of the subsidy and the cap as well as the number of trips allowed to each participant, the last factor in cost is the number of participants. Using the actual trip count in Scottsdale which provides a citywide service for people over 65 and people with disabilities, we have determined the ratio between the taxi trips provided and the population of Scottsdale, and arrived at 5.33%. Then we have applied that 5.33% to Phoenix and Glendale, were they to institute city wide taxi programs. Since Scottsdale's trip length is unusually short we have used \$16.00 as the subsidy cost rather than the \$12.10 Scottsdale reports. Our rough estimate follows.

City	Population (2000 Census)	Number of taxi trips, annually	Subsidy Cost including administrative costs
Phoenix	1,300,000	243,902	\$3,902,432
Glendale	225,000	42,213	\$675,408

**Includes administrative costs*

We recommend expanding taxi-subsidy programs in Maricopa County to complement the Dial-a-Ride services by providing cost-effective same day service. Offering this option to older adults and people who have disabilities can complement the ADA service. Taxi programs could be increased in two ways: by individual cities expanding or initiating taxi programs or by additional cities joining the East Valley Ride Choice Program

Expansion in Phoenix and Glendale, would involve following the lead of East Valley Ride Choice and Scottsdale and offering the taxi option to people over 65 and people with disabilities. As shown in *Table T2* Phoenix and Glendale currently limit their taxi subsidy to specific groups (medical and employment). Making other people eligible would be particularly relevant in Phoenix with its high demand.

In cities that have no taxi programs, we recommend considering the taxi option. Even in places where no taxi company is based, this can be a viable option. The nature of our taxi system makes it possible to have taxi service anywhere in Maricopa County. For example, when a person in Anthem requested a subsidized taxi trip to work, this was provided by a Discount Cab driver who resided in Anthem. The excellent taxi programs

now operating will be a good model for communities starting their own programs; there is a precedent for sharing software and information.

As a good alternative to starting a new program, communities can join the East Valley Ride Choice taxi subsidy program. Now that the East Valley program has some experience under their belt, the cities of Scottsdale, Phoenix and Glendale may want to take a second look at joining this RPTA coordinated program. For cities starting programs, joining the RPTA program would eliminate a lot of the up-front work involved in starting a new program.

Taxi Programs can relieve Dial-a-Ride demand, meet the need for direct, time sensitive trips and reduce the overall cost of paratransit so we recommend them as a part of the public transit mix.

7.4 Paratransit-to-Fixed-Route “Feeder” Service

For many persons with disabilities and seniors, access to and from bus and train stops and stations is a primary barrier that prevents use of the fixed route system. The lack of an accessible path-of-travel, major intersections that are difficult to navigate, and distances to and from stops and stations are barriers that are often encountered.

Using paratransit services to get riders to and from the fixed route system (also referred to as “feeder” service) can be an effective way to support use of the fixed route system. Feeder service helps riders overcome the barriers that may be present and may be preventing access to the fixed route system. Feeder service then allows riders with disabilities and seniors to enjoy the independence and flexibility that the fixed route system provides.

Feeder service may be particularly relevant and effective in the RPTA since a light rail system will soon be opened. More seniors and riders with disabilities will be able to benefit from this new transit mode if paratransit service is used to provide access to rail stations.

Feeder Service Policy Considerations

It is recommended that the RPTA ask the regional Call Center contractor to explore feeder service as an option for riders. This should be done when this service option is appropriate to the specific trip characteristics and to the needs of the rider. National experience suggests that several considerations are important when paratransit-to-fixed-route feeder service is being considered. It is recommended that the RPTA work with the Call Center contractor, the paratransit service providers, and local and regional consumer advisory committees to develop a “Feeder Service Policy” that addresses the key issues detailed below.

Service that is appropriate to the rider’s needs. Feeder service should be considered for riders who are able to use the fixed route bus and rail systems but who are not able to access these systems due to barriers in the environment. These would be individuals identified as being “conditionally eligible” for paratransit service. That is, they are riders able to use fixed route service but who are prevented due to certain barriers and conditions. Riders considered for feeder service should be able to independently use the fixed route system once given a ride to a stop or station. The Call Center contractor should identify those riders who can travel independently but who are prevented from using fixed route services primarily by barriers and environmental conditions associated with getting to and from bus and rail stops and stations.

Service that is appropriate to the trip being requested. Feeder service should be provided where it makes sense in terms of the specific trip being requested. Some guidelines suggested by the national experience are:

Trips over seven miles in total length: Feeder service should be considered for longer trips where the inconvenience of a transfer from the paratransit to fixed route is offset by the efficiencies and conveniences associated with use of bus or rail services. Direct paratransit service should be used for shorter trips.

Frequent trips. Feeder service should be considered primarily for trips that are ongoing and frequent. It typically is not worth the effort to arrange for feeder service for a one-time trip. On the other hand, for riders traveling daily to work, the detailed arrangements for a successful connection to the fixed route system will only need to be made once and will then benefit the rider on an ongoing basis.

Trips where one location is readily accessible to the rider: Feeder service should be considered primarily in cases where one end of the trip is close to the bus or rail service and can be accessed by the rider. For example, a rider's destination may be close to a rail stop and the rider may be able to get to the destination from the rail system, but may not be able to get to the rail station nearest her home to begin the journey. In this case, paratransit service would connect the rider to the rail system and the rider would then be able to complete the trip. Feeder service probably should not be considered if paratransit vehicles are needed at both ends of the trip and two transfers are required. "Double feeder" service with transfer at both ends of the fixed route portion of the trip should only be considered for very long trips (perhaps more than 20 miles in length).

Trips where the fixed route headways are short. Feeder via paratransit to a bus route or rail line should be considered primarily where the bus or train service operates on frequent headways. That way, an exact connection to a particular bus or car is not required. The paratransit service can simply get the rider to the appropriate stop or station and the rider can catch the next available bus or train. And, the transfer times to the fixed route would be reasonable (perhaps 10-15 minutes).

Guaranteed ride and "hand-to-hand" transfer policies. If feeder service is considered to bus routes or rail lines that have longer headways and less frequent service, it is recommended that the RPTA consider policy that would require paratransit providers to wait with riders until the transfer is made. If for some reason the desired bus or train is missed, the paratransit provider should be directed by the regional Call Center dispatchers to complete the trip. This type of policy will make riders using the feeder option more comfortable with the reliability of the service. Similar policies are often adopted in ride-share programs.

Fixed route stop and station amenities. If riders are transported to bus stops and stations and asked to independently wait for the fixed route bus or train, it is recommended that the RPTA and the Call Center contractor identify those stops

and stations that are appropriate transfer points. Selected transfer points should be safe and should have a place for riders to sit and wait and to be sheltered from the elements. Transfer locations also should ideally have a public pay phone where the rider can contact the regional paratransit Call Center if any issues develop with the fixed route connection.

Fare policy. Given that feeder service essentially is facilitating the use of the fixed route system, it is recommended that the RPTA adopt a policy of charging riders who utilize feeder service only for the fixed route portion of the trip. The paratransit connection to and/or from the fixed route should be provided free of charge. Feeder service will be particularly attractive and beneficial to riders if the RPTA also adopts a policy of providing free fare fixed route service to riders who are determined to be ADA paratransit eligible, as recommended earlier in this section of the report.

Scheduled connection times. It is recommended that the RPTA ask the regional Call Center contractor to pay particular attention to the scheduling “windows” used to arrange feeder trips. Typically, paratransit pick-ups and drop-offs are scheduled to be performed in a 30-minute operating “window” That is, it is acceptable to pick-up riders from the scheduled pick-up time up to 30 minutes after the scheduled pick-up time. It also is typically acceptable to get riders to their destination up to 30 minutes before their appointment or desired arrival time. To make feeder service workable and usable, these pick-up and drop-off windows will need to be much shorter. Fixed route riders typically will not get to a bus stop or train station 30 minutes early and wait that long for a bus or train. And, obviously, it would be very inconvenient to ask a rider to wait at a fixed route stop or station for 30 minutes for a connecting paratransit ride. If shorter connection times are not scheduled, the overall travel time when using feeder service will make this option very undesirable and unusable. To achieve better connecting times, the regional Call Center contractor should identify all trips that involve feeder service to the fixed route system and should have schedulers manually review and refine runs that include feeder trips as part of the final “clean-up” of schedules. Call Center dispatchers also should then pay particular attention to feeder trips and runs that include feeder trips to be sure that connections are made and transfer wait times are reasonable.

Requiring the use of feeder service but guaranteeing service performance. If a rider’s needs can be met using feeder service, and the characteristics of the trip and the rider make feeder service desirable and appropriate, it is recommended that the RPTA policy require riders to use the feeder service for the trip. However, the RPTA should guarantee that the feeder service that will be provided will meet established service performance standards. Maximum transfer wait times should be established. Maximum total travel time standards also should be adopted. Feeder trips should be guaranteed to be performed in accordance to these standards. If a pattern or practice on long total travel times

or long transfer wait times develops, the RPTA should have an agreement with riders that direct paratransit service will again be provided.

Potential Use and Benefits

National research suggests that feeder service typically applies to less than 5% of all paratransit rides, and is often only 1-2% of all rides.¹¹ Significant cost savings typically do not result from the implementation of feeder service. Still, feeder service can be cost-effective for the longest trips in the system. And, feeder service gives riders the independence and freedom that is provided by use of the bus and rail systems. Feeder service also promotes the primary goal of the ADA to provide transportation services in the most integrated way possible.

Feeder Service Implementation Issues

Feeder service arrangements should be made outside of the trip booking and reservations process. The Call Center contractor should first identify potential trips and riders for whom feeder service is appropriate. Fixed route options and feeder arrangements should then be worked on by schedulers dedicated part-time to this task. If this analysis by schedulers indicates that feeder service is possible and appropriate, the rider should be contacted and informed of the new travel option. The rider should then have an opportunity to raise questions about the proposed service option. Ideally, the RPTA would also utilize travel training contractors (see the "Travel Training Programs" portion of this section above) to travel with the rider for the first few feeder trips.

If feeder service is successful, the schedulers should then code the trip as a feeder trip in the rider's trip file. These trips would then be set-up in a fashion similar to ongoing subscription trips.

Before feeder service can be considered and implemented, the RPTA will need to:

- ◆ Develop a more thorough eligibility determination process that better identifies travel barriers for individual riders. The in-person interview and assessment process detailed in Section 5 of this report should first be adopted and implemented. Using this new process, more detailed conditions of eligibility should be identified. Once this is done, the RPTA and the regional Call Center will then be able to identify the riders for whom feeder service is appropriate.
- ◆ Minor customization to the paratransit operations software will also need to be made to allow trips to be coded as feeder trips. This will be important to enable schedulers and dispatchers to pay particular attention to these trips in daily operations.

¹¹ *Transit Operations for Individuals with Disabilities*, TCRP Report 9, Transportation Cooperative Research Program, Transportation Research Board, Washington, DC, 1995.

Section 8. Implementation Plan for Proposed Regional Services

This section details the work that must be completed to implement the proposed regional services discussed in Sections 5, 6 and 7. This includes the proposed regional paratransit service, as well as the proposed in-person eligibility determination process, travel training programs, free fare fixed route program, taxi-based programs, and paratransit-to-fixed route feeder service. The sequencing of the various work tasks is discussed and a general schedule for implementation is provided. A proposed “start-up” date for each program and service is also indicated. The plan assumes and October 2007 RPTA Board authorization to begin working on implementation of the recommended programs.

8.1. Regional Paratransit Service

Proposed Start-Up Date: July 1, 2009 (beginning of FY2010)

Implementation of Phase I of the regional paratransit service described in Section 6 will require that the following general tasks be completed:

- ◆ Create regional Committee on Accessible Transportation.
- ◆ Refine regional paratransit cost allocation model.
- ◆ Programming of the necessary operating and capital funding.
- ◆ Obtain necessary vehicles and equipment and software.
- ◆ Creation of a regional paratransit reservations, scheduling and dispatch “call center.”
- ◆ Selection of service providers and negotiation of service provider contracts.
- ◆ Revision of public information about paratransit services and notification of current riders.

Following is a discussion of each of these required work tasks.

Create Regional Committee on Accessible Transportation

As noted in Section 6.2 of this report, it is recommended that the RPTA create a regional Committee on Accessible Transportation (CAT) to provide for ongoing input from member communities, local and regional service organizations, and persons with disabilities on the development and provision of transit and paratransit services for persons with disabilities and seniors. A committee that provides input on both paratransit services and fixed route services is recommended so that a multi-modal perspective on serving persons with disabilities and seniors is maintained.

It is recommended that the CAT be formed at the outset of the implementation process so that its members can provide input and guidance on issues associated with the development of regional services. The following tasks and timelines are suggested for the creation of the CAT.

Table 8.1. Tasks and Milestones for Creation of Committee on Accessible Transportation

Task	Timeline
Decide how the CAT will be supported by RPTA staff and assign responsibility for creating and facilitating the committee.	December 2007
Collect information about successful regional advisory committees from selected peer transit systems.	December 2007 – February 2008
Create a proposed structure for the CAT, including the desired number of member community representatives, service agency representatives, and rider representatives and how each type of member will be selected.	March 2008
Formally invite member communities and service organizations to name representatives to the committee.	March 2008
Present, review and agree on proposed committee by-laws at first meeting.	April 2008
Review and provide input and guidance on regional paratransit policies, standards, and other implementation materials.	Ongoing after April 2008

Refine Regional Paratransit Cost Allocation Model

As noted in Section 6.5 of this report, a model will be needed to allocate local costs for regional paratransit services to participating member communities. It is recommended that the model assign costs based on passenger-miles of service provided to riders. Further, it is recommended that passenger-miles of service be assigned to communities based on the place of residence of each rider.

Sufficient data and software systems were not available to allow for preliminary calculations of likely allocations based on current and projected service. In some cases, detailed pick-up and drop-off information was not collected by current DAR services. The underlying maps and reporting routines in current paratransit software also did not allow for accurate passenger-mile calculations and assignment of passenger-miles to riders based on place of residence. An alternate cost allocation methodology, based on trips by community and current DAR productivities, was used to develop an initial estimate of likely costs for each community for the Phase I regional paratransit service. It was recommended that a cost allocation model be developed as part of the implementation of the Phase I regional system. The following tasks and timelines are suggested for creating the recommended model.

Table 8.2. Tasks and Milestones for Refining Cost Allocation Model

Task	Timeline
Request that all DAR systems involved in the Phase I regional service begin capturing individual rider pick-up and drop-off mileage and .	December 2007
Update underlying street network in the RPTA's Trapeze software to allow for calculations of direct passenger-miles based on shortest-path road network distances.	Dec. 2007 – June 2008
Create and install customized report to calculate passenger-miles and link passenger-miles to rider place of residence.	March–June 2008
Determine how passenger-miles for riders from unincorporated areas and visiting riders from outside the region will be allocated.	March – June 2008
Run test of report and allocation model using RPTA Trapeze software and FY2008 trip data from applicable DARs to estimate allocations based on current ridership. Use model to estimate revised FY2010 allocations	August 2008
Adjust model as needed.	August 2008 – March 2009
Run mode with partial FY2009 data to refine estimates of likely first year allocations for community budget planning.	March 2009
Run at end of each year using prior year data to finalize allocations to each participating community.	Ongoing

Program the Required Capital and Operating Funding

As part of the proposed system design, the RPTA would assume responsibility for obtaining replacement vehicles and expansion vehicles used in the provision of regional paratransit service. The RPTA would also need to obtain equipment needed to start the regional call center. And, the RPTA would assume responsibility for providing Proposition 400 funding for regional paratransit program administration, the start-up of the regional call center, and implementation of the in-person eligibility determination process. As noted in Section 6.5 of this report, it is also recommended that the RPTA consider utilizing the flexibility provided in Section 5307 funding to classify the regional call center as a “mobility manager” and use federal funding to pay for 80% of the ongoing costs of the call center. The following tasks and timelines are suggested for this part of the implementation.

Assuming RPTA Board approval of the regional plan in November 2007, the required programming and reprogramming of capital and operating funding could be brought forward in January of 2008 for inclusion in the TIP Update for the FY2009-FY2013 period. The approval process would then be completed by July 2008.

A similar time period is suggested for discussion and approval of use of unallocated Proposition 400 funding.

**Table 8.3. Tasks and Milestones for Programming Required
Capital and Operating Funding**

Task	Timeline
Amend TIP to show RPTA purchasing replacement vehicles for East Valley and Phoenix DAR operations starting in FY2010.	January – July 2008
Add 8 vehicles to TIP in FY2010 for West Valley dedicated operation.	January – July 2008
Add expansion vehicles to TIP for regional operation as per fleet estimates in Section 6.	January – July 2008
Add computer hardware and software, telephone equipment, and radio system to TIP in FY2009 for start-up of regional call center.	January – July 2008
Program estimated Proposition 400 funding needed to support RPTA administration of regional paratransit program, call center start-up, and in-person ADA eligibility determinations	January – July 2008
Program New Freedom funding for regional travel training program and include Section 7 supplemental services and programs in regional plan.	January – July 2008
Examine the option to use Section 5307 funding to pay 80% of the ongoing regional call center costs and classifying the call center as a “mobility manager.”	Ongoing

Obtain Necessary Vehicles, Equipment and Software

A number of different types of equipment and software will need to be purchased to facilitate implementation of the regional paratransit service. This will include an estimated 8 vehicles for use by the West Valley dedicated service provider in FY2010, replacement and expansion vehicles for the regional service starting in FY2010, computer hardware and software needed to support the regional service operation, telephone equipment and systems needed for the regional operation, and MDC/GPS/AVL hardware and systems.

It is our understanding that the RPTA currently has a blanket contract for the purchase of the type of cutaway vehicles used in paratransit operations. It is recommended that the types of vehicles and the designs available under this current contract be reviewed and compared to current vehicle designs in Phoenix as well as the East Valley to ensure that appropriate vehicles will be able to be ordered. This purchasing mechanism should then be adequate to allow the RPTA to obtain needed replacement and expansion vehicles for the first few years of the regional system.

Exact regional paratransit hardware and software needs will also have to be determined and existing software will need to be customized to support the regional operation. This will include new software modules needed to support a multi-operator system, modules to support for web-based checking of ride times and cancellations, customizing the underlying maps to reflect the new design, customizing fare tables and days and hours tables and other settings to reflect the new regional program policies and operating procedures. Licensing of the two main software systems that will be combined to support the regional operation – one owned by the RPTA and one owned by the City of Phoenix – will also need to be renegotiated with Trapeze.

Detailed telephone system specifications will also need to be determined. This will include the exact call groups that will need to be set-up, the number of incoming and outgoing lines needed, IVR requirements to support call-outs, and call recording and hold time management systems. It is our understanding that the RPTA has a state-of-the-art telephone system and that this system can be modified to support the regional call center and the regional operation.

An expanded two-way radio system will also be needed. The current systems in the East Valley and Phoenix should be able to be used, but additional coverage will need to be considered in the West Valley. Additional base stations will also be needed to allow the call center to be set-up and used for training while current operations continue.

Finally, additional equipment and systems will need to be obtained and installed on vehicles used in the regional paratransit operation. These include MDCs, GPS and AVL systems. The RPTA should be able to build on existing systems now used in the East Valley and in Phoenix.

The following tasks and milestones are suggested for this part of the implementation.

Table 8.4. Tasks and Milestones for Obtaining Vehicles, Equipment and Software

Task	Timeline
Review existing blanket contract for purchase of paratransit cutaway vehicles to ensure that it will be able to be used for purchase of required replacement and expansion vehicles for first years of regional paratransit service. Revise as needed.	January – March 2008
Determine paratransit software capabilities needed to operate regional service, including multiple provider operation, map updates, web-based cancellations, trip confirmations, trip reservations, and automated call-outs. Compare to current system capabilities and define changes, upgrades and customization needed.	March – May 2008
Negotiate with Trapeze to amend Phoenix and East Valley systems and licensing agreements to support regional paratransit service design with final revised license and system under RPTA. Include ability to set up and run parallel system in regional call center during transition.	June-August 2008
Determine computer hardware needs both short-term and long-term. Consider on-site server for the short-term with possible use of a “server farm” in the longer-term. Plan for redundant system during transition.	August – October 2008
Determine two-way radio system needs. Build on existing East Valley and Phoenix systems. Consider coverage issues in the West Valley. Plan for redundant base stations for transition.	August – October 2008
Consider MDC/MDT and GPS system needs. Build on existing East Valley and Phoenix systems. Plan to have redundant central call center equipment and software to facilitate transition.	August – October 2008
Determine telephone system requirements including capacity, call groups, and caller selections and routing. Determine requirements to provide hold time monitoring and reporting, call recording, and automated call-outs. Consider building on to existing RPTA system. Determine what new capabilities and options are needed. Plan for redundant equipment at call center to facilitate transition.	August – October 2008
Order and take delivery of 8 vehicles for use by Phase I West Valley dedicated service provider.	November 008 – February 2009
Order computer hardware and install at regional call center site.	Jan – March 2009
Order MDC/MDT and GPS hardware and systems for installation in vehicles and call center.	Jan - March 2009
Order and install two-way radio equipment for installation in new vehicles and regional call center.	Feb. – April 2009
Install Trapeze at call center and customize for regional service operation.	April 2009
Install and test call center phone system	April 2009
Order first year replacement vehicles for delivery during FY2010.	May 2009
Receive vehicles from Phoenix for use in the regional system.	June 2009

Create Regional Paratransit “Call Center”

A critical task that must be accomplished is the start-up of a regional call center. The exact duties and responsibilities of the call center will need to be specified and a competitive process to select a call center contractor will need to be undertaken. To allow for easy transitions between call center management contractors in the future, should this be necessary, it is recommended that the RPTA provide the infrastructure for the call center – including the facility, computer hardware and software, telephone system, etc. A location to house the call center will therefore need to be obtained. In the long-run, the RPTA is planning to build a new facility. It is suggested that plans for the new facility consider call center needs. In the short-term, probably FY 2010 through FY2012, commercial space will have to be leased for the regional call center operation.

To facilitate start-up, it is recommended that the RFP for a regional call center manager include a requirement that the contractor will provide six months of management consulting and transition assistance to the RPTA. It is also recommended that a transition team, made up of representatives of the call center contractor, the service providers, and the RPTA be created as soon as the call center contractor is selected. This transition team should then meet regularly to plan for the transition to the regional system.

Staff from the current Veolia and MV Transportation call centers should also be considered in staffing the new regional call center. Existing staff will bring important experience and knowledge of current programs and riders.

Careful consideration will also need to be given to all existing rider and trip data and how to combine and transition this data to the new regional operation. As noted in the previous section, completely redundant call center systems, including a redundant server and software system is recommended to allow current data to be uploaded to the regional call center in advance, carefully reviewed, and even used as “live data” for training and transition simulations.

The tasks and milestones on the following page are suggested for the creation of a regional call center.

Table 8.5. Tasks and Milestones for Creating Regional Call Center

Task	Timeline
Prepare detailed scope of work, including duties and responsibilities, policies and procedures, staffing requirements, data management and reporting requirements, and performance standards for regional call center.	May – July 2008
Determine space requirements for call center plus on-site RPTA staff. Select location for call center. Consider commercial leased space for FY2010 through FY2012. Plan to become part of new RPTA facility after FY2012.	July – August 2008
Issue RFP for regional call center contractor. Request nine months of consulting and management assistance in creating new call center as part of planned contract.	September 2008
Select call center contractor and begin working on call center design and transition issues. Create transition team made up of new call center contractor staff, existing East Valley and Phoenix call center staff and management, and RPTA staff.	November – December 2008
Execute lease for space.	January 2009
Make necessary modifications to space. Install computer hardware, two-way radio base stations, and telephone equipment.	February – April 2009
Install and customize redundant Trapeze system and central MDC/MDT/GPS/AVL systems. Link to existing East Valley and Phoenix systems to allow for easy transition and switch to new location.	April 2009
Consider staffing needs. Negotiate with current call center employees.	March – April 2009
Review RPTA ADA data, Phoenix and East Valley non-ADA rider data, East Valley trip and other operating data, and Phoenix trip and other operating data. Design combined data system to upload data from each source. Review data for completeness to ensure no loss of information or information inaccuracies in transition. Regularly upload and review latest data leading up to transition to ensure understanding and smooth transition.	Mar – May 2008 (Review data) Apr – June 2009 (Regular uploads)
Hire any needed additional staff. Train new employees. Re-train existing employees who will transition to new call center.	March – April 2009
Conduct consolidated training with real data and simulated real service at new facility using redundant systems. Consider doing this for several weekends with shifts of current and new employees	May – June 2009
Switch on telephone service and begin operations at new regional call center.	July 1, 2009

Select and Contract with Service Providers

In addition to the regional call center, the RPTA will directly manage the service providers. This will include dedicated service providers in the East Valley, Phoenix/Central/Southwest area, and the West Valley, as well as non-dedicated “back-up” providers in each area.

In the short-term, it is recommended that the current providers in the East Valley and the Phoenix area (Veolia and MV Transportation) be used to provide the regional service. The contracts that the RPTA and City of Phoenix have with Veolia and MV Transportation will need to be renegotiated to remove call center functions and to reflect regional service operation policies and requirements. New, detailed scopes of work for each area will need to be developed. Negotiations with each provider will then need to be conducted.

In the West Valley, the consensus of the TAC was that a competitive process be conducted to select a dedicated service provider. Again, a detailed scope will need to be created for this work and a procurement process initiated.

A scope of work also will need to be developed for non-dedicated service providers. Options for contracting with these “back-up” service providers should be explored, which could include direct negotiation with existing taxi and van companies or a competitive process.

Once a set of dedicated and non-dedicated service providers is selected, it is recommended that representatives from the dedicated service providers be asked to participate on the transition team. It is also recommended that the transition team then become an ongoing service provider group that would meet every week at the outset and then perhaps every two weeks once the regional service is well established.

The exact tasks and milestones suggested for this part of the implementation are shown on the following page.

**Table 8.6. Tasks and Milestones for Selecting and Contracting
with Service Providers**

Task	Timeline
Prepare detailed scope of work, including duties and responsibilities, policies and procedures, expected levels of service and fleet requirements, staffing requirements, data management and reporting requirements, and performance standards for dedicated service providers in each area.	May – July 2008
Negotiate with Veolia for revised contract and rates. Work together with Phoenix to negotiate assignment of MV Transportation contract to RPTA with new scope, terms, and rates.	August – September 2008
Issue RFP for a dedicated service provider in the West Valley. Obtain and review proposals and select a West Valley dedicated service provider.	August – December 2008
Determine desired non-dedicated service provider needs. Prepare scope of work for non-dedicated service providers. Negotiate contracts with existing taxi and private van companies in each operating area.	January – May 2009
Have representatives from Veolia, MV Transportation, and the selected West Valley dedicated service provider join the call center transition team to plan for transition to new service.	January 2009 (and ongoing)

Revise Public Information and Market New Regional Paratransit System

Final details of the regional service policies and service performance standards will need to be developed. The recommended policies and standards included in Section 6 of this report can be used as a starting point. Input should be obtained through various existing and proposed mechanisms, including the VMOCC, TMC and the CAT.

Once a final set of service policies and standards is established, this information will need to be communicated to existing and potential riders. It is suggested that the RPTA develop a detailed public information plan to facilitate implementation of the regional paratransit service. The RPTA also should work with and assist member communities to revise information that each of these communities maintain on paratransit services.

It is suggested that Information about the planned change to a regional service begin to be made available well before the actual transition. This could be accomplished through ongoing press releases and updates, as well as meetings with local organizations and agencies. As the transition gets closer, mailings to existing riders also should be part of the public information plan.

A revised paratransit Rider's Guide will also need to be prepared in advance of the transition. The Rider's Guide should then be made available to riders as well as new, approved applicants as soon as the regional service is in place.

The tasks and milestones for this portion of the implementation are provided in the table below.

Table 8.7. Tasks and Milestones for Revising Public Information on Paratransit Services

Task	Timeline
Finalize service policies and performance standards with VMOCC and TMC, with input from the Committee on Accessible Transportation.	April – July 2008
Develop a public information program to alert riders to coming regional services and policy changes.	June – August 2008
Implement public information program.	September 2008 – July 2009
Develop revised Rider Guide for regional paratransit service.	January – March 2009
Revise information about paratransit services on web sites and other public information used by the RPTA and member communities.	April – June 2009

8.2. In-Person ADA Paratransit Eligibility Determination Process

Several key decisions about the design of a new in-person ADA eligibility determination process are detailed in Sections 5.5 and 5.6 of this report. These include deciding on whether all applicants will participate in at least an interview, how many interview/assessment sites will be created, whether interviews and assessments will be conducted in-house or by a contractor, and the desired qualifications of any contractors utilized in the process. As noted in Section 5.6 of this report, these decisions also need to be made with public input.

A second key issue, also discussed in Section 5.6 of this report, is to ensure that existing fixed route services are accessible to and usable by riders with disabilities. A more thorough ADA paratransit eligibility determination process will be encouraging greater use of fixed route services. It is vital that the systems work for riders who are encouraged to use them. It is therefore suggested that the RPTA undertake a critical review of current fixed route operations to ensure that proper accessibility equipment is functional and well maintained, proper assistance is provided, riders with disabilities are not “passed-by,” and stops are announced as required by the ADA. Based on the findings of this review, training programs, service monitoring programs, and employee recognition and disciplinary programs should be strengthened and implemented. This should be done before the in-person eligibility determination process is implemented.

If an outside contractor or contractors are to be used to assist with in-person interviews and/or assessments, staffing requirements and a scope of work will need to be developed. A competitive process to select a contractor or contractors will then need to be conducted. The interview/assessment sites will then need to be selected and equipped. In-house staff needed to support the new process will need to be hired. New and existing staff will also need to be trained in the new process.

Current ADA paratransit eligibility application material and public information will also need to be revised. Photo ID equipment will also need to be purchased for each interview/assessment site. It is also suggested that the Trapeze eligibility module be purchased and installed to support management of the new process.

Table 8.8 on the following page lists the tasks and milestones suggested for implementation of an in-person ADA paratransit eligibility determination process. As shown, the process could be implemented during FY2009, prior to the start-up of the new regional paratransit program.

Table 8.8. Tasks and Milestones for Implementing In-Person ADA Paratransit Eligibility Determination Process

Task	Timeline
Make final decisions on percent of riders to be interviewed, and number interview/assessment centers. Develop guidelines for issuing “permanent” eligibility for certain riders once they have participated in the new process. Utilize the CAT for input. Also sponsor at least one public forum to present and discuss the proposed process.	March – May 2008
Review current accessibility of fixed route system. Strengthen fixed route driver training programs, service monitoring programs, and employee recognition and disciplinary programs as needed.	January – March 2008
Implement programs to strengthen fixed route accessibility and usability.	April 2008 (and ongoing)
Develop RFP for interview and assessment services.	June – July 2008
Negotiate and execute contract for interview and assessment services.	August – September 2008
Revise application form and other public information to reflect new in-person process.	June – October 2008
Obtain photo ID equipment and other assessment equipment for interview/assessment centers. Set up interview/assessment centers.	October – November 2008
Purchase and install Trapeze rider eligibility module to allow process to be managed and to allow rider trip information to be easily transmitted to Call Center and other DARs in the future.	August – September 2008
Hire and train additional RPTA staff needed to support the new process.	September – November 2008
Begin in-person interviews and assessments as needed with new applicants and current riders as their current term of eligibility expires.	December 2008

8.3. Travel Training Programs

Section 7.1 of this report recommends that the RPTA implement expanded travel training programs to encourage and facilitate use of fixed route transit options. These include one-on-one training for persons with cognitive or vision disabilities, as well as group trainings and sponsored outings modeled after successful programs in Glendale and Tucson.

Section 7 of this report also notes that an informal TransACT group (Transportation Alternatives for Community Travel) has been meeting to promote expanded travel training as well as other supplemental services and programs. This group has received training from Easter Seals Project ACTION, a national program to promote greater accessibility of public transit services, and has already gathered information on travel training at other transit systems. It is suggested that the RPTA and member communities utilize and work with this group as travel training and other supplemental services are planned and developed.

Several separate contracts with local service organizations are suggested as part of the travel training program. Scopes of work and contracts should be developed and executed with 4-5 organizations that have the capabilities to provide training to riders with various types of disabilities. This would include organizations that work with persons with cognitive disabilities, organizations that work with person with vision disabilities, and organizations that work with persons with physical disabilities. Programs appropriate to each population should be developed cooperatively with these organizations.

As suggested in Table 8.9 below, group training and outings could begin first. Referrals from the eligibility process for one-on-one training would take place after the in-person eligibility determination process is implemented (suggested to be January 2009). The ADA eligibility determination process should be used to identify applicants and riders with the potential to be trained to use fixed route services. Referrals should then be made to the organizations under contract.

The tasks and milestones in Table 8.9 are suggested for the development and implementation of expanded travel training programs.

**Table 8.9. Tasks and Milestones for Implementing
Regional Travel Training Programs**

Task	Timeline
Develop scopes of work and RFPs for agencies to provide travel training services. Develop separate work scopes and RFPs for travel training for riders with cognitive disabilities, vision disabilities, and physical disabilities. Include staff “core competencies” in scopes and RFPs.	December 2007 – March 2008
Obtain proposals from local organizations, review proposals and select 4-5 agencies to provide various types of needed training.	April – June 2008
Develop region-wide group training program modeled on Glendale and Tucson programs.	April – June 2008
Implement group trainings and sponsored outings.	July 2008 (and ongoing)
Develop program to make buses and extraboard fixed route drivers available in off-peak hours to local agencies.	July 2008 (and ongoing)
Market availability of buses for group trips and begin offering group trips for interested agencies.	July 2008 (and ongoing)
Have RPTA eligibility staff begin making referrals to contracted agencies for travel training.	January 2009

8.4. Free Fare Fixed Route Program

As noted in Section 7.2 of this report, offering free fares on fixed route services to persons who have been determined ADA paratransit eligible can be an effective way to encourage and facilitate greater use of these modes. National experience has shown that free fare programs can encourage 5-15% of paratransit riders who are able to sometimes travel by bus and train to use these modes for some trips. National experience also has clearly shown that free fare fixed route systems tied to ADA paratransit eligibility can also significantly increase the number of persons applying for ADA paratransit eligibility. ***It is therefore strongly recommended that this program only be implemented after the development and implementation of an in-person interview/assessment process for determining ADA paratransit eligibility.***

It is suggested that a photo ID be issued to ADA paratransit eligible riders for use in obtaining free fixed route fares. Photo IDs would be issued to new applicants and recertified riders as part of the new in-person eligibility determination process. Current riders whose eligibility will not expire for some time could also be asked to show-up in person at one of the interview/assessment sites to have a photo ID made.

Besides implementing a new in-person eligibility process, a free fare system would only require some minimal efforts to advertise the program and service bulletins and/or training of fixed route employees. Suggested tasks and milestones for implementing a free fare fixed route program are provided below. Note that the implementation date for this program is set to be after the suggested implementation date of an in-person eligibility process noted above.

Table 8.10. Tasks and Milestones for Implementing Free Fare Fixed Route Program

Task	Timeline
Implement in-person interview/assessment process for determining ADA paratransit eligibility.	December 2008
Develop service bulletin and training, as needed, for fixed route drivers and supervisors on new free fare program.	October – December 2008
Develop public information on program.	October – December 2008
Develop process for tracking use of ADA IDs for free fixed route fares to be able to determine the impact of the program.	October – December 2008
Begin offering free fares on fixed route system for riders who are ADA paratransit eligible and who have a Valley Metro ADA photo ID.	January 2009

8.5. Taxi-Based Programs

Possible service policies for an expanded regional taxi subsidy program are presented in Section 7.3 of this report. These suggested policies would first need to be discussed with member communities and the proposed CAT.

Once a set of standardized regional policies are agreed upon, the RPTA should meet with member communities to discuss and encourage expansion of taxi subsidy as well as mileage reimbursement programs. Communities could either elect to start or expand their own programs, or could choose to fund a program administered by the RPTA.

Efforts to encourage expanded taxi subsidy and mileage reimbursement programs could begin immediately and are not dependent on other recommended regional services or programs. Tasks and milestones for implementing a program in FY2009 are provided below.

Table 8.11. Tasks and Milestones for Implementing Expanded Regional and Local Taxi Subsidy and Mileage Reimbursement Programs

Task	Timeline
Finalize service policies for an expanded regional taxi subsidy program and mileage reimbursement program based on the current Ride Choice program. Finalize policies with VMOCC and CAT input.	July – October 2008
Meet with member communities to encourage and develop expanded taxi subsidy and mileage reimbursement programs operated either by the communities or through an expanded regional service.	November 2008 (and ongoing)
Implement expanded taxi subsidy and mileage reimbursement programs	Ongoing as funding is made available by member communities.

8.6. Paratransit-to-Fixed Route Feeder Service

As detailed in Section 7.4 of this report, paratransit services can be used to overcome barriers that prevent persons with disabilities from getting to and from fixed route stops and stations and can make use of the fixed route system possible. This type of “feeder” service is appropriate for longer trips under certain circumstances. Suggested guidelines for identifying trips that are appropriately served through feeder arrangements are provided in Section 7.4.

Policies and guidelines for a feeder program should first be discussed and finalized with the CAT and other public and community input processes. Appropriate routes and lines, as well as stops and stations, should then be identified. Some customization of paratransit software will also be required to identify feeder trips for special handling in the scheduling and dispatching processes.

If feeder service is used, the adopted policies and guidelines also would need to be incorporated into the regional call center contractor requirements. Public information describing the feeder options also would need to be developed.

It is suggested that feeder service only be implemented once the transition to a regional system and a regional call center is successfully completed. The tasks and milestones below suggest implementing feeder service one year after the start-up of the regional call center.

Table 8.12. Tasks and Milestones for Developing and Implementing Paratransit-to-Fixed-Route Feeder Service

Task	Timeline
Finalize feeder service policies and guidelines with VMOCC, TMC and CAT input.	June – August 2008
Include feeder service policies and guidelines in regional call center RFP and contract.	September 2008
Include information about feeder service options in regional paratransit public information.	January – March 2009
Customize Trapeze software to identify feeder trips for special handling in scheduling and dispatch.	April 2009
Identify appropriate routes/lines to be used for feeder service and appropriate feeder transfer locations on those routes and lines.	January – March 2010
Provide training to call center staff (managers, schedulers and dispatchers) on appropriate use of feeder service and implementation of feeder service policies and guidelines.	May – June 2010
Begin identifying frequently made trips that are appropriate for feeder service.	July 2010

Attachment A

DAR and STS Trip Origin-Destination Information

DAR and STS Trip Origins and Destinations by Community for the Week of September 17-23, 2006 – Color-Coded by DAR Program Area

From \ To	Apache Junction city	Avondale city	Buckeye town	Carefree town	Cave Creek town	Chandler city	El Mirage city	Fountain Hills town	Gila Bend town	Gilbert town	Glendale city	Goodyear city	Guadalupe town	Laveen	Litchfield Park city	Mesa city	Morristown	New River CDP	Paradise Valley town	Peoria city	Phoenix city	Queen Creek town	Rio Verde CDP	Scottsdale city	Sun City CDP	Sun City West CDP	Sun Lakes CDP	Surprise city	Tempe city	Tolleson city	Tonopah	Wickenburg town	Wittmann	Youngtown town	Total
Apache Junction city	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5
Avondale city	0	227	3	0	0	0	0	0	0	0	7	51	0	2	3	0	0	0	0	0	76	0	0	0	0	0	0	0	0	24	0	0	0	0	393
Buckeye town	0	3	108	0	0	0	0	0	0	0	0	6	0	0	0	0	0	0	0	4	0	0	0	0	0	0	0	0	0	5	0	0	0	126	
Carefree town	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Cave Creek town	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Chandler city	0	0	0	0	0	593	0	0	0	43	0	0	0	0	0	96	0	0	0	0	21	0	0	7	0	0	0	0	73	0	0	0	0	833	
El Mirage city	0	0	0	0	0	0	44	0	0	0	1	0	0	0	0	0	0	0	0	7	0	0	0	8	0	0	35	0	0	0	0	0	1	96	
Fountain Hills town	0	0	0	0	0	0	0	12	0	0	0	0	0	0	0	0	0	0	0	5	0	0	21	0	0	0	0	0	0	0	0	0	0	38	
Gila Bend town	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Gilbert town	0	0	0	0	0	39	0	0	0	259	0	0	0	0	0	162	0	0	0	0	0	0	16	0	0	0	0	32	0	0	0	0	0	508	
Glendale city	0	5	0	0	0	0	1	0	0	0	1531	1	0	0	2	0	0	0	0	82	346	0	3	13	0	0	0	1	1	0	0	0	1,986		
Goodyear city	0	45	6	0	0	0	0	0	0	0	1	17	0	0	0	0	0	0	0	38	0	0	0	0	0	0	0	0	3	0	0	0	110		
Guadalupe town	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	7		
Laveen	0	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	36	0	0	0	0	0	0	0	1	0	0	0	0	39		
Litchfield Park city	0	3	0	0	0	0	0	0	0	0	2	0	0	0	0	0	0	0	0	4	0	0	0	1	0	0	0	0	0	0	0	0	0	10	
Mesa city	5	0	0	0	0	93	0	0	0	158	0	0	5	0	0	1858	0	0	0	18	0	0	24	0	0	0	0	226	0	0	0	0	0	2,387	
Morristown	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	9	
* New River CDP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Paradise Valley town	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	14	0	0	6	0	0	0	0	0	0	0	0	0	0	20	
Peoria city	0	0	0	0	0	0	4	0	0	0	83	0	0	0	0	0	0	0	0	724	10	0	0	63	5	0	4	0	0	0	0	0	0	893	
Phoenix city	0	82	3	0	0	21	0	5	0	0	316	33	1	33	5	20	0	0	19	11	6771	0	170	10	0	0	2	90	16	0	0	0	7,608		
Queen Creek town	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
* Rio Verde CDP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Scottsdale city	0	0	0	0	0	7	0	20	0	17	0	0	0	1	0	60	0	0	6	0	119	0	491	0	0	0	0	85	0	0	0	0	0	806	
* Sun City CDP	0	0	0	0	0	0	9	0	0	0	15	0	0	0	1	0	0	0	0	63	10	0	0	582	112	0	25	0	0	0	3	9	26	855	
* Sun City West CDP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	0	0	0	112	172	0	28	0	0	0	5	10	332		
* Sun Lakes CDP	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	-	
Surprise city	0	0	0	0	0	0	20	0	0	0	0	0	0	0	0	0	0	0	3	2	0	0	0	38	31	0	158	0	0	0	3	0	0	255	
Tempe city	0	1	0	0	0	64	0	0	0	22	3	0	1	0	0	169	0	0	0	0	160	0	79	0	0	0	0	365	0	0	0	0	0	864	
Tolleson city	0	16	0	0	0	0	0	0	0	0	0	3	0	0	0	0	0	0	0	16	0	0	0	0	0	0	0	45	0	0	0	0	80		
Tonopah	0	0	5	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	5	
Wickenburg town	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	9	0	0	0	0	0	0	3	0	0	3	0	0	0	36	0	0	51	
Wittman	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	8	5	0	0	0	0	0	0	0	0	13	
Youngtown town	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	26	10	0	0	0	0	0	0	10	0	47	
Total	5	384	125	-	-	817	79	37	-	499	1,959	111	7	36	11	2,375	9	-	25	895	7,651	-	-	817	856	338	5	255	874	89	5	51	14	47	18,376

Attachment B

Analysis of Travel Times and Transfer Wait Times for Regional DAR 123 Trips Taken September 17-23, 2006

APPENDIX B.
TRIPS THAT CROSS CITY BOUNDARIES
COMPARISON OF IDENTICAL TRIPS USING DIAL-A-RIDE OR FIXED-ROUTE BUS

EAST VALLEY-PHOENIX TRANSFERS

DAR TRIPS							BUS TRIPS			
#	Day/ Time	Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time	Bus Travel Time	Trans Wait Time	# Buses	Miles Walked
1	Sun 1pm	Scotts	Phx	5.4	1 hr 9 min	31 min	29 min	6 min	2	0.6
2	Sun 3 pm	Scotts	Phx	29	1 hr 37 min	35 min	No bus service			
3	Sun 3:45p	Phx	Tempe	13.7	1 hr 8 min	25 min	1 hr 1 min	18 min	2	0.5
4	Sun 3:30p	Phx	Mesa	44.5	2 hr 8 min	1 hr 9 min	No bus Serv			
5	Sun 8:30a	Phx	Scotts	6.4	1 hr 13 min	22 min	16 min	-	1	0.9
6	Sun 5:30a	Phx	Scotts	17	54 min	0 min	1 hr 13 min	25 min 6+19	3	0.7
7	Sun 5:20a	Phx	Scotts	29	1 hr 56 min	8	No bus service		3	1.5
8	Sun		Phx no show							
9	Sun		Phx no show							
10	Sun 3pm		Phx no show							
11	Sun		Phx canc at door							
12	Mon 1:15p	Scotts	Phx	10.1	1 hr 31 min	4 min	32 min		1	0.6
13	Mon	Mesa	Phx	19.7	2 hr	27	1 hr	4 min	2	0.4

8:45a				42 min	min		34 min			
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DAR TRIPS

BUS TRIPS

#	Day/Time	Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time	Bus Travel Time	Trans Wait Time	# Buses	Miles Walked
14	Mon 5:45a	Mesa	Phx	10.2	1 hr 4 min	0	No bus service			
15	Mon 4:30a	Mesa 4:27 4:58a	Phx no times shown							
16	Mon 6 am	Chand	Phx	16.2	1 hr	18 min	1 hr 5 min	7 min	2	0.9
17	Mon noon	Mesa	Phx	44.5	1 hr 7 min	1 min	No bus Service			
18	Mon 7:15 p	Tempe	Phx	6.6	1 hr 21 min	40 min	36 min	15 min	2	0.3
19	Mon 12:30p	Phx 12:24 1 pm	EV no times shown							
20	Mon 4pm	Phx	Scotts	20.6	1 hr 49 min	37 min	1 hr 43 min	20 min 5+15	3	0.6
21	Mon 4:44p	Phx	Chand	16.2	1 hr 59 min	40 min	1 hr 9 min	15 min	2	0.9
22	Mon 7:30p	Phx	Mesa	19.8	2 hr 22 min	37 min	1 hr 35 min	15 min	2	0.4
23	Mon 12:30p	Phx	Mesa	25.4	1 hr 40 min	5 min	2 hr 8 min	28 min	3	0.7
24	Mon 7pm	Phx	Mesa	11.3	44 min	9 min	1 hr 25 min	44 min 25+19	3	0.5
25	Mon 6am	Phx	Mesa	18.5	2 hr 38 min	59 min	1 hr 41 min	14 min	2	0.5
26	Mon 3:30p	Mesa	Phx	29	2 hr 18 mi	0 min	1 hr 58 min	8 min	2	0.7
27	Mon 2pm	Scotts	Tolleson	21.8	3 hr 43 min	2 hr 53 min	No bus service			
28	Mon 12:31p	Phx 12:31 13:24	EV no times shown							

#	Day/ Time	DAR TRIPS					BUS TRIPS				
		Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time	Bus Travel Time	Trans Wait Time	# Buses	Miles Walked	
29	Mon 5pm	Phx	Scotts	10.1	1 hr 17 min	46 min	1 hr 2 min	28 min	2	0.7	
30	Mon 3pm	Phx	Scotts	26	3 hr 23 min	1 hr 2 min	No bus service				
31	Tues 7:30a	Mesa	Phx	21.4	1 hr 53 min	11	52 min		1 Ex- press	0.4	
32	Tues 8 am	Mesa	Phx	21.0	2 hr 37 min	48 min	1 hr 55 min	42 min 11+8+17+6	5	0.7	
33	Tues 8am	Tempe	Avond	25.0	1 hr 51 min	12 min	2 hr 19 min	30 min 20+10	3	0.4	
34	Tues 6:45a	Phx 6:43 7:18am	EV no times								
35	Tues 9:15 a	Scotts	Phx	9.2	59 min	18 min	36 min	8 min	2	0.6	
36	Tues 4:35p	Mesa	Phx	17.4	2 hr 1 min	25 min	1 hr 53 min	22 min 12+6+4	4	0.3	
37	Tues 8:30a	Tempe 8:35/8:58	Phx No times	23.0	na	na	1 hr 44 min	14 min 7+7	2	0.3	
38	Tues 4pm	Mesa	Phx	26.7	2 hr 10 min	18 min	2 hr 37 min	34 min 17+10+7	4	0.4	
39	Tues 8 am	Mesa	Phx	19.7	2 hr 43 min	19 min	1 hr 34 min	5 min	2	0.4	
40	Tues 2pm	Mesa 2 2:44pm	Phx No times								
41	Tues 9:15a	Chand	Phx	23.1	1 hr 36 min	0	2 hr 15 min	29 min 16+13	3	0.8	
42	Tues 10:30a	Scotts	Phx	17	1 hr 6 min	5	1 hr 26 min	20 min 9+11	2	0.3	

#	Day/ Time	DAR TRIPS					BUS TRIPS				
		Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time	Bus Travel Time	Trans Wait Time	# Buses	Miles Walked	
43	Tues 4:30p	Tempe	Phx	22.9	na	1 min	1 min 50	9 min	2	0.5	
44	Tues 6 am	Chand	Phx	15.4	1 hr 26 min	45 min	1 hr 5 min	7 min	2	0.7	
45	Tues 6:30 a	Mesa	Phx	23.1	3 hr 16 min	15 min	1 hr 50 min	8 min	2	0.5	
46	Tues 8:30a	EV no times	Phx 8:32-9:09a								
47	Tues	Phx no times									
48	Tues 6:30p	Tempe	Phx	18.2	1 hr 36 min	39 min	1 hr 30 min	20 min 3+10+7	4	0.6	
49	Tues 10am	Scotts	Phx	12	1 hr 15 min	31 min	1 hr 7 min	18 min 8+3+7	4	0.8	
50	Tues 4 pm	Phx	Chand	15.4	1 hr 55 min	14 min	1 hr 21 min	23 min 4+19	3	0.5	
51	Tues 7:45p	Phx	Mesa	19.8	50 min	1 min	1 hr 25 min	5 min	2	0.4	
52	Tues 2 pm	Phx	Mesa	25.4	2 hr 9 min	53 min	2 hr 11 min	23 min 13+10	3	0.7	
53	Tues 7:15p	Phx	Mesa	11.3	1 hr 14 min	35	60 min	21 min	2	0.9	
54	Tues 12:30p	Phx	Mesa	21.8	2 hr 50 min	1 hr	2 hr 2 min	23 min 17+6	3	0.2	
55	Tues 5:15p	Phx	Mesa	15.8	1 hr 48 min	13 min	57 min	6 min	1 express 1 local	0.8	
56	Tues 12:15p	Phx	Mesa	26.8	2 hr 44 min	1 hr 41 min	1 hr 37 min	32 min 10+22	3	0.7	

#	Day/ Time	DAR TRIPS					BUS TRIPS				
		Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time	Bus Travel Time	Trans Wait Time	# Buses	Miles Walked	
57	Tues 1:45p	Phx	Mesa	17.4	2 hr 36 min	32 min	2 hr 12 min	26 min 10+16	3	0.4	
58	Tues 1:30p	Phx	Mesa	28.5	2 hr 23 min	6 min	2 hr 25 min	28 min 8+20	3	0.5	
59	Tues 2:45p	Phx	Mesa	14.6	2 hr 25 min	1 hr 22 min	1 hr 47 min	33 min 12+9+12	4	0.9	
60	Tues 11am	Phx	Tempe	25.2	1 hr 11 min	7 min	2 hr 5 min	19 min 3+6+10	4	0.4	
61	Tues 1:30p	Phx	Chand	23.5	2 hr 18 min	31 min	2 hr 4 min	16 min 3+6+7	4	0.2	
62	Tues 5:30a	Phx	Scotts	17	1 hr 29 min	47 min	1 hr 24 min	22 min 8+9+5	4	0.5	
63	Tues 5 am	Phx	Scotts	10.3	2 hr 3 min	1 hr 26 min	52 min	6 min	2	0.6	
64	Tues 10:15a	Phx	Mesa	29.5	1 hr 50 min	1 min	2 hr 32 min	24 min 13+4+7	4	0.9	
65	Tues 3 pm	Phx No drop Off time	Mesa	15.8	3 hr 53 min	na	1 hr 31 min	26 min	2	0.8	
66	Tues 7:30a	Scotts No times									
67	Wed 6 pm	Mesa	Phx	32.6	2 hr 50 min	0	2 hr 15 min	29 min 13+16	3	0.7	
68	Wed 6:15p	Chand	Phx	15.4	53 min	3 min	1 hr 9 min	11 min	2	0.9	
69	Wed 6:45a	Mesa	Phx	17.4	1 hr 35 min	0 min	1 hr 25 min	15 min 12+3	3	1.1	
70	Wed 2pm	Scotts	Phx	25.9	1 hr 7 min	0	1 hr 57 min	29 min 11+12+6	4	0.7	

#	Day/ Time	DAR TRIPS					BUS TRIPS				
		Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time	Bus Travel Time	Trans Wait Time	# Buses	Miles Walked	
71	Wed 10:15a	Mesa 10:20 11:40a	Phx No times				1 hr 46 min	15 min	2	1.0	
72	Wed 5:15a	Mesa	Phx	17.4	1 hr 26 min	0 min	1 hr 14 min	20 min	1 express 1 local	0.5	
73	Wed 1pm	Scotts	Phx	25.1	1 hr 39 min	21 min	1 hr 54 min	29 min 18+11	3	0.4	
74	Wed 8:45a	Mesa	Phx	20.8	1 hr 35 min	4 min	1 hr 26 min	18 min 12+6	3	0.4	
75	Wed 11am	Mesa	Phx	27.8	2 hr 11 min	1 hr 8 min	2 hr	7 min	2	1.4	
76	Wed 2:30p	Tempe	Phx	12.8	1 hr 4 min	2 min	1 hr 36 min	37 min 18+19	3	0.7	
77	Wed 2pm	EV no times	Phx 2:30 3:04p								
78	Wed 2:45p	Scotts	Phx	14.3	1 hr 38 min	41 min	1 hr 20 min	31 min	2	0.3	
79	Wed 5:30p	Mesa	Phx	14.6	1 hr 43 min	44 min	1 hr 17 min	19 min 11+8	3	0.5	
80	Wed 7am	EV No times	Phx 7:10 – 7:30a								
81	Wed 5pm	Mesa	Phx	22.8	1 hr 55 min	19 min	1 hr 55 min	14 min	2	0.1	
82	Wed 5:30p	Mesa	Phx	10.4	1 hr 28 min	0 min	1 hr 3 min	8 min	2	0.8	
83	Wed 6:30p	Mesa	Phx	18.9	1 hr 50 min	12 min	2 hr 2 min	36 min 12+16+8	4	0.5	

DAR TRIPS

BUS TRIPS

#	Day/ Time	Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time		Bus Travel Time	Trans Wait Time	# Buses	Miles Walked
84	Wed 11:45	Scotts	Phx	33.7	2 hr 49 min	1 hr 56		2 hr 30 min	31 min 11+9+6+5	5	0.5
85	Wed 6:45p	Tempe	Phx	10.3	1 hr 19 min	39 min		54 min	15 min	2	0.4
86	Wed 5:15p	Mesa	Glend Soft border Drop off	29.7	2 hr 22 min	19 min		2 hr 35 min	30 min 14+8+8	4	0.5
87	Wed 6pm	EV no Times shown	Laveen Near Avond 6:24- 7:15p					No bus service		Nearest bus Stop is 1.3 miles	
88	Wed 7 pm	Tempe	Phx	8.8	50 min	6 min		36 min	15 min	2	0.3
89	Wed 11:30 a	Phx	Mesa	33.2	2 hr 16 min	1 hr 20 min		2 hr 19 min	3 min	2	0.3
90	Wed noon	Phx	Chand	15.4	1 hr 58 min	1 hr 20 min		1 hr 23 min	23 min 4+19	3	0.5
91	Wed 8:15a	Phx	Mesa	22.8	1 hr 38 min	15 min		1 hr 30 min	8 min	2	0.1
92	Wed 4pm	Phx 4-4:19pm	EV no Times shown								
93	Wed 5:45p	Phx	Mesa	22.6	1 hr 54 min	34 min		1 hr 58 min	20 min	2	1.0
94	Wed 11:15a	Phx— not a transfer									
95	Wed 4pm	Phx	Mesa	17.4	2 hr 35 min	46 min		1 hr 59 min	30 min 12+5+13	4	0.4
96	Wed 3:30p	Phx	Mesa	14.5	1 hr 33 min	0 min		2 hr 14 min	17 min 7+10	3	0.5

DAR TRIPS

BUS TRIPS

#	Day/ Time	Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time	Bus Travel Time	Trans Wait Time	# Buses	Miles Walked
97	Wed 9:30a	Phx	Scotts	14.3	1 hr 58 min	58 min	55 min	5 min	2	0.2
98	Wed 5pm	Phx No times shown	Tempe 4:58-5:53p							
99	Wed 6:30p	Phx	Mesa	11.3	1 hr 28 min	54 min	1 hr 23 min	10 min 6+4	3	0.7
100	Wed 12:45p	Phx	Mesa	20.8	3 hr 21 min	59 min	1 hr 48 min	34 min 17+17	3	0.6

GLENDALE TRANSFERS

DAR TRIPS

BUS TRIPS

#	Day/ Time	Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time	Bus Travel Time	Trans Wait Time	# Buses	Miles Walked
1	Sun 6:22a	Phx	Glend	7.2	56 min	30 min	31 min	7 min	2	0.7
2	Sun 2:35p	Glend	Phx	7.2	51 min	22 min	1 hr 16 min	31 min 23+8	3	0.5
3	Sun 8:11a	Glend	Phx	9.4	47 min	21	1 hr 11 min	33 min	2	0.7
4	Mon 4:37a	Phx	Peoria	12.1	2 hr 20 min	N/A	2 hr 6 min	55 min 20+35	3	0.7
5	Mon 6:35p	Gets to Phx-Gln trans loc on own	Glend	4.3	18 min	N/A				
6	Mon 5:30a	Gets to Gln-Phx trans loc on own	Phx	4.3	30 min	N/A				
7	Mon	Peoria	Glend							
8	Mon 7:52a	Glend								
9	Mon 7:59a	Phx	Glend	10.7	1 hr 43 min	13 min	55 min	9 min	2	0.3
10	Mon 11:33a	Glend	Phx	10.7	1 hr 27 min	27 min	59	9 min	2	0.2

#	Day/ Time	DAR TRIPS					BUS TRIPS				
		Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time	Bus Travel Time	Trans Wait Time	# Buses	Miles Walked	
11	Mon 8:21a	Phx	Glend	8.9	1 hr 21 min	13 min	30		1	0.4	
12	Mon 2:05	Glend	Phx	8.1	4 hr 27	2 hr 56 min	32 min		1	0.2	
13	Mon 8:03a	Phx	Glend	7.7	1 hr	9 min	37 min	6 min	2	0.9	
14	Mon 12:51p	Phx resi- dent – not a transfer	Glend	1.6	15 min	N/A					
15	Mon 4:44p	Glend	Phx	5.7	1 hr 43 min	1 hr 14 min	1 hr 4 min	36 min 18+7+11	4	0.6	
16	Mon 1:30p	Glend	Peoria	3.3	37 min	N/A	No bus service				
17	Mon	Peoria	Glend								
18	Mon 7:36a	Glend	Peoria	13.0	1 hr 15 min	N/A	No bus service				
19	Mon 2:30p	Glend	Peoria								
20	Mon 7:09a	Gln	Phx	9.4	54 min	18 min	no bus service				
21	Mon	Peoria	Glend								
22	Mon 7:14a	Glend	Peoria	10.7	1 hr 57 min	N/A	No bus service				
23	Tues 5:48a	Gets to Gln- Phx transfer loc on own	Phx	4.3	15 min						
24	Tues 1:04p	Phx	Glend	9.6	55 min	11 min	1 hr 2 min	19 min 7+12	3	0.7	
25	Tues 7:25a	Glend	Phx	9.6	1 hr 6 min	0	1 hr 5 min	20 min	2	0.5	
26	Tues 10:10a	Glend no show									
27	Tues	Peoria	Glend								

DAR TRIPS

BUS TRIPS

#	Day/ Time	Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time		Bus Travel Time	Trans Wait Time	# Buses	Miles Walked
28	Tues 7:57a	Glend	Peoria	6.2	52 min	N/A		1 hr 21 min	20 min	3	0.9
29	Tues 9:29a	Phx	Glend	5.3	1 hr 55 min	47 min		37 min	11 min 6+5	3	0.6
30	Tues 9:21a	Glend	Phx	5.3	56 min	14 min		36 min	14 min	2	0.7
31	Tues 7:08a	Phx	Glend	7.7	1 hr 11 min	42 min		44 min	16 min	2	1.6
32	Tues 12:59p	Glend	Phx	7.7	1 hr 5 min	9 min		51 min	22 min	2	1.6
33	Tues 7:09a	Glend	Phx	9.4	1 hr 10 min	8 min		53 min	10 min	2	0.7
34	Tues	Peoria	Glend								
35	Tues 7:35a	Glend	Peoria	13.0	1 hr 44 min	N/A		No bus service			
36	Tues 7:01a	Phx	Peoria	18.1	2 hr 18 min	N/A		No bus service			
37	Tues 2:34p	Glend	Peoria	3.9	1 hr 32 min	N/A		No bus service			
38	Tues 10am	Glend	Phx	9.4	1 hr 20 min	N/A Phx p.u not shown		no bus service			
39	Tues 7:19a	Glend No show									
40	Tues	Peoria	Glend								
41	Tues 3:05p	Glend	Peoria	3.3	1 hr 1 min	N/A		No bus service			

DAR TRIPS

BUS TRIPS

#	Day/ Time	Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time		Bus Travel Time	Trans Wait Time	# Buses	Miles Walked
42	Tues	Phx not on Phx sheet	Glend No show 9:44a								
43	Tues 7:37a	Phx	Glend	16.3	1 hr 52 min	28 min		60 min	29 min 15+14	3	0.4
44	Tues 12:18a	Glend	Phx	16.3	34 min	5 min		57 min	17 min 8+9	3	0.3
45	Wed	Glend No show	Peoria								
46	Wed 5:47p	Gets to Gln-Phx trans loc on own	Glend	4.3	25 min	N/A					
47	Wed 5:24a	Glend	Gets from Gln-Phx trans loc on own	4.3	16 min	N/A					
48	Wed	Peoria	Glend								
49	Wed 10:37a	Glend	Peoria								
50	Wed 10:52a	Phx	Glend	9.1	1 hr 7 min	14 min		1 hr 7 min	17 min	2	0.4
51	Wed 6:50a	Glend 6:50-7:03	Phx no times shown	9.1							
52	Wed 2:08p	Phx	Glend	5.6	38 min	7 min		33 min	11 min	2	1.6
53	Wed 7:12a	Glend	Phx	5.6	54 min	7 min		29	12 min	2	1.2
54	Wed	Peoria	Glend								

#	Day/ Time	DAR TRIPS					BUS TRIPS			
		Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time	Bus Travel Time	Trans Wait Time	# Buses	Miles Walked
55	Wed 7:30a	Glend	Peoria							
56	Wed 7:21a	Phx	Glend	11.2	1 hr 44 min	44 min	1 hr 20 min	15 min ⁹⁺⁶	3	0.1
57	Wed 11:02a	Glend	Phx	11.2	59 min	5 min	1 hr 3 min	12 min	2	0.5
58	Wed 7:37a	Phx	Glend	7.7	42 min	4 min	42 min	11 min	2	0.9
59	Wed 11:32a	Glend No show								
60	Wed 2:46p	Glend	Peoria							
61	Wed	Peoria	Glend							
62	Wed 7:29a	Glend	Peoria							
63	Wed 2:51p	Glend	Peoria							
64	Wed 3:10p	Phx	Glend	9.4	38 min	6 min	no bus service			
65	Wed 8:18a	Glend	Phx	9.4	29 min	0 min	no bus service			
66	Wed 11:20a	Phx No show	Glend							
67	Wed 8:51	Phx	Glend	6.1	1 hr 3 min	19 min	42 min	13 min	2	0.4
68	Wed 12:29p	Glend	Phx	6.1	23 min	0 min	46 min	8 min	2	0.2
69	Thurs	Peoria	Glend No show							

DAR TRIPS

BUS TRIPS

#	Day/Time	Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time	Bus Travel Time	Trans Wait Time	# Buses	Miles Walked
70	Thurs 7:43a	Glend	Peoria							
71	Thurs 6:14p	Gets to Phx-Gln trans loc on own	Glend		18 min	N/A				
72	Thurs 5:45a	Glend	Gets from Phx-Gln trans loc on own	4.3	15 min	NA				
73	Thurs 2:28p	Glend 2:28p p.u. 2:47p d.o.	Phx 4:50p p.u. reported No show	11.2	N/A	2 hr 3 min person left				
74	Thurs	Peoria	Glend							
75	Thurs 7:42a	Glend	Peoria	6.3	48 min	N/A	1 hr 21 min	20 min	3	0.9
76	Thurs 9:51a	Glend	Peoria	7.3	57 min	N/A	48 min	20 min	2	1.4
77	Thurs 7:39 a	Glend	Avond	8.0	1 hr 18 min	26 min	No bus service			
78	Thurs 1:41p	Glend No show	Peoria							
79	Thurs 11:45a	Glend 11:45a p.u. 11:56 d.o.	Phx							
80	Thurs no show	Peoria	Phx							
81	Thurs	Peoria	Glend							
82	Thurs 7:39a	Glend	Peoria							
83	Thurs 3:15p	Phx	Glend	9.4	55 min	2 min	no bus service			

DAR TRIPS

BUS TRIPS

#	Day/ Time	Origin City	Dest. City	Trip Miles	Travel Time	Trans Wait Time	Bus Travel Time	Trans Wait Time	# Buses	Miles Walked
84	Thurs 7:09a	Glend	Phx	9.4	52 min	18 min	No bus service			
85	Thurs 5:10p	Phx	Glend	28.4	1 hr 28 min	3 min	2 hr 3 min	32 min 6+26	3	0.2
86	Thurs 2:04p	Phx	Glend	19.1	1 hr 47 min	56 min	1 hr 2 min	11 min 3+8	3	0.5
87	Thurs 9:45a	Glend	Phx	10.1	1 hr 54 min	17 min	59 min	20 min 3+17	3	0.3
88	Thurs 6:15a	Glend	Phx	8.3	1 hr 47 min	44 min	50 min	11 min	2	0.4
89	Fri	Peoria	Glend							
90	Fri 5:38p	Glend	Peoria	10.4	53 min	N/A	No bus service			
91	Fri 11:08a	Phx	Peoria	12.1	1 hr 21 min	N/A	1 hr 42 min	39 min 8+31	3	0.7
92	Fri	Peoria	Glend							
93	Fri	Glend	SCAT							
94	Fri 11:32a	Phx	Glend	6.0	1 hr 37 min	52 min	46 min	13 min	2	0.6
95	Fri 6:33a	Phx	Glend	13.2	1 hr 7 min	5 min	1 hr 36 min	25 min 3+22	3	0.3
96	Fri 10:33a	Glend	Phx	13.2	3 hr 38 min	2 hr 22 min	1 hr 45 min	30 min 15+15	3	0.2
97	Fri 7:33	Glend 10:30 pu 10:51 do	Avond No show				No bus service			
98	Fri	Peoria	Glend							
99	Fri	Glend	Peoria							
100	Fri	Peoria	Glen							