

VALLEY METRO/Regional Public Transportation Authority

Regional Paratransit Study

Response to Questions

Prepared by

TranSystems Corp.

with

**RLS & Associates, Inc.
Gunn Communications, Inc.**



January 31, 2008

Introduction

This document provides responses to questions received by the Regional Public Transportation Authority (RPTA) on the recent Regional Paratransit Study Report. A final study report was delivered to the RPTA on September 26, 2007. The recommendations contained in the report were presented to the VMOCC on September 13, 2007, to the Finance Oversight Advisory Committee on September 18, 2007, and to the Transit Management Committee on October 3, 2007.

A number of questions were received from VMOCC, FOAC, and TMC members during these presentations. The RPTA also broadly requested questions from member communities and other stakeholders during October and November 2007. Questions received were reviewed by RPTA staff and categorized by subject. Similar questions were combined or consolidated. Many of the questions were then forwarded to the study consultant for review and response. Several of the questions having to do with the process of adopting the recommendations and general transit funding were addressed by RPTA staff.

Following are the questions received as well as responses prepared by RPTA staff and the study consultants. Questions and responses are presented by topic, including:

- ◆ Ridership projections
- ◆ General cost issues
- ◆ Cost allocation issues
- ◆ Funding
- ◆ Operational issues
- ◆ Administrative issues
- ◆ ADA requirements
- ◆ ADA eligibility determination issues
- ◆ Supplemental programs
- ◆ RPTA process
- ◆ Implementation issues

Ridership Projections

1. **Will there be any more information provided by RPTA or the consultant on how the figures for projected/potential ridership were determined? If so, when and if not, why?**

And

Will the consultant make available the database(s) used to estimate ridership along with the type and design parameters of the regression analysis used and the raw regression outputs generated which served as the basis for the quantitative conclusions contained in the final report. If so, by what date?

RPTA has arranged for a special workshop on the ridership projections and ridership estimation methodologies included in the study report. This workshop will be held on February 15, 2008. The study consultants will present the methodologies used, will go over the data that was used to develop the estimates, and will review the ridership estimates that were developed.

In addition, the consultants will make available the raw data used to develop ridership estimates and the raw regression ridership outputs that were generated. Because of the amount of information involved, the raw data will be on a separate CD, which is available on request. The data contained on the CD will be discussed as part of the February 15 workshop.

2. **We would like to have a better understanding of the methodology used to determine ridership estimates and growth projections. The study refers to two methods used – one proprietary and one using an unpublished method. The two methods created a large disparity between the two sets of projections. Not having access to these models makes it difficult to get an understanding of the estimates. Have the models been calibrated to historical trends? Page 4-32 states a reason for the difficulty in determining projections; however it is not clear why it is not possible to use published models in this region?**

The final study report contains two types of future ridership information. The first is ***potential demand*** and the second is ***projected ridership***. In addition, the final study report provides these two types of ridership information for ADA eligible trips and non-ADA trips.

Potential demand shows the number of trips that could potentially be requested by eligible riders. The potential demand for ADA service was developed using a national demand estimation model that had been developed for the Transportation Research Board (TRB), part of the National Academy of Sciences. In the Spring of 2007, when demand estimates had to be developed for the study, this national model had been fully developed and tested, but had not been formally released or published by the TRB.

The consulting team was aware of the model because members of the team had served on a TRB panel that had overseen the research and development of the model. Special permission was obtained from the TRB to use the model, with the understanding that background information about the model would not be released until the final research report was published.

The TRB issued the final research report and model on December 4, 2007. A full description of the model and how it was developed is contained in *TCRP Report 119, Improving ADA Complementary Paratransit Demand Estimation, Transit Cooperative Research Program, Transportation Research Board, Washington, D.C., 2007*. The report can now be downloaded from the TRB website, www.trb.org. Details of the model will be discussed at the February 15, 2008 workshop noted in Question #1 above. The data used to run the model and the outputs for each community in the RPTA area will also be made available on the data CD that is being developed by the study consultants. Basically, the TRB model was developed by collecting data from 25 transit systems across the country that were felt to have fully implemented ADA complementary paratransit services and were operating without capacity constraints. Multivariate regression analysis was used to look for correlations between various system characteristics (total population, various population subgroups, fares, service various service policies, eligibility determination approaches, etc.) and actual expressed ridership. Ridership for these systems was found to have a high correlation to total population of the service area, the level of fares for the ADA complementary paratransit service, the percent of population below the poverty line, and the length of the on-time performance window used in providing service.

The **potential demand** for non-ADA service was estimated using a proprietary model developed by RLS & Associates, one of the firms on the study team. This model was developed using data collected by RLS & Associates from a number of systems across the country that provide non-ADA service. This proprietary model was used since there is no national model for estimating non-ADA demand.

It is important to note that the estimates of **potential demand** included in the final study report indicate what levels of ridership could potentially be experienced by RPTA member communities based on population and service area characteristics. These estimates do not consider actual ADA and non-ADA ridership in the area or trends in actual ridership. They are included in the report to show the levels of ADA and non-ADA ridership that would be expected compared to other systems across the country.

The **projected ridership** information contained in the final study report was developed based on actual past ridership trends in each RPTA member community. ADA and non-ADA ridership was collected from each DAR system. Ridership information was collected for fiscal years 2001 through 2007. For some DARs and communities, data was obtained for only 2002 through 2006. However, in each case, at least five years of ridership data was obtained.

Future ridership projections were developed using regression analysis. Basically, past ridership trends were used to predict future ridership through 2010, the first year of implementation of the proposed regional service.

The analysis did show a difference between the ***potential demand*** for ADA and non-ADA service (based on comparisons to other cities), and the ***projected ridership*** (based on actual past ridership trends). For example, in 2010, the projected ADA ridership based on actual ridership trends for the area is 648,568 trips. The potential ADA demand based on national models and comparisons to other cities is 1,074,823. Similarly, the projected non-ADA ridership in 2010 based on actual ridership trends for the area is 321,695 trips. The potential non-ADA demand based on modeling is 902,539. Essentially, this is saying that there is a lot more potential demand for both types of service than is currently being provided.

Information about both potential demand and projected ridership is contained in Section 4 of the final study report.

The ridership that was used to develop cost estimates for the proposed regional service was taken largely from the ***projected ridership***. That is, we used actual ridership and historical trends in actual ridership to build our regional cost model. In some cases, though, there were adjustments made to the strict regression projections. For example, in Mesa, we decreased non-ADA ridership well below the straight regression analysis to reflect changes in non-ADA service policies in recent years. Also, while non-ADA ridership has been dropping in some other communities in recent years, we assumed that non-ADA ridership in these communities in the first year of implementation of the regional service (2010) would be equal to current non-ADA ridership in 2007. These differences from the straight regression estimates are explained in "Estimated Ridership," on page 6-54 through 6-58 of the final report.

Page 4-32 of the final report notes that a variety of strategies (as detailed above) were used to estimate demand and ridership due to the complexities of the various DAR services. To the best of our knowledge, there is no single national model that can be used to predict demand and ridership for the various types of DAR programs in the RPTA area. The TRB model noted above is the most recent model for predicting ADA ridership. There are no national models for predicting non-ADA ridership, which is why the proprietary model developed by RLS & Associates was used. There is no model that we are aware of that could be used to generate a single ADA and non-ADA "DAR" demand or ridership estimate for the DAR systems as constructed in the RPTA area.

3. Define in more detail the difference between what is meant by projected ridership and potential ridership. For example, the numbers for Glendale are 33,882 for projected and 70,775 for potential ridership. The study explains the gap is being met by alternative services. While we understand the basic difference between the two, it is not clear what would cause the impact between the projected and potential. If implementation of the ADA service and costs impacts the ability to continue funding non-ADA services is it reasonable to

expect ADA ridership closer to the 70,775 numbers? Also, the Glendale ridership figure of 33,882 (Table 4.13) is different than the ridership figure of 27,600 (Table 6.22) used to calculate costs. Please explain the difference.

The differences between potential demand and projected ridership are explained in Question #2 above. For Glendale, the **potential demand** for ADA service in 2010 is 70,775 trips (from Table 4.15 of the final report). This is the ADA ridership that would be expected for Glendale based on the national TRB model and the estimated 2010 population, ADA fares, ADA on-time window, and 2010 low-income population. The **predicted ridership** for ADA service in 2010 in Glendale is 33,882. This is what you would expect based on the straight regression analysis of actual ridership trends from 2002 through 2006. The 2010 ADA ridership figure for Glendale used to develop costs for the regional service was 27,600 (see Table 6-10 on page 6-55 of the final report). This figure is lower than the straight regression estimate because, as explained on page 6-54 of the final report "Ridership in Glendale has remained relatively constant in the past few years and actually fell slightly in 2006." This very recent trend was offset by past ADA ridership increases in the straight regression analysis. So, essentially, we chose to use the most recent trends for Glendale rather than the five-year straight regression analysis.

4. At the Transit Management Committee meeting it was suggested a group workshop explaining the methodology used to project ridership would be helpful. We agree this may provide insight to allow us to understand the projections more clearly.

As noted in Question #1 above, We plan to do this as a three-hour workshop on February 15. The joint VMOCC/FOAC meeting will be in the morning, and the three-hour methodology workshop will be in the afternoon. To take advantage of the consulting team's time on-site, TMC members are also encouraged to attend both meetings.

5. There will be an increase in demand because of a transfer-less system and there is going to be a corresponding increase in ridership for the next two years beyond fiscal year 2010. Does the consultant agree?

Yes. If you look at the footnotes on Table 6.22 of the Final Report (page 6-78), we estimated that in 2011 and 2012 there would be about 6,874 additional regional trips from the East Valley each year, 3,340 additional regional trips originating in Phoenix in each of these years, and 5,324 additional regional trips from the West Valley each year. These numbers were developed by comparing general public regional travel to DAR regional travel and saying that over a three year period (2010-2012), the difference would be cut in half.

6. Referring to the attached spreadsheet: I have added columns to the table for projected FY 2010 ridership using the Dial-a-Ride practices that currently in place (from Table 4.13 - Projected ADA and Non-ADA Ridership 2007-2010)

and columns for the RPTA Administration costs and In-Person Interview costs that the report proposes to be paid from Prop 400 unallocated funds. I also allocated a flat proportion (1/17th) of the \$1.714M in start-up capital costs to the capital costs column. These new cost columns were added to try to get a more complete understanding of the total annual investment would be necessary, regardless of funding source. Total East Valley ridership is projected to increase by about 38,600 additional trips (16%) in FY 2010, when you compare 2010 projections in Table 4.13 with the projections used to develop Table 6.22. Within the East Valley, the percentage of additional ridership tied to plan implementation varies dramatically (Mesa - 4.2%, Gilbert - 13.8%, Chandler - 18.1%, Tempe - 32.3% and Scottsdale - 45.6%). When looking at these same tables, projected ridership for Phoenix/Central and Glendale drop by 1.5% and 18.5%, respectively. After reviewing, the methodology that was applied to develop the ridership projections used in Table 6.22 (as described on pages 6-56 through 6-58), why aren't all areas seeing some growth in projected ridership for 2010 under the proposed plan, and why is there so much variation in the projected growth among the East Valley cities?

The estimated ridership for 2010, included in Table 6.10 and 6.22, was developed based on several factors. First, the regression estimates in Table 4.13, which consider past ridership trends, were considered. Second, special considerations beyond the straight regression analysis were considered (e.g., the fact that the policy regarding non-ADA ridership in Mesa had changed in recent years). Finally, the estimates include additional regional travel as explained on pages 6-56 and 6-57 of the final report. Following are a few examples:

Mesa: The straight regression analysis for ridership in Mesa (in Table 4.13) indicated that ADA ridership would likely increase from the 70,319 in 2006 and the 93,785 in 2007 to 128,270 in 2010. Non-ADA ridership, which was 25,915 in 2006, fell to 8,120 in 2007. The assumption was made that the 2007 non-ADA ridership would remain constant through 2010 at this lower 8,120. Then, an additional 5,772 ADA regional trips were estimated for Mesa in 2010. The final estimates for 2010 used to develop costs were therefore 134,042 ADA trips and 8,120 trips.

Glendale: The straight regression analysis of past ridership (Table 4.13) indicated that ADA ridership in Glendale would increase from 24,270 in 2006 to 33,882 in 2010. However, when we examined recent years, we saw that ADA ridership in Glendale was relatively constant in recent years and actually fell slightly in 2006. It was therefore assumed that ADA ridership in Glendale would remain constant at 24,270 through 2010. Then, an additional 3,330 regional ADA trips were added for 2010. The final estimated ridership for Glendale used to develop costs (Tables 6.10 and 6.22) was therefore 27,600. Note that non-ADA ridership was not considered when developing Phase I regional service costs because Glendale would continue to provide non-ADA service.

Based on this kind of analysis, the estimated ridership increases for each community varied based on our consideration of long-term ridership trends (the last 5-6 years), more recent trends, and expected increases in regional travel due to changes in transfer policies under the regional plan. Even though the increases varied, increases were predicted for each city. A comparison of 2006 and 2010 ridership in Table 6.10 indicates this. With the exception of a very small drop in trips provided in Paradise Valley as part of the Phoenix/PV/SW Community numbers, Table 6.10 shows an increase for each community. For example, total ridership in Phoenix is predicted to go from 370,187 in 2006 to 466,149 in 2010 in Table 6.10. The question suggests that we estimated a decrease of 1.5% in Phoenix, but this was not the case.

7. Using the methodology as described in the report, would it be fair to say that the East Valley could see an additional 38,600 additional riders in both 2011 and 2012 as the 3-year phase in of the projected ridership increase takes effect, and would these additional trips be expected to be distributed to each of the five cities in the same percentages listed above? Based on the discussion on page 6-69 stating that only the West Valley will need more vehicles (8) to allow for regional implementation to begin in 2010, where are the projections for additional fleet and associated capital costs that would be required for the projected increases in trips for the East Valley?

In response to Questions #14-16 below, ridership estimates for 2011 and 2012 have been developed. Please see responses to these questions.

In terms of vehicles, Table 6.13 on page 6-60 of the final report shows the estimated number of vehicles needed in 2010. As this table shows, we are estimating that the East Valley fleet would need to increase from 63 vehicles in 2006 to 89 vehicles in 2010. The Phoenix/PV/SW Communities fleet would need to increase from 120 vehicles in 2006 to 156 vehicles in 2010. As indicated in the discussion on page 6-69, it is assumed that communities will continue to grow the fleets to these levels in response to ridership increases through 2010. That is, it is assumed that in the East Valley and the Phoenix/PV/SW areas, there will be fleets of 89 and 156 vehicles in 2010 to start the new regional service. In the West Valley, an additional eight new vehicles will be needed. This is because it is assumed that the West Valley communities will want to keep their vehicles to continue providing non-ADA service and additional new vehicles will be needed to provide the ADA service in that area. Total ADA ridership in the West Valley in 2010 is estimated at 28,262. Eight vehicles should be sufficient to provide this number of trips.

8. On slide 6 of the presentation made to the TMC on October 3, 2007—30,000 trips per year are greater than the number on the bus. Is this correct?

No. Slide 6 is only comparing Dial-A-Ride trips where a transfer was required – not all DAR trips. We looked at transfer trips for one sample week and found 65% to be longer.

9. Slide 7 of the presentation made to the TMC on October 3, 2007—9.1% is too low.

We looked at all DAR trips for the week of September 17-23, 2006. There were 4,590 trips made from West Valley Communities and 4,170 of them had destinations in the West Valley. Only 391 were to Phoenix, 4 were to the East valley, and there were 25 to “Other” destinations. We arrived at the 9.1% by dividing the number of regional trips (420) by the total trips (4,590).

10. As the West Valley builds out, demand for service to and from that region will likely drive ridership increases throughout the region.

This was considered a valid comment. No response is needed.

11. Many tables in the study have been formed based on estimates of ridership. Consistently, there is mention of and indication of Non-ADA ridership in Mesa. Mesa does not provide Non-ADA complementary Paratransit service. Please revise the report accordingly. Do the cost estimates for Mesa assume non-ADA service is provided?

The final report takes into account the recent policy change in Mesa to drastically decrease the amount of non-ADA service. The ridership estimates used in the development of costs takes into consideration that non-ADA ridership decreased from 25,915 in 2006 to 8,120 in 2007. It was noted, though, that there are still a small number of Sunday non-ADA trips. It was assumed that Mesa will continue to provide this small number of non-ADA Sunday trips. The small number of non-ADA trips in 2007 (8,120) is carried forward to 2010.

12. Page 6-54 “Estimated Ridership” first bullet, an 80% increase is not accurate if it is based on FY06/07 data. FY06/07 is the first year after eliminating Non-ADA service in Mesa, causing an unusual percentage of increase –shifting of ridership from Non-ADA to ADA, and this should not be reflected as the standard in the East Valley.

While this significant increase is noted on page 6-54 of the final report, it was not the basis for estimating 2010 ridership in each East Valley community. As explained in Question #6 above, the 2010 estimates were developed by looking at ridership trends in each city between 2001/2002 and 2006/2007. Then, most recent trends were also considered, such as the change in non-ADA service policy in Mesa. Finally, increases in regional ADA trips were considered and included in the estimates.

13. Page 6-57, Paragraph 4. Please clarify this paragraph in the final report.

Paragraph 4 on page 6-57 should be deleted from the final report. It discusses an approach taken in an earlier draft. The paragraph indicates that estimates of regional travel were applied differently to the ADA and non-ADA riders in the various communities. In the final report, estimates of increased regional travel were developed only for ADA riders and this was done consistently throughout all communities.

Projections Beyond 2010

14. We request ridership figures for the first three years of service in the plan not just the first year to have a better understanding of what we may expect in the first couple of years.

Ridership projections for Phase I of the regional program, through FY2012, are provided in Attachment 1.

15. Ridership projections for the regional program need to be clarified and extended through FY 2012 to account for the full phase-in of a regional paratransit system. For example, the consultant projects ridership to be higher in the East Valley under the regional program, while the rest of the region is predicted to see reductions?

Ridership projections for Phase I of the regional program, through FY2012, are provided in Attachment 1. The assumptions used to develop the projections are also presented. Clarifications on other ridership questions are provided in the responses to Questions #1-13 above. Additional clarifications will be provided as part of the planned February 15, 2008 workshop.

16. We need as much of an “apples to apples” comparison and full cost analysis as we can get. All projected costs for the regional paratransit program need to be calculated through FY 2012 (not FY 2010, since ridership increases are projected to phase in over three years), put into a comprehensive spreadsheet and compared against the costs of the existing service system. These include, but are not limited to:

- **Capital costs for the regional call center and for offices/furnishings for administrative staff increases**
- **Capital costs, including the possible federal share that would be competing against other federal funding requests, for additional vehicles necessary to carry the higher number of passengers that are projected in FY 2010-2012**
- **Costs for the proposed in-person interview program and the decreased revenue to the fixed route system from the proposed free ADA bus fare**
- **Costs related to the projected decrease in route productivity due to longer average trip lengths**

- **Annual costs for the additional RPTA administrative staff**

The call center costs in the final report, which are used to develop total regional system costs, include all capital and operating costs. This includes facility costs, equipment and supplies, telephone costs, computer hardware and software costs, as well as staff costs.

As indicated in Table 16 on page 6-68 of the final report, the calculation of additional administrative costs included salary, fringe, as well as overhead costs. Overhead costs include the cost of office space, office supplies, and support systems such as telephones. Work station furniture related to the call center is included in the call center start-up cost estimates. Any additional office furniture needs not related to the call center would have to be added to the capital budget.

Detailed costs for the recommended in-person eligibility process are included on pages 5-23 to 5-25 of the final report.

Costs associated with a free fare bus program, including lost fixed route revenues, are provided in the response to Question #75 below.

Costs associated with lower productivities for an increased number of inter-regional trips are included in the calculations, as explained on page 6-59 of the final report.

The tables on the following three pages provide Phase I regional system costs for the first three years of the program. Separate cost tables for FY2010, FY2011, and FY2012 are provided. The ridership estimates, vehicle-revenue-hour estimates, fleet estimates,, operating cost estimates, and capital costs estimates used to develop these tables are detailed in Attachment 1.

Note that the FY2010 through FY2012 costs shown in these Tables does not assume the implementation of any of the supplemental services discussed in Chapter 7 of the final report or the implementation of the in-person ADA eligibility determination process. As discussed in the final report and in the responses to questions below, implementation of those programs and processes could significantly lower costs. For example, as detailed in the response to Question #75 below, implementation of just the free fare fixed route program is estimated to save \$2,188,094 per year while costing communities only about \$40,500 in start-up (equipment) costs, and \$94,116 per year in ongoing materials costs and lost fixed route revenues. As detailed in the final report, expansion of travel training programs, supplemental taxi programs and in-person ADA eligibility would also impact future paratransit costs.

Table 1. Estimated First Year (FY2010) Member Community Cost Allocation for 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 Costs						\$ 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.
- (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

Table 2. Estimated Second Year (FY2011) Member Community Cost Allocation for Phase I Regional Service Using Trips By Community Adjusted for Productivity Differences

	Estimated FY2011 Ridership (1)	% FY11 Ridership	Productivity (2)	Product./ Adjustment Factor (3)	FY11 Share (4)	Estimated FY11 Call Center Costs	Estimated FY11 Operating Costs	Estimated FY11 Capital Costs	Estimated FY11 Total Costs	Current FY06 Operating Costs	Est FY11 Ops. Cost with Existing DAR and Predicted Growth
Est. FY11 Costs						\$ 2,845,475	\$ 32,483,629	\$ 914,640	\$ 36,243,744		
Phoenix/Central	522,849	59.9419%	1.4400	1.0983	65.1145%	\$ 1,852,816	\$ 21,151,541	\$ 595,563	\$ 23,599,920	\$ 12,439,977	\$ 20,006,699
Phoenix	493,694	56.5994%	1.4400	1.0983	61.4836%	\$ 1,749,499	\$ 19,972,093	\$ 562,353	\$ 22,283,946		
SW Communities	29,071	3.3328%	1.4400	1.0983	3.6204%	\$ 103,019	\$ 1,176,050	\$ 33,114	\$ 1,312,182		
Paradise Valley	84	0.0096%	1.4400	1.0983	0.0105%	\$ 298	\$ 3,398	\$ 96	\$ 3,792		
Subtotals	522,849	59.9419%	1.4400	1.0983	65.1145%	1,852,816	21,151,541	595,563	23,599,920		
East Valley	318,486	36.5127%	1.7734	0.8918	32.1126%	\$ 913,755	\$ 10,431,331	\$ 293,714	\$ 11,638,800	\$ 6,717,959	\$ 12,012,976
Chandler	31,930	3.6606%	1.6499	0.9586	3.4706%	\$ 98,755	\$ 1,127,378	\$ 31,744	\$ 1,257,877	\$ 783,388	\$ 1,310,981
Gilbert	22,446	2.5733%	1.4488	1.0917	2.7784%	\$ 79,059	\$ 902,524	\$ 25,412	\$ 1,006,995	\$ 487,183	\$ 1,053,434
Mesa	162,685	18.6510%	1.9254	0.8214	15.1527%	\$ 431,166	\$ 4,922,149	\$ 138,593	\$ 5,491,908	\$ 2,823,764	\$ 5,533,928
Scottsdale	51,805	5.9392%	1.7849	0.8861	5.2050%	\$ 148,107	\$ 1,690,776	\$ 47,607	\$ 1,886,490	\$ 1,317,560	\$ 2,081,813
Tempe, incl Guadalupe	49,620	5.6887%	1.6162	0.9786	5.5059%	\$ 156,668	\$ 1,788,504	\$ 50,359	\$ 1,995,531	\$ 1,306,064	\$ 2,032,820
Subtotal	318,486	36.5127%	1.7734	0.8918	32.1126%	913,755	10,431,331	293,714	11,638,800	\$ 6,717,959	\$ 12,012,976
Glendale	30,200	3.4623%	2.0000	0.7908	2.7079%	\$ 77,054	\$ 879,640	\$ 24,768	\$ 981,462	\$ 684,892	\$ 817,859
Peoria	604	0.0692%	2.0000	0.7908	0.0542%	\$ 1,541	\$ 17,593	\$ 495	\$ 19,629	\$ 10,770	\$ 13,310
Sun City	121	0.0139%	2.0000	0.7908	0.0108%	\$ 309	\$ 3,524	\$ 99	\$ 3,932	\$ 785	\$ 1,400
TOTALS	872,260	100.0000%	1.5816	NA	100.0000%	2,845,475	32,483,629	914,640	36,243,744	\$ 19,854,382	\$ 32,852,243

- (1) Includes increased ridership based on recent trends plus second year increases in regional travel.
- (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) FY11 Share is FY11 Ridership times Productivity Adjustment Factor

**Table 3. Estimated Third Year (FY2012) Member Community Cost Allocation for Phase I Regional Service
Using Trips By Community Adjusted for Productivity Differences**

	Estimated FY2012 Ridership (1)	% FY12 Ridership	Productivity (2)	Product./ Adjustment Factor (3)	FY12 Share (4)	Estimated FY12 Call Center Costs	Estimated FY12 Operating Costs	Estimated FY12 Capital Costs	Estimated FY12 Total Costs	Current FY06 Operating Costs	Est FY12 Ops. Cost with Existing DAR and Predicted Growth
Est. FY12 Costs						\$ 3,174,373	\$ 36,475,541	\$ 954,810	\$ 40,604,724		
Phoenix/Central	555,138	58.7610%	1.4400	1.1011	63.9663%	\$ 2,030,529	\$ 23,332,057	\$ 610,757	\$ 25,973,343	\$ 12,439,977	\$ 21,879,497
Phoenix	521,446	55.1947%	1.4400	1.1011	60.0841%	\$ 1,907,294	\$ 21,916,006	\$ 573,689	\$ 24,396,989		
SW Communities	33,608	3.5574%	1.4400	1.1011	3.8725%	\$ 122,928	\$ 1,412,520	\$ 36,975	\$ 1,572,424		
Paradise Valley	84	0.0089%	1.4400	1.1011	0.0097%	\$ 307	\$ 3,530	\$ 92	\$ 3,930		
Subtotals	555,138	58.7610%	1.4400	1.1011	63.9663%	2,030,529	23,332,057	610,757	25,973,343		
East Valley	356,014	37.6838%	1.7734	0.8941	33.2472%	\$ 1,055,391	\$ 12,127,104	\$ 317,448	\$ 13,499,943	\$ 6,717,959	\$ 13,812,965
Chandler	35,469	3.7544%	1.6499	0.9610	3.5739%	\$ 113,450	\$ 1,303,612	\$ 34,124	\$ 1,451,187	\$ 783,388	\$ 1,499,974
Gilbert	25,333	2.6815%	1.4488	1.0944	2.9069%	\$ 92,277	\$ 1,060,316	\$ 27,756	\$ 1,180,348	\$ 487,183	\$ 1,224,594
Mesa	184,809	19.5619%	1.9254	0.8235	15.9572%	\$ 506,542	\$ 5,820,486	\$ 152,361	\$ 6,479,389	\$ 2,823,764	\$ 6,475,098
Scottsdale	56,292	5.9585%	1.7849	0.8883	5.2431%	\$ 166,436	\$ 1,912,449	\$ 50,062	\$ 2,128,946	\$ 1,317,560	\$ 2,329,990
Tempe, incl Guadalupe	54,111	5.7276%	1.6162	0.9810	5.5660%	\$ 176,687	\$ 2,030,241	\$ 53,145	\$ 2,260,073	\$ 1,306,064	\$ 2,283,310
Subtotal	356,014	37.6838%	1.7734	0.8941	33.2472%	1,055,391	12,127,104	317,448	13,499,943	\$ 6,717,959	\$ 13,812,965
Glendale	32,800	3.4719%	2.0000	0.7928	2.7212%	\$ 86,380	\$ 992,564	\$ 25,982	\$ 1,104,926	\$ 684,892	\$ 842,394
Peoria	656	0.0694%	2.0000	0.7928	0.0544%	\$ 1,728	\$ 19,851	\$ 520	\$ 22,099	\$ 10,770	\$ 13,710
Sun City	131	0.0139%	2.0000	0.7928	0.0109%	\$ 345	\$ 3,964	\$ 104	\$ 4,413	\$ 785	\$ 1,442
TOTALS	944,739	100.0000%	1.5855	NA	100.0000%	3,174,373	36,475,541	954,810	40,604,724	\$ 19,854,382	\$ 36,550,008

- (1) Includes increased ridership based on recent trends plus third year increases in regional travel.
- (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) FY12 Share is FY12 Ridership times Productivity Adjustment Factor

Cost—General

17. Table 6.22 - the Glendale estimated total FY10 Operating Costs \$773,018 does not match either the cost per trip or revenue cost/hour estimates shown earlier in the report. While we have worked the amounts back to a number close to the figure used in Table 6.22 we would feel more confident understanding the formula used to get this figure. Please identify the formula used in calculating the regional productivity total (1.5775) in Table 6.78.

The regional productivity of 1.5775 was calculated by multiplying the productivities of each system by the ridership in that system and then dividing the sum by the total regional ridership. It is therefore a weighed average that considers the productivity and relative size of each system. The formula is:

$$\frac{((\text{Phoenix/Central productivity} \times \text{Phoenix/Central ridership}) + (\text{East Valley productivity} \times \text{East Valley ridership}) + (\text{Glendale productivity} \times \text{Glendale ridership}) + (\text{Peoria productivity} \times \text{Peoria ridership}) + (\text{Sun City productivity} \times \text{Sun City ridership}))}{\text{Total Ridership}}$$

Numerically, it is:

$$\frac{((1.44 \times 490,800) + (1.7734 \times 283,499) + (0.7887 \times 27,600) + (0.7887 \times 552) + (0.7887 \times 110))}{802,561}$$

18. Each city has options as to how they would provide the regional service (ADA only intracity, ADA only regional, ADA and non-ADA, etc.). How will costs and service levels be affected if different cities choose different service options? For example, if one city selects to use the regional system to provide out-of-city trips only, what are the costs per passenger and call center charges for this service? How does this impact other cities costs? Request an option to be developed in which RPTA would provide ADA intercity trips only. Include cost estimates and develop options for 100% regional funding.

The final report recommends that in Phase I of the implementation of the regional service, all ADA and non-ADA trips in the East Valley and Phoenix/Paradise Valley/Southwest Communities areas be provided through the regional system. In the West Valley, the recommendation is that the regional service be available to provide all ADA trips, again intracity and regional. The plan does not include an option for communities to opt to have the regional system perform only ADA regional trips. In our opinion, this would not address the goals of the study and would be a step backward rather than forward in terms of a regional service. Having a separate system just for regional ADA trips would add another set of service requirements (phone number, service policies, etc.) to a system that, with eight current providers, is already recognized as being overly complex and difficult for the public to understand and use. In our opinion, a separate service just for regional ADA trips would also be highly

inefficient. For example, in the West Valley, the RPTA would have to contract with a service provider for only 2,662 regional ADA trips in 2010. This service provider would have to provide the capacity to perform work during all of the days and hours required for ADA-level service. Because vehicles would only be providing long-distance regional trips and would not also be used to perform local service, the downtime and deadhead miles would be substantial. The fixed costs associated with making this capacity available for this small number of trips, combined with the downtime and deadheading, would likely make these trips very expensive. This option was not identified as one of the five possible designs at the beginning of the study by the Technical Advisory Committee. We would also note that none of the other peer systems separate local from regional ADA trips in the design of their systems.

There could be some variation in costs, though, depending on how riders choose to use the regional versus local systems in the West Valley. In West Valley communities, ADA riders would likely also qualify for non-ADA service and could therefore choose to continue to make trips on the local DAR service, or call the regional system for rides. With this choice, it is difficult to say how many ADA eligible riders would choose to continue to use local DARs for their intracity trips versus calling the regional system. However, when ADA eligible riders use the local system, these trips would not be included in the regional service costs assessed to them. In Glendale, Peoria and Surprise, the operating cost per hour is higher than what is projected for the regional service, and while productivities are higher, the trip costs ranged from \$23-\$31 in 2006 dollars. Assuming 3% inflation per year, this would equate to about \$26-\$35 per trip cost in these communities in 2010. The regional service is projected to operate at \$56.85 per vehicle-hour. Assuming a productivity of 2.0 trips per hour, this would mean the regional system would provide service in 2010 at \$28.42 per trip. In Glendale, Peoria and Surprise, there would be very little impact on local budgets even if there were variation on the percentage of ADA eligible riders who chose to use the regional versus the local systems. In Sun City, the current service is very inexpensive. SCAT provided trips for \$12 each in 2006, which would equate to a rate of \$13.50 in 2010. ADA riders using the regional service rather than the SCAT service would cost Sun Cities about \$14.92 more per trip. Only 110 ADA trips are expected in the Sun Cities area, though, in 2010. Even if all ADA eligible riders chose to use the regional system, this would mean an annual difference in cost of only \$1,641.

19. Projected FY 2010 costs under the current system seem to be linked to the ridership projections that include the increased demand created by transfer elimination to adjust for ridership growth (see Column V of attached spreadsheet). Page 6-76 (1st full paragraph) indicates that estimates for FY 2010 operating costs are developed by “inflating FY 2006 costs by the percentage increase in ridership predicted and inflating costs by 3% each year.” Based on this approach, shouldn’t the projected FY 2010 costs for the existing system be linked to the percentage growth in projected ridership for the existing system (Table 4.13)?

For a more “apples-to-apples” comparison, we felt it would be better to base both sets of costs on providing a similar amount of service. So, the projected costs based on the current service design assumes that cities will have to develop an approach to meet the current demand for additional regional travel and eliminate the capacity constraint that now exists because of forced transfers.

20. In the period between Fiscal Year 2003 and Fiscal Year FY 07, the initial contract costs for Dial-a-Ride service provided by RPTA increased from \$947,427 to \$1,440,338 per year. Actual costs (not yet reconciled for FY 07) have varied somewhat both below and above the initial estimates, but the general trend line is an increase of about 52% over 4 years. Over the same time period, Scottsdale’s ADA and Non-ADA ridership dropped from 44,446 to 39,204, a decrease of 12%. As noted under the first bullet above, the Regional Paratransit Study predicts Scottsdale's annual ridership to be about 15,000 (46%) higher with the recommended improvements than it would be if we continue with the current system. Table 6.22 of the study suggests that Scottsdale's annual costs in FY 2010 under the recommended plan would be about \$200,000 less than they would be under the current system. The study also notes on pages 6-58 and 6-59 that “slightly lower productivities are applied for the increased number of regional trips that are predicted.” Given higher ridership forecasts and slightly lower productivity, how is the projected reduction in costs for the East Valley and Scottsdale under the proposed plan justified?

First, the regional paratransit study does not predict that ridership in Scottsdale will be 46% higher in 2010 with the recommended improvements than it would be under the current system. Most of the increase is due to predicted increased in ADA service demand, regardless of which system is employed. The 2010 ridership estimates for Scottsdale in Tables 6.10 and 6.22 of the final report suggest that ADA trips will increase from 20,514 in 2006 to 32,362 in 2010. Of this, 10,454 new trips are attributed to general expected growth in ADA service demand. The remaining 1,394 trip increase is attributable to additional regional ADA trips. As noted in the answer to Question #19 above, while these additional regional trips certainly will result from the new regional service design, they probably should be addressed one way or another even under the current service design. Note also that Tables 6.10 suggests that non-ADA service will decrease from 17,495 trips in 2006 to 15,226 in 2010.

The slightly lower cost for Scottsdale in 2010 under the proposed regional system, as indicated in Table 6-22 of the final report is due mainly to the fact that the predicted hourly cost of service in the East Valley under the regional service is lower than current costs inflated 3% per year. The hourly cost of service in the East Valley in 2006 was \$55.24. Inflated 3% per year through 2010 would lead to a cost of \$62.17 per hour. The total operating cost per revenue-hour under the regional design is estimated to be \$56.85 (\$2,541,852 in call center costs plus \$28,838,382 in vehicle operating cost divided by 552,015 vehicle-revenue-hours). Note also that, while ridership is projected to increase, the comparison of “regional design” and “current design” costs in Table

6.22 assumes that the increase in ridership will also have to be accommodated under the current service design.

21. The report suggests that Scottsdale will see an additional 15,000 Dial-a-Ride trips in 2010 with the plan in place, but our annual costs will be less, even with a projected 46% increase in passengers. Perhaps a better cost comparison for analysis would be “per trip” vs. “annual cost.” One cannot assume a decrease in annual cost with a 46% increase in ridership.

As noted in the response to Question #20 above, while a ridership increase is predicted, the comparison of costs in Table 6.22 of the final report assumes that the same level of ridership will be provided under both the regional design and the current service model.

22. If RPTA assumes administrative costs for a region-wide program what is the estimated administrative cost savings for each existing program as related to the service they would no longer be providing? What is the total offset Valley-wide?

The proposed regional service plan did not make assumptions about staffing reductions within city departments. In many cases, city transportation staff may have multiple duties. Because we did not want to assume how each community would address current staff, potential cost savings by community were not developed. We continue to feel this way and that these decisions are really to be made at the city level.

It should also be noted that there would not be savings in administrative staff in the West Valley under Phase I of the regional program. Because the West Valley communities would continue to provide non-ADA service under Phase I, staff in those communities would still be needed.

A broad, systemwide comparison under the Phase II, full regionalization, design is possible, though. As detailed in the final report, it is recommended that RPTA have a staff of 11 to manage the regional service. This would include a Paratransit Manager, a Fleet/Facilities Manager, five Contract Administrators, The Customer Service/Complaint Management staff, and an Administrative Assistant. There currently are two RPTA staff FTEs dedicated to DAR services. This would mean adding nine people. There are a total of 13.4 administrative FTEs in all DAR services, not counting East Valley (which is included in the existing RPTA count) or STS (which would remain separate under Phase II). So, a total reduction of 4.4 FTEs might be possible. Again, though, this would be a city-by-city decision and would be impacted by other administrative needs in the cities.

23. Scottsdale has been proactive in regionalizing our transit services (we were one of the original partners for the Tempe/Scottsdale dial-a-ride service in 1988 that is the precursor of the East Valley Dial-a-Ride, and we transferred our fixed route services to RPTA in 2000). We support the concept of continued regionalization of paratransit and transit services, but are

concerned about the following issues: availability of adequate cost information and identification of funding sources to address costs associated with the program; demonstration that service quality can be improved; and demonstration that economies of scale can be achieved.

We have done our best to provide detailed cost information and to identify the best current options for funding. Economies of scale will exist in a more regional service, but actual cost savings from this do not appear in the plan. There are two main reasons for this. First, current operating costs in the Phoenix DAR operation are well below typical market prices. We did not feel comfortable assuming that costs could be continued at such a low level while still providing quality service. Second, economies of scale would be best achieved by having a single, turnkey service provider rather than a call center with several separate service providers. However, in our review of peer systems, it was noted that single, turnkey systems can be susceptible to difficult transitions and poor service quality. This “all eggs in one basket” approach is not recommended. During the planning process, Stakeholders and TAC members agreed with this. A review of peer systems indicated that a single, turnkey operation could be about 10%, or \$5.00 per vehicle-hour cheaper, which would translate to a savings of \$2.7 million, but the high risks associated with this model were not felt to be worth the cost savings.

In terms of service quality, we feel we have costed out a regional system that will have the resources to provide very high quality service and have proposed high service quality performance standards for the system. We have also proposed the regional paratransit service design that several peers have reported to be very successful in ensuring high service quality. The central call center model with multiple service providers allows for relatively easy changes in contractors for any portion of the operation where a contractor may be under-performing. It also allows trips to be moved by the central call center to the highest quality service provider, which provides the ultimate incentive for all service providers to perform. It also provides checks and balances between call center operation and service provision. Contractors in each area closely monitor each others performance and service providers will quickly note if central scheduling or dispatching is inadequate. Similarly, call center managers and dispatchers are typically quick to note if service providers are performing poorly. This type of check and balance does not exist in most other service designs. The plan also proposes an extensive public input process to assist with service monitoring.

Aside from having the resources and the best possible service design and public input processes, achieving the high performance standards set out in the plan will depend on actual implementation. Our allowances for the call center transition and for administrative staffing were developed with this in mind. The call center transition costs allow for a full duplication of key systems and hardware so that start-up can be carefully phased-in.

24. The cost estimates indicate large increases for capital and operating expenses which are not offset by economies of scale. Funding sources such as unallocated Proposition 400 funds seem to be targeted for a number of projects in addition to paratransit services.

Please refer to Question #23 above for a discussion of why economies of scale, which would be expected with regionalization, are not evident in the proposed plan. Also as noted in Question #23, the plan has been conservative in estimating costs in order to provide the best opportunity for a smooth transition, and the best service design in terms of ongoing service quality.

25. The report indicates 5-10% increase in operating costs per year after the first year. The point of the study is to find ways to contain costs, why is this increase so high? Identify means to reduce the margin of cost increases.

The various supplemental services in Chapter 8 of the final report provide several opportunities for addressing service demand. For example, this portion of the report notes that a free fare fixed route service can be expected to shift 5-15% of paratransit demand to the fixed route system. Chapter 8 also details examples of savings from good travel training programs.

Chapter 5 of the final report also recommends an in-person eligibility determination process for several reasons. Among these are that in-person processes allow for free fare fixed route programs without massive increases in ADA eligibility requests. Also, in-person eligibility processes have been proven to be an important part of successful travel training, by better identifying applicants who can benefit from training and linking these individuals to available services.

Furthermore, identifying cost containment strategies was not the only objective of the study. The study also called for:

- Assessing current systems, identifying problems, and recommending solutions
- Recommending standardized service policies and practices
- Developing methods for improving regional travel
- Positioning Valley Metro and its members to be better prepared to accommodate future growth
- Recommend effective alternatives to traditional dial-a-ride service
- Optimize service provided to the customer using the resources available

26. Page 6-16 last paragraph, you mention in Phase I that only 5 of the 9 DAR services would be included. How will the startup costs that I assume will be incurred in phase I as well as capital costs for the call center be allocated? It seems that Phoenix and East valley will incur most costs so that in Phase II the other cities will mostly be paying for additional operating costs with some vehicle capital. This does not seem equitable. Please show some sort of explanation of allocation of cost between phases.

The final report recommends on page 6-71 that unallocated Proposition 400 funding be used to pay for call center start-up. This would address the issue raised by this question. Obtaining approval from FTA to use available capital funding to create this “mobility management” structure would be another way to address start-up costs equitably. Since recent revenue projections for Proposition 400 funding are lower than once predicted, other sources of regional and federal funding are being explored by RPTA. Beyond these options, a process might be developed where cities joining the system after Phase I would be assessed a one-time cost to be reallocated back to Phase I participants. We would still recommend, though, the use of either Proposition 400 funding or federal funding for “mobility management.”

27. What are the cost estimates of Phase II to the remaining cities if the West cities opt out?

If all West Valley communities decide to not fully participate in the regional system for all service (ADA and non-ADA) under Phase II, the remaining communities could expect that Phase I costs would continue with an increase of about 5% per year to accommodate the predicted ongoing increase in service demand. This ongoing increase would depend on what decisions are made about eligibility determination and the implementation of supplemental services, as noted in the answer to Question #25 above.

28. Page 8-11 Paragraph 4. Were the costs of the Rider Guides included in the Phase I costs?

No. It was assumed that the current RPTA budget allows for periodic printing and ongoing distribution of DAR Rider Guides.

29. What is the long term cost of replicating non-ADA dial-a-ride service at 50% on time performance (current level, same day calls) in Phoenix?

The most significant cost is ongoing public dissatisfaction with the service – both ADA and non-ADA – and with the entity providing it. The current method of providing non-ADA service in Phoenix was found to not only result in poor on-time performance for non-ADA riders, but on poor service (circuitous routing, long rides, late drop-offs) for ADA riders as non-ADA trips had to be same-day dispatched and added to existing schedules.

If the RPTA intends to implement regional paratransit as part of its plan to become the areas regional transportation provider, the consultants strongly recommend against assuming this type of operation. Public dissatisfaction with the service would quickly pass to the RPTA, regardless of the fact that the City of Phoenix was making the policy decisions.

In terms of dollars, non-ADA service can be operated at any level desired. It is important, though, to match operating policies to the funding available. Without scheduling and operating policies to match the level of funding available, the quality of service provided suffers, and in turn the customer suffers.

Cost—Allocation to Jurisdictions

30. What is the final recommendation for allocation of costs to member cities?

The recommendation in the final report is to allocate costs based on direct distance passenger miles and to allocate passenger miles based on rider place of residence. This method would take into account the varying trip lengths in each community. It would also be based on data that should be able to be generated from a central scheduling software system.

An attempt was made to develop an allocation of estimated 2010 costs using this method, but difficulties were encountered with the data available. In particular, there was difficulty identifying ADA and non-ADA trips based on the internal trip codings used in the scheduling software systems in various communities. And, in some communities, there was no recorded pick-up and drop-off mileage for trips. With numerous databases and software systems, it was also a difficult process to link trips and riders to place of residence rather than origin of the trip. Finally, transfer trips involved obtaining data from two or more systems and linking the trips.

Because of the difficulties encountered, an alternate method of cost allocation was used to estimate costs in 2010. This method was to allocate costs based on trips in each community, adjusted for varying productivities. A productivity adjustment factor was applied to take trip length and trip grouping into account. Communities with longer trips and less grouping can be expected to have a lower trip productivity. Those with shorter trips and more grouping would have a higher productivity. Actual trip productivity in each DAR system was used to develop an adjustment factor. This is explained on page 6-75 of the final report.

The final report also recommended that the RPTA and the member communities continue to work on and test acceptable cost allocation models. The “direct miles by place of residence” method should be tested further once a central software system is in place and all trip and rider eligibility data is in a common database. In the interim, the alternate “trips adjusted by productivity” method could be used. The RPTA and member communities might also test the method currently used in the East Valley throughout the area, which allocates vehicle-hours. The implementation plan detailed in Chapter 8 of the final report includes a timeline and suggested activities to continue to refine the cost allocation method.

31. The consultant has stated it is not possible to determine estimated costs using the recommended method of cost allocation. What would be needed to

develop cost estimates using the proposed method? It seems that the information is available in the Trapeze systems in the Valley. Please explain the complications involved in determining costs using the proposed cost allocation method.

As noted in Question #30 above:

- Some DARs did not have pick-up and drop-off mileage in their final reconciled trip databases;
- It was difficult in some cases to accurately identify ADA trips in some trip databases due to varying trip coding systems;
- It was difficult to link trips and riders to place of residence given the multiple ways that the main rider eligibility databases are maintained.

Once a central database is in place, these issues would be addressed and the proposed cost allocation method would be relatively easy to apply. In the interim, The RPTA and member communities might use the alternate “trips adjusted by productivity” method explained on page 6-75 of the final report.

32. Page 6-73, “Allocation of Costs to Member Communities” should recommend a measure to be added for service productivity/efficiency as well. This was thought important enough to use for the current estimates, why would you remove that factor for future estimates? This could be a make-or-break cost estimate for our city.

Both the “direct miles by place of residence” and the “trips adjusted by productivity” methods take service efficiency into account. The mileage method would adjust for varying trip lengths in different communities. The productivity method takes trip lengths and trip grouping into account. As suggested in the final report, either could be used, and both need to be more fully tested once complete service data is available in a more centralized fashion.

33. Page 6-73, last paragraph. Same comment as previous question. To add, I also think that this would negatively impact almost all surrounding cities to Phoenix, while adding great gain to Phoenix only. Phoenix already benefits from riders from other cities that travel to there to work or for major activities.

In the alternate “trips adjusted by productivity” method used to allocate costs in Table 6.22 of the final report, the productivity adjustment factors favor the East Valley and West Valley communities. Current Phoenix service has a lower productivity than other services. The adjustment factor therefore places some additional costs on Phoenix for this lower productivity. It is also interesting to note that the individual system reviews, summarized in Chapter 2 of the final report, indicates that Phoenix DAR had the highest revenue-miles per trip of any DAR (see Table 2.13). It may be incorrect to assume that trips will be shorter and more productive in Phoenix.

34. Will we be billed for trips that originate in the city by the passengers' city of residency for Non ADA trips?

It is recommended that both ADA and non-ADA service costs be allocated back to cities based on the riders' place of residence rather than the origin of the trip.

35. How does the cost model adjust for the fact that "non uniform densities" occur in the region?

Both the recommended "direct miles by place of residence" and the alternate "trips adjusted by productivity" methods take this in to account. Non-uniform densities produce varying trip lengths, which the direct miles method considers. Non-uniform densities also affect productivity, which would then be considered in the productivity model.

36. How does the cost model take into consideration the "dead head" to fringe cities?

In the direct miles model, costs associated with deadhead miles would be allocated based on relative passenger-miles accumulated in each city. So, a city with longer trip lengths would pay more of a relative share of the deadhead mile costs than a city that had lower trip lengths.

In the productivity model, a city with lower than systemwide average productivity, which would likely be related to longer trips, would pay more of a relative share of the deadhead mile costs than a city with higher than average systemwide productivity.

This is another cost allocation detail recommended for further assessment by RPTA and member communities.

37. The specific method for allocating costs needs to be approved at the same time as any recommended changes to paratransit service delivery. We agree that these costs should be allocated to the member agencies based on the city of residency of the person taking the trip.

Taken as a comment. No response required.

Funding

38. What are potential funding alternatives other than TLCP funds?

There are four potential federal sources of funds that could be alternatives to TLCP funds: Sections 5307, 5309, 5310, and 5317 of the federal transit program. 5307 Urban Formula – These funds are appropriated annually to the region based on population and existing transit services and are for Capital purchases only (no

operating). Again, the TLCP is already utilizing these funds for projects included in the original RTP. Unless additional funds beyond those expected are appropriated to the region, these funds are already programmed for existing projects. The only other possibility would be if a savings or reduction of cost of the planned projects already included in the TLCP were to occur, the “unneeded” amount of federal funds could be reprogrammed for capital purchases. Keep in mind that other transit agencies here in the region are also hoping additional funds become available from 5307 to fund local transit projects that they have planned.

5309 Discretionary - These funds are “awarded” by Congress annually and require Congressional/Senate support for funding and could be used for one time capital purchases only (no operating), assuming congressional support exists, but other projects in the TLCP are relying heavily on the receipt of these funds and the financial element of the TLCP already includes this revenue source to fund existing projects. Projects requested through this program “compete” with each other (both locally and nationally for support), so adding projects not in the existing plan could, theoretically, jeopardize funding for existing Regional Transportation Plan projects.

5310 Transportation for Elderly Persons and Persons with Disabilities – See the answer provided to question #45.

5317 New Freedoms - The New Freedom formula grant program’s intent is to provide additional tools to overcome existing barriers facing Americans with disabilities seeking integration into the work force and full participation in society. Lack of adequate transportation is a primary barrier to work for individuals with disabilities. The 2000 Census showed that only 60 percent of people between the ages of 16 and 64 with disabilities are employed. The New Freedom formula grant program seeks to reduce barriers to transportation services and expand the transportation mobility options available to people with disabilities beyond the requirements of the Americans with Disabilities Act (ADA) of 1990. Eligible activities include both capital and operating expenses. (Detailed listing included at end of these response.

In addition to federal funds, other sources could be additional state funds, or local (member city) funds.

39. Please describe in more detail the potential impact of current reduced Prop 400 tax collections.

In the short term, reduced revenues will reduce our general fund balance and may require financing sooner than previously anticipated. If decreased revenues persist, as anticipated in the currently adopted revenue forecast, then projects may need to be delayed or deleted in order to ensure the TLCP is balanced.

40. What potential TLCP projects might be negatively impacted by funding the regional dial-a-ride study?

If the regional ADA service were funded through the TLCP and revenues continue to be lower than anticipated, then other projects would need to be delayed or deleted in order to ensure that the TLCP is balanced. Since the regional ADA service is an on-going operating costs, the logical projects to delay would be operating projects. The VMOCC would need to participate in the determination of which operating projects would be delayed.

41. The study reports in several locations the use of Prop 400 unallocated funds to fund portions of the regionalization of paratransit services. With the current revenues falling below the ADOT estimates, and the costs of start-up indicated to begin 2009, is it reasonable to rely on this source of funding until later years? Identify the universe of alternative funding options.

Revenues will decrease or increase based on current economic conditions. As such, there may be unallocated revenues in future years or there may not. It would be a policy decision of the RPTA Board as to whether regional ADA services should be funded through the TLCP ahead of other projects already in the TLCP.

42. How are local agencies affected in the RTP distribution of funds for expansion if they choose not to opt into the regional Dial-a-Ride program?

Local agencies will continue to receive an allocation of ADA funds from the TLCP. Those funds will not change regardless of whether RPTA operates a regional ADA service or the current model continues. Those ADA funds will be used by cities to offset their costs for service whether the service is operated by RPTA or by the cities.

43. Is there a backup proposal for how to fund the plan and if so, what is it and will it be reviewed by the FOAC and the Budget and Finance Subcommittee before going to the RPTA Board of Directors?

FOAC is reviewing the TLCP financial model with the potential regional paratransit costs added to it. FOAC does not review items that do not involve funding the service through the TLCP. The FOAC was set up to oversee the TLCP financial model only. Any non-TLCP funded backup plan would be reviewed as appropriate, through the Transit Management Committee, the Board Budget and Finance Subcommittee and the Board of Directors.

44. Unallocated funds were also considered as a funding source for county island ADA paratransit trips and for in-person assessment start-up. Is that still true or is there a different funding option for these tasks?

This is still the recommendation.

At present, funding for current trips coming out of county islands depends on the agency paying for the trip. For instance, county islands completely within the City of Mesa and within ¾ mile of a Mesa fixed route bus are provided service through EVDAR and paid by Mesa through their PTF ADA allocation. Trips provided by STS may be reimbursed through the County's PTF ADA allocation.

In light of recent Proposition 400 revenue projections, RPTA continues to explore other options for any unfunded needs identified in this study.

45. Did the consultant consider directing existing grant awards (5310, etc....) towards the new regional Paratransit service as a way of creating a steady source of funds and vehicles? If the service gets this funding and vehicles first, this can reduce the cost to the region.

Section 5310 vehicles are vital to the provision of human services transportation by local and regional agencies. The provision of this capital funding allows agencies to transport their clients and leverages funding available at those agencies to support transportation services. The amount of funding available is typically not sufficient to meet all of the requests from local agencies. For these reasons, we did not assume that these resources would be redirected to the regional system. Doing this may be more appropriate in Phase II+ if regional human services transportation is folded into the fully-implemented regional system.

46. Please provide the Proposition 400 allocations per jurisdiction for projected year(s) as a comparison to the projected operating costs per jurisdiction.

and

Please provide a table detailing Prop 400 and local costs by city for each phase to implement the regional paratransit plan.

See Table 4 on the following page for Proposition 400 ADA allocations.

Table 4. ADA Allocations
FY 2008 through FY 2026

ADA	FY 2008	FY 2009	FY 2010	FY 2011	FY 2012	FY 2013	FY 2014	FY 2015	FY 2016	FY 2017	FY 2018	FY 2019	FY 2020	FY 2021	FY 2022	FY 2023	FY 2024	FY 2025	FY 2026
Regional ADA Compliance	\$591,335	\$609,075	\$627,347	\$646,168	\$665,553	\$685,519	\$706,085	\$727,267	\$749,085	\$771,558	\$794,705	\$818,546	\$843,102	\$868,395	\$894,447	\$921,281	\$948,919	\$977,387	\$1,006,7
Avondale	\$176,497	\$181,250	\$192,774	\$205,907	\$220,379	\$235,784	\$252,123	\$269,394	\$288,543	\$308,489	\$330,176	\$352,929	\$377,558	\$404,063	\$431,227	\$461,481	\$493,068	\$525,450	\$319,4
Buckeye	\$6,408	\$6,581	\$6,999	\$7,476	\$8,001	\$8,561	\$9,154	\$9,781	\$10,476	\$11,200	\$11,988	\$12,814	\$13,708	\$14,670	\$15,657	\$16,755	\$17,902	\$19,078	\$11,5
Carefree	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Cave Creek	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Chandler	\$1,122,238	\$1,152,459	\$1,225,735	\$1,309,241	\$1,401,259	\$1,499,212	\$1,603,099	\$1,712,917	\$1,834,671	\$1,961,494	\$2,099,390	\$2,244,066	\$2,400,667	\$2,569,193	\$2,741,916	\$2,934,280	\$3,135,127	\$3,341,020	\$2,031,3
El Mirage	\$26,548	\$27,263	\$28,996	\$30,972	\$33,148	\$35,465	\$37,923	\$40,521	\$43,401	\$46,401	\$49,663	\$53,086	\$56,790	\$60,777	\$64,863	\$69,414	\$74,165	\$79,035	\$48,0
Fountain Hills	\$7,324	\$7,521	\$7,999	\$8,544	\$9,144	\$9,784	\$10,462	\$11,178	\$11,973	\$12,800	\$13,700	\$14,644	\$15,666	\$16,766	\$17,893	\$19,149	\$20,459	\$21,803	\$13,2
Gila Bend	\$1,373	\$1,410	\$1,500	\$1,602	\$1,715	\$1,834	\$1,962	\$2,096	\$2,245	\$2,400	\$2,569	\$2,746	\$2,937	\$3,144	\$3,355	\$3,590	\$3,836	\$4,088	\$2,4
Gila River	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Gilbert	\$746,358	\$766,457	\$815,190	\$870,727	\$931,924	\$997,070	\$1,066,161	\$1,139,197	\$1,220,171	\$1,304,516	\$1,396,225	\$1,492,444	\$1,596,594	\$1,708,674	\$1,823,545	\$1,951,479	\$2,085,055	\$2,221,987	\$1,350,9
Glendale	\$550,088	\$564,902	\$600,819	\$641,751	\$686,856	\$734,869	\$785,792	\$839,621	\$899,302	\$961,467	\$1,029,059	\$1,099,975	\$1,176,736	\$1,259,342	\$1,344,006	\$1,438,297	\$1,536,747	\$1,637,670	\$995,7
Goodyear	\$21,330	\$21,904	\$23,297	\$24,884	\$26,633	\$28,495	\$30,469	\$32,556	\$34,871	\$37,281	\$39,902	\$42,652	\$45,628	\$48,831	\$52,114	\$55,770	\$59,588	\$63,501	\$38,6
Guadalupe	\$641	\$658	\$700	\$748	\$800	\$856	\$915	\$978	\$1,048	\$1,120	\$1,199	\$1,281	\$1,371	\$1,467	\$1,566	\$1,676	\$1,790	\$1,908	\$1,1
Litchfield Park	\$19,316	\$19,836	\$21,097	\$22,534	\$24,118	\$25,804	\$27,592	\$29,482	\$31,578	\$33,761	\$36,134	\$38,625	\$41,320	\$44,221	\$47,193	\$50,504	\$53,961	\$57,505	\$34,9
Maricopa County	\$109,586	\$112,537	\$119,693	\$127,847	\$136,833	\$146,398	\$156,542	\$167,266	\$179,155	\$191,539	\$205,005	\$219,132	\$234,425	\$250,881	\$267,747	\$286,532	\$306,144	\$326,250	\$198,3
Mesa	\$2,455,759	\$2,521,892	\$2,682,239	\$2,864,972	\$3,066,332	\$3,280,680	\$3,508,013	\$3,748,325	\$4,014,756	\$4,292,279	\$4,594,032	\$4,910,621	\$5,253,308	\$5,622,087	\$6,000,051	\$6,420,996	\$6,860,503	\$7,311,054	\$4,445,1
Paradise Valley	\$43,483	\$44,654	\$47,494	\$50,729	\$54,295	\$58,090	\$62,115	\$66,370	\$71,088	\$76,002	\$81,345	\$86,951	\$93,019	\$99,549	\$106,241	\$113,695	\$121,477	\$129,455	\$78,7
Peoria	\$260,900	\$267,926	\$284,962	\$304,375	\$325,768	\$348,540	\$372,692	\$398,223	\$426,529	\$456,013	\$488,071	\$521,705	\$558,113	\$597,292	\$637,447	\$682,168	\$728,861	\$776,728	\$472,2
Phoenix	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Queen Creek	\$5,035	\$5,171	\$5,499	\$5,874	\$6,287	\$6,726	\$7,192	\$7,685	\$8,231	\$8,800	\$9,419	\$10,068	\$10,771	\$11,527	\$12,302	\$13,165	\$14,066	\$14,989	\$9,1
Salt River	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0	\$0
Scottsdale	\$1,411,608	\$1,449,623	\$1,541,792	\$1,646,830	\$1,762,575	\$1,885,786	\$2,016,460	\$2,154,595	\$2,307,744	\$2,467,268	\$2,640,721	\$2,822,701	\$3,019,683	\$3,231,663	\$3,448,922	\$3,690,888	\$3,943,523	\$4,202,507	\$2,555,1
Surprise	\$18,492	\$18,990	\$20,197	\$21,573	\$23,090	\$24,704	\$26,415	\$28,225	\$30,231	\$32,321	\$34,593	\$36,977	\$39,557	\$42,334	\$45,180	\$48,350	\$51,660	\$55,052	\$33,4
Tempe	\$2,104,505	\$2,161,179	\$2,298,590	\$2,455,187	\$2,627,746	\$2,811,435	\$3,006,252	\$3,212,191	\$3,440,514	\$3,678,342	\$3,936,934	\$4,208,241	\$4,501,912	\$4,817,944	\$5,141,847	\$5,502,583	\$5,879,225	\$6,265,333	\$3,809,3
Tolleson	\$23,435	\$24,066	\$25,597	\$27,340	\$29,262	\$31,307	\$33,477	\$35,770	\$38,313	\$40,961	\$43,841	\$46,862	\$50,132	\$53,651	\$57,258	\$61,275	\$65,470	\$69,769	\$42,4
Wickenburg	\$2,014	\$2,068	\$2,200	\$2,350	\$2,515	\$2,690	\$2,877	\$3,074	\$3,293	\$3,520	\$3,768	\$4,027	\$4,308	\$4,611	\$4,921	\$5,266	\$5,626	\$5,996	\$3,6
Youngtown	\$1,373	\$1,410	\$1,500	\$1,602	\$1,715	\$1,834	\$1,962	\$2,096	\$2,245	\$2,400	\$2,569	\$2,746	\$2,937	\$3,144	\$3,355	\$3,590	\$3,836	\$4,088	\$2,4
SCAT*	\$40,088	\$41,168	\$43,785	\$46,768	\$50,055	\$53,554	\$57,265	\$61,188	\$65,538	\$70,068	\$74,994	\$80,162	\$85,756	\$91,776	\$97,946	\$104,817	\$111,992	\$119,347	\$72,5
Total ADA	\$9,745,734	\$10,010,000	\$10,626,001	\$11,326,001	\$12,096,003	\$12,914,997	\$13,782,999	\$14,699,996	\$15,715,001	\$16,772,000	\$17,920,002	\$19,124,001	\$20,425,998	\$21,826,002	\$23,260,999	\$24,857,001	\$26,523,000	\$28,231,000	\$17,576,9

47. Request that options to fully fund all ADA with regional funds (no local [jurisdictional] funds) be developed for consideration and if not, why? Other regions (Chicago, Pittsburgh, Miami) utilize Medicaid as a partial funding mechanism to help pay for some of the ADA costs. Has this option been explored? We would like to see an analysis by FOAC of all funding sources that are being proposed and impact to the TLCP if applicable. Did the study meet that stated objective of “Cost Containment” and “Economies of Scale” with the proposed plan? If so, where are the savings projected?

We did not look at integrating Medicaid transportation funding into the regional system in Phase I or Phase II, but could in the future.

Human service programs could eventually be included in the regional transportation system. Contracts could be executed with various agencies to transport their clients to eligible program activities. A contract for Medicaid transportation could be included in this type of broader coordination effort. Some ADA riders may also be agency clients and some ADA trips may be to and from approved agency programs and activities. By having contracts with agencies, it will therefore be possible to ensure that, where multiple eligibility exists, available program funds could be used to pay for trips before local funding is used. This is essentially what the systems cited in the question do.

While this broader coordination could certainly be beneficial in the long-run, it is recommended that the RPTA and member communities focus first on coordinating the public DAR systems and getting regional ADA service in place. Once these systems are successfully coordinated, discussions could begin with local, regional, and state human service programs about participating in the regional system.

Regarding cost containment, Chapter 7 of the final report details several supplemental services that can be implemented to provide riders with a wider array of transportation options and reduce reliance on only ADA paratransit service. Chapter 5 also details a recommended in-person eligibility process that, together with the supplemental services, can better match riders to the most appropriate and cost-effective transportation options.

Regarding economies of scale, please see the response to Question #23 above.

Regarding regional funding of the ADA service, the review of peers also noted that many systems fund regional paratransit services with available regional funds. This option has been considered, but it would impact the way that regional funding has been distributed to date and would require much more extensive discussion.

By law, ADA service may not be financially constrained. Regional funding for ADA service under the Transit Life Cycle Program is constrained. Before the funding of ADA service could be solely regionally funded, these incongruities would have to be resolved.

If the Board opted to fully fund regional ADA costs through Proposition 400, it could significantly impact RPTA's ability to complete the projects in the TLCP. Along with such policy direction, the Board of Directors would need to provide some guidance on which projects should be delayed or eliminated.

The FOAC is responsible to monitor the TLCP financial model. The FOAC would not review any plan to fund the regional ADA service that was outside of the TLCP.

48. Relative to section 5309 funding, the final report appears to assume availability of such funds when needed. What research was done relative to future availability of section 5309 funds when needed in the future?

No analysis has been done to assess the possibility of 5309 funding available in a given year to support this program. 5309 Discretionary funds are for capital projects only and are annually appropriated by Congress. Projects require support from a member of Congress to request funding for the project be included in the budget. A large part of the TLCP already is relying on receipt of a large amount of 5309 funds, in amounts similar to or greater than we currently receive. However, theoretically, the amount of 5309 funds that we could receive is limited only by the total amount made available each year (for 2006, we received \$7.4 million out of \$840 million total available).

49. The study reports that the use of 5309 funds to pay for "Mobility Manager" services. This funding would be needed in FY09/10. With the current MAG TIP process, what fiscal year do you think this funding would be available?

The proposed implementation plan in Chapter 8 of the final report suggested that the current TIP be amended between January 2008 and July 2008 to be consistent with the funding needs of the regional system. This would allow the funding to be available and used as proposed in FY 2010.

Call Center

50. Are the costs for the time and extra staff required at the call center and extra operations staff that are required to meet the demand of non-ADA services being allocated only to the cities that fund that type of service? How does this financially impact the cities of the East Valley DAR?

Cities that opt to have non-ADA service provided through the regional system would be assessed the costs associated with this service. This would include all contracted operating costs, call center costs, as well as the local share of capital costs. Non-ADA services are included in the estimated allocations in Table 6.22. The estimated allocations to East Valley communities are shown there. This type of cost allocation is currently done in the East Valley for ADA and non-ADA service, so there is no significant change in approach to this issue.

51. Would creating the proposed call center as an extension of the existing Valley Metro Customer Service Department be less expensive to create and manage?

It is possible that combining the two functions could result in some cost-sharing benefits. There are a lot of considerations in doing this, though. Providing trip planning services and information for fixed route riders is a very different function than scheduling and dispatching paratransit service. Some systems have attempted to combine fixed route customer service call centers with paratransit call centers (some that we are aware of include Rochester, NY and the Delaware Area Regional Transit). These efforts have not, in our opinion, been successful. While there may be some advantages to having a larger staff to cover call peaks, combining the two systems adds complexities in managing staff assignments and call group coverage. It also complicates training. One of the six peer systems – Las Vegas – does operate in this way and seems to be having some success. This system might be examined further.

Having the RPTA run the call center directly with RPTA staff, rather than contracting out for this service, also would be a significant change to the proposed service design. The RPTA would become directly responsible for the schedules given to contracted service providers and for the dispatching of those services. The RPTA would no longer be able to play an independent “mediator” role if there were disputes between the service providers and the call center about the quality of scheduling and dispatching.

A final consideration is that it is always possible to change from a contracted call center to an in-house call center. But, it is difficult to do the reverse. At the outset, the RPTA should consider contracting this function out. Over time, after the transition to a regional system, the RPTA may want to further explore the option to bring this function in-house.

Operational

52. Is it possible to estimate the average DAR trip length in Phoenix if the plan is implemented?

The average trip length in Phoenix should not change much from the current service (which is about 11.3 miles). As explained on page 6-57 of the final report, the plan does not anticipate a significant increase in regional travel by Phoenix riders. There is currently only a 2.6% differential in fixed route versus DAR regional travel. Regional trips will only increase to 9.9% of the total as opposed to 8.6% of the total now. This small, 1.3% increase in regional travel should have a negligible impact on average trip length. Conservatively assuming that a regional trip might average 20 miles, a 1.3% increase in regional trips would mean that average trip length would increase from 11.3 to 11.4 miles.

53. Clarify average trip length as it relates to Glendale. Under current conditions, Glendale’s average trip length for residents utilizing intercity transportation services like STS and transfers to other DAR providers average over 10 miles

per trip. However, the consultant model assumes that a future regional intercity trip is only 7% - 10% longer than the current average trip length that is provided in Glendale. This is not a correct local assumption given that Glendale's average trip length is approximately 4 miles. This would have an impact on productivity and cost to the city.

We cannot find where the final report estimates new average trip lengths for Glendale. The report does suggest a 10.4% increase in *trips* in 2010 to account for increased regional travel. On page 6-59, the report then estimates that these regional trips will be provided at a productivity of 2.0 trips per vehicle-hour rather than the 3.0 trips per vehicle-hour currently averaged for the Glendale DAR service. This much lower productivity should allow for the provision of regional trips with an average length of 10 miles.

54. In slide 14, what are the operations assumptions in the FY 2006 cost estimate? What are the operations assumptions in the FY 2010 cost estimate? What are the operations assumptions in the regional FY 2010 \$31 million cost estimate?

The "Current (FY2006)" operating cost of \$25,231,251 shown on the slide is the operating cost in FY 2006 for providing all DAR services.

The "Current (FY2010)" operating costs of \$29,438,927 shown on the slide is the projected operating cost for providing service that would otherwise be provided under the Phase I regional system by the current services. So, for example, it includes both ADA and non-ADA operating costs in Phoenix and the East Valley, since both types of services in these areas would be part of the regional system. In the West Valley, it includes only the operating costs associated with providing ADA services. The estimated 2010 costs for the current service design assumes ridership increases based on past trends and increases 2006 costs by 3% per year for inflation. As explained in the response to Question #19, it also assumes that the need for additional regional travel and the elimination of regional travel constraints will have to be addressed and therefore includes these trips in the total ridership count. ADA-only costs are estimated by multiplying total operating costs by the percentage of trips that are ADA in each system. So, for example, in Sun Cities, where only 110 ADA trips were provided in 2006, an amount of \$3,425 was included in the total.

The "Regional (FY2010)" cost of \$31,380,232 for the first year of the regional system assumes:

- Phase I implementation – meaning that the regional system will provide ADA and non-ADA services now provided by the East Valley DAR and the Phoenix/Paradise Valley/SW Communities DAR operation, plus ADA service in the West Valley.
- Increases in ridership based on recent trends in each area.

- Additional regional travel (10.4% increase in ridership in the West Valley due to regional trips, 4.5% increase in ridership in the East Valley, and 0.4% increase in the Phoenix/Central area).
- Similar productivities to current services for “local” trips.
- Lower productivities for regional trips.
- Per-hour operating costs similar to those experienced by peers using a similar model.

55. Does the \$31 million cost estimate include non ADA service?

It includes non-ADA service in the East Valley and in Phoenix. It does not include non-ADA service in the West Valley.

56. What are some options we may consider short of full implementation of phases 1 and 2?

To achieve a true regional service, Phase I represents about the least amount of change possible. Basically, the main change under Phase I is that the call centers now serving the East Valley and Phoenix are combined. The service providers in the East Valley and Phoenix could remain the same (with renegotiated contracts to remove call center costs). In the West Valley, existing DAR services in Peoria, Surprise, Sun Cities, and El Mirage would continue pretty much as is under Phase I. ADA riders in those areas would have the option of calling the regional system for travel, but the number of ADA trips now provided in those cities is relatively small (65 per year in Sun City, about 500 per year in Peoria, and none in Surprise and El Mirage). In Glendale, ADA riders would also have the option to call the regional system, but the Glendale DAR service would also continue to be provided. If all ADA riders opted to use the regional service instead of the current local service, this would mean a shift of 30% of the ridership, which would mean a reduction in the size of the Glendale DAR service. However, it is likely that the actual impact will be less than that.

One reason for the selection of the recommended model is that it moves toward regional service by building on the existing services and represents the least amount of change from what now exists. We can’t think of an intermediate step in the process of moving to a region service short of full implementation of Phase I. RPTA has acknowledged that decisions about several of the details (such as the cost allocation method) should be made in incremental steps in consort with the members, and that the RPTA Board should also be allowed to approve these decisions incrementally.

Other than moving toward the recommended regional model, one option would be to overlay a regional ADA service on all of the current DAR systems. In our opinion, though, while this would provide regional service for ADA eligible riders, it would not be moving to a true regional system. Rather than simplifying the current situation, it would add another phone number and set of service policies for the public to try to understand. As explained in the response to Question #18 above, a separate ADA service overlaid on the existing systems would also be very costly.

The only other way to provide true regional service would be to have each DAR system provide more direct ADA service throughout the region. This would result in a lot of deadheading, duplication, and inefficiency.

57. What is the impact to Maricopa County STS if the cities opt to use the regional services and they are not selected as the West Valley provider?

Based on the STS trip data from FY 2006, only about 8% of STS' trips are for ADA eligible riders. Some of these are not ADA eligible trips, but are coded as ADA for RPTA funding purposes. It is therefore likely that the total impact on STS would be less than 8%, perhaps more on the order of 4-5%, but no more than 8%. STS may have to redirect this small part of their overall service if they are not selected as the West Valley regional provider or not retained as a back-up regional provider. Using them in this capacity should be considered, though. It is also important to note that much of the additional inter-regional travel predicted under the new system would be new trips, not currently performed by STS, so having these provided by someone else would have no impact on current STS operations.

58. The amount of vehicles allocated to the West Valley does not seem adequate based on the levels of service provided in just Glendale. It was explained that vehicles could be pulled from other providers during peak demand times, and the example given was buses would be pulled from Phoenix. There are several questions with this response, considering Phoenix currently has system capacity issues is it reasonable to expect buses would be available to do this? Also, if taxis and other vehicles are used for this purpose is this done at a lower cost?

In the first year of the regional service, it is estimated that only 28,262 trips will need to be provided. This translates to only about 10,333 vehicle-hours of service (see Table 6.12 in the final report). This means only about 198 vehicle-hours of service per week. Assuming six of the eight planned vehicles are in regular operation, and the others are spares, this would mean each vehicle would be operating only 33 hours per week. The eight vehicles should be more than enough for the level of demand expected at the outset in the West Valley. Growth in the fleet is then provided as detailed in Table 6.18 of the final report.

59. The creation of the EVDAR system caused impacts resulting in benefits and challenges. What are the pros and cons that can be expected in the regionalization of the West Valley services in Phase I and Phase II based on the history of the change in the East Valley?

We spoke with individuals who were part of the creation of the EVDAR service or who were around to observe the process and got the following input: An unanticipated reaction to the Tempe/Scottsdale Dial-a-Ride start-up in 1988 was concerns on the part of the seniors who used Scottsdale's preceding senior transportation program, the

“Scottsdale Mobility Program.” The earlier program provided cab rides for seniors in limited parts of the city. Those who used the cab service liked the service and their drivers. Many voiced objection to the changes.

With the long-standing services provided in the West Valley, any change in service may be unwelcomed by some users and complaints may be voiced. It is important to note, though, that in Phase I of the proposed regional service, ADA certified riders can choose to continue to use local DAR services for their local trips. They could use the regional system for out-of-area trips, and benefit from a significant improvement over current out-of-area service requiring multiple transfers. A reaction similar to that in the East Valley in 1998 might be more likely in Phase II if West Valley communities transfer non-ADA services to the regional system. Before any decision is made to move into Phase II, the West Valley communities would have had an opportunity to experience the quality and characteristics of a regional service.

Phase I will help ensure that the West Valley’s ADA paratransit service is comparable to the level of fixed route provided. Providing ADA certified riders a one-seat ADA trip in the West Valley also benefits the riders by eliminating transfers.

Another issue reported in the East Valley is that, as outlying cities or jurisdictions are added to the fixed route service area, existing cities experience cost increases. In the East Valley, costs are allocated on a formula based on revenue hours provided in each jurisdiction. If fixed route service is expanded to areas such as Queen Creek, Apache Junction or Fountain Hills, riders in existing communities are able to make complementary ADA paratransit trips to these areas. These are likely to be longer trips, and this can increase the number of hours the vehicle spends getting to the new areas. While it gives riders greater travel opportunities, it can also result in higher costs for existing cities. For this reason, we have incorporated additional inter-regional travel into our cost estimates for the regional system. As the overall service area expands in the future, due to growth of the fixed route system, agreement will need to be reached and rules established prior to adding new cities to the existing service area. Future fixed route changes will also need to consider impacts on required complementary paratransit service area and costs.

60. The study refers to a gap between fixed route rider trip distance and paratransit rider trip distance. Considering trip distance would be longer with less geographical constraint, would this gap be narrowed, and if so is there a projected amount? This information is important if costs are to be allocated as proposed in the report using trip length as mentioned previously.

Chapter 3 of the final report notes a difference in the amount of regional travel by fixed route riders versus DAR riders (see pages 3-8 to 3-12). It does not discuss the gap in terms of trip distance, but rather in terms of the number of regional trips taken. The regional service plan recognizes that with the introduction of a more regional paratransit system, more regional trips will be made by paratransit riders. This is included in the ridership estimates and in the cost model (see pages 6-56 to 6-57 of the final report).

It can be expected that the additional regional trips will have longer average trip lengths. For this reason, the plan assumes a lower productivity when providing these trips (see pages 6-58 to 6-59 of the final report).

61. Can the study be furthered to include other options such as improving transfers, using Maricopa County for all intercity ADA trips, or other options?

Paratransit transfers are difficult to carry out operationally. They also tend to be inefficient – tying up two vehicles to complete a single trip. None of the peers studied used transfers to any great degree and none had “forced” or “required” transfers. If transfers were used at all, it was a scheduler decision when doing a transfer made sense from a scheduling perspective. And, these were still managed by a single, central dispatch operation. EVDAR and the City of Phoenix DAR have and continue to work cooperatively on improving transfers between those two systems, but this has proven to be an ongoing challenge.

If transfers were continued in the RPTA area, there would also have to be far fewer independent service areas to make it work to any degree. A single operating area would likely be needed in the West Valley so riders would not have to transfer 2-3 times just to get to Phoenix.

In terms of overlaying an additional regional ADA service on the already complex DAR structure, please refer to the answers to Questions #18 and #56.

62. If member (or non-member) agencies agree to participate in the regional service and then, later, opt out or discontinue their participation, choosing instead to manage their paratransit locally, how will that impact the regional call center and regional operation (reduction in staffing, vehicles, shared costs, etc.). Will the remaining agencies have to absorb additional costs associated with the reduced participation?

If some communities opt out in the future, much of the cost associated with their portion of the service could be eliminated. This would include the direct vehicle operating costs associated with providing trips in their area. Many call center costs could also be reduced as fewer reservationists, schedulers, and dispatchers would be needed. It is likely, though, that in the short-term some of the “sunk” fixed costs of the facility and other infrastructure previously shared would have to be covered by remaining communities. In the longer-term, even the infrastructure could be “re-sized” to serve only remaining communities.

63. With respect to the standards of Dial-a-Ride, what level of service will the region provide for the Non ADA Passenger for the following scenarios:

- Non ADA Senior
- General Public

As detailed in sections 6.3 and 6.4 of the final report, each participating community would get to specify exactly what type and level of non-ADA service will be provided to their residents. This would include choosing the eligibility requirements (e.g., seniors, general public, etc.), the fares to be charged, the days and hours of service, the trip purposes to be served, and any limitations/capacity constraints on the service (e.g., the use of trip caps, waiting lists, maximum numbers of trips per year, etc.). There are only a few service policies and standards that, for operational reasons, would need to be somewhat standardized to allow for consistent operation. These include:

- Door-to-door service would be provided where needed for both ADA and non-ADA trips. Assistance would be provided up or down one step or curb. An accessible path of travel will be needed for driver assistance beyond the vehicle, and drivers must be able to maintain “effective control of vehicles” when providing assistance to the door.
- There would be a flat and consistent \$2.50 fare regionwide for ADA trips. A monthly pass will be available, but only to Phoenix residents (continuing current program). Free transfers would be provided to and from fixed route. Non-ADA fare policies would be set by each participating city that funds non-ADA service.
- Reservations would be taken for ADA trip requests from 6:00 a.m. to 7:30 p.m., up to 14 days in advance. Non-ADA trip requests would be taken during the same hours, but only up to one day in advance. Same-day service would be provided on a space available basis with possible trip purpose priorities (such as medical trips).

64. Is the southwest valley provider of service the same provider as the Phoenix provider? In early drafts of the study, the southwest valley was a part of Phoenix (same provider).

In the proposed regional service design, the contracted operators would have primary operating areas, but would be able to be used throughout the region as needed and as the most efficient schedule dictates. For riders in the Southwest communities, this could mean that the provider located in the Phoenix/central area might be assigned to perform their trips if they are traveling to Phoenix. Or, if they are traveling to El Mirage or one of the West Valley communities, the central scheduling unit might assign their trips to the West Valley provider. They may also sometimes (but probably rarely) be transported by the East Valley provider if vehicles assigned to that provider happen to be traveling in the Southwest area.

65. Assuming regional adoption of the consultant’s recommendations, what would be the positive and negative implications of a city - which perhaps expects a higher quality of service - operating its own local dial-a-ride service for local ADA and Non-ADA trips while contracting with Valley Metro (and/or STS) for regional ADA and Non-ADA trips?

As noted in the response to Question #18, the recommended plan does not include an option for RPTA to provide only regional trips and we would not recommend that this be done.

Cities may opt, however, to continue to provide non-ADA service. And, in many cases, non-ADA riders may also be ADA eligible and may opt to make their trips via the local DAR rather than the regional system by calling in as non-ADA riders. If cities opted to continue to provide non-ADA service, they would not be assessed for these trips through the regional system, but would have to fund them through their local DAR budgets. Where cities have DARs that are more cost-effective than the proposed regional service (such as SCAT), they could save money by providing non-ADA service separate from the regional system. Where cities have DARs that have a higher unit cost than the proposed regional system, it might be more costly for them to provide non-ADA service locally.

From a rider perspective, having both a local non-ADA service and a regional ADA service might add some complexity in terms of understanding and use of both. However, as noted in the question, some cities may feel that they will be better able to provide higher quality service by keeping the service delivery local.

66. Pg 1-4, why are Tempe and Scottsdale broken away from Mesa, Chandler, and Gilbert.

This section of the final report is summarizing the results of the 1998 Regional Dial-A-Ride Analysis. At that time, Scottsdale and Tempe were separate from the other cities.

Administrative

67. This plan will have an impact on the level of staffing in Glendale. In Phase I it is estimated 30% of our current system ridership would use the regional ADA. If staffing is reduced what impacts would there be to individual west valley cities under section 13(c) guidelines? Do the consultants expect the regional paratransit service would reduce the amount of demand on non-ADA, and if so would it be expected to be a corresponding amount? The study does not address the possible impacts on the level of non-ADA services in cities continuing to provide that service. This would need to be addressed as an impact of implementation of regional service. Additionally the study calls for non-ADA to be provided regionally in Phase 2 of the plan but does not address the cost impacts to individual west valley cities for labor implications. Please address these issues that affect west valley communities in Phase 1 and Phase 2.

and

What are the Department Of Labor's 13 (c) legal implications and contractual obligations regarding the assumption of local service by RPTA?

Department of Labor 13 (c) provisions protect existing workers from being adversely affected as the result of a change in working conditions. Grant recipients are required to have an approved local agreement in place. The terms of the local agreement dictate the details of how 13 (c) is applied.

The current local agreement that governs public transportation in the region states that a successor contractor of a transit operation in the Valley must provide a preference in hiring for non-management employees affected by an outsourcing of their job. The agreement does not require that existing workers be paid the same wage they currently receive. However, in contract negotiations or during the competitive procurement process, if a member city desired it, RPTA could require that the successor contractor pay the same wage rate the affected employee receives. This would allow RPTA to grandfather such employees. Resulting additional cost could be paid as a part of the service cost of the system.

68. What is the cost model for Surprise regarding the regional non-ADA Dial-a-Ride service if Glendale and Peoria “opt out” of regionalization?

A summary of ridership and cost estimates for 2010 that includes Surprise non-ADA trips as part of the regional system, but with other West Valley communities still providing their own non-ADA trips, is provided in Attachment 2. Following is a description of how costs were calculated:

- Based on the ridership projections and as indicated in Table 6.10 of the final report, it is assumed that Surprise would need to have about 26,728 non-ADA trips provided in 2010. This number of trips is included for Surprise in the “Estimated FY2010 Ridership” column in the Attachment 2 spreadsheet.
- It is assumed that this service will be provided at a productivity of 2.0 trips per vehicle-hour. This productivity is indicated for Surprise in the “productivity” column of the Attachment 2 spreadsheet.
- With an additional 26,728 trips needing to be provided, the systemwide call center cost has been increased to \$2,626,504. This cost was arrived at by multiplying the call center costs without the Surprise non-ADA trips (\$2,541,852) by a factor of 1.0333, because the Surprise service would be a 3.333% increase in total ridership.
- The total system operating cost was increased to \$29,622,194. This increase of \$783,812 was arrived at by multiplying the number of service hours projected for the Surprise non-ADA trips (see Table 6.12 in the final report) by the \$56.28 per-hour cost projected for the West Valley service provider (see Table 6.15 in the final report).
- The estimated FY2010 local share of capital cost for the total system was increased by \$36,000 to \$720,000. This figure was arrived at by assuming that about 15 vehicles would need to be used to provide the trips in Surprise (see

Table 6.13 in the final report), that the fleet used by Surprise at the beginning of 2010 would be made available to the regional system, and that three of the 15 vehicles would need to be replaced in 2010 as part of the regular replacement plan (assumes a five year useful life for vehicles). Three vehicles at \$60,000 each would cost \$180,000, and the 20% local share would be \$36,000.

- The call center, operating, and capital costs are then allocated to Surprise using the “trips adjusted by productivity” method. These allocations are shown in the spreadsheet in Attachment 2. The estimated call center costs allocated to Surprise in 2010 would be \$66,454, the estimated operating costs allocated to Surprise in 2010 would be \$749,486, and the estimated local share of capital costs allocated to Surprise in 2010 would be \$18,217. Total estimated cost to Surprise would be \$834,157.

69. What is the financial impact to Surprise if all cities in the region opt into the non-ADA Dial-a-Ride at the following percentages?

- 80 %
- 70%
- 60 %
- 50%

If cities opt in to the regional system to have non-ADA service provided, that would be at 100%. There is no option for in the final report for cities to opt in at various percentage levels. An estimate of costs for Surprise to opt in while other West Valley communities do not is provided in Question #68 above.

70. *The following question comes from a member other than the City of Glendale. Glendale's Dial-a-Ride service carries additional gross costs but is vastly more efficient than the other privately operated valley dial-a-ride services. A large part of Glendale's success stems from a stable employee base and strong employee knowledge of and commitment to citizens (read "citizen" as inclusive of all residents). Essentially it is the close proximity of the service and its employees to citizens and the relationships stemming from this make Glendale stand out. Embedded within this relationship is a solid line of accountability between city and citizen. Citizens may pay regional taxes, but Valley Metro is NOT institutionally configured in such a way as to actualize any form of stable social or political bond between citizens and agency members; and Valley Metro's board accountability is insufficient on this point. Moreover, dial-a-ride is not light rail or bus transit where interaction between user and agency is somewhat less critical. Dial-a-ride relies on human interaction. Glendale has proven that an understanding of and commitment to this reality is the way to create a successful service.*

Proceeding with option 4 may bring us some added efficiency and may incrementally improve service (with respect to transfers), but this option will also create a very large and complicated organization (as well as several private sub-organizations) that is even farther removed from the people it

serves. As is the case with most large organizations, Valley Metro will configure its rules, operations, and services as much to suit its own ends as it does to serve the community. Additionally, any performance improvements may be negatively offset by the interaction effects of a larger, less responsive, Valley Metro organization with the use of multiple private operating firms. We may all want the cost savings that come with contracting, but most will agree (and it has been empirically demonstrated) that contracted transit services under-perform when compared to publicly operated services. Again, Glendale demonstrates this locally.

That the majority of our peers have taken the same approach as TranSystems now recommends should not be viewed uncritically. Most or all of these agencies came to this arrangement in the last century under a variety of assumptions that today may be considered dated. We have not adequately explored the limitations of this arrangement and I would ask TranSystems to attempt an answer on this.

We would agree that Glendale provides excellent local service. This is a major reason why the recommended regional system plan gives communities in the West Valley that are currently providing service locally the option to continue to do this.

However, while it is agreed that local communities can provide very good service, it must also be recognized that the collection of local services that have been developed do not provide good region-wide service and that the ADA requires that a regional service, which mirrors the regional fixed route system, be provided to individuals with disabilities who are unable to use the fixed route system. This is not currently being provided by the multiple local systems. The RPTA and its member communities provide fixed route public transit on a regional basis and needs to also do so for people with disabilities who cannot use the fixed route system. It is a bit disingenuous to say to people with disabilities that they cannot easily travel throughout the region because we are looking out for their best interests by keeping services local.

As detailed in the response to Question #18, it also would not make sense to have communities provide local ADA and non-ADA service and then layer on another system to only provide regional ADA trips. This would make the current network more complex, not less and would be inherently inefficient.

We disagree with the implication that regional services cannot have good accountability or effective human interaction, and cannot therefore also provide good service. There are many examples among the peers contacted of high-quality regional paratransit service. The proposed regional plan builds in a considerable amount of local involvement and accountability. Local elected officials and their designees would also still oversee RPTA operations through their roles on the Board and other RPTA committees.

We also disagree with the statement: “as is the case with most large organizations, Valley Metro will configure its rules, operations, and services as much to suit its own ends as it does to serve the community.” We believe that RPTA has shown that it is highly dedicated to customer service and providing the best product possible to riders. Valley Metro (as referenced in the statement) is made up of and governed by its members organizations.

ADA Requirements

71. Should two times the fixed route trip travel time be considered as an ADA standard?

No. A “two time fixed route” standard does not work well for short or long trips. A trip that only takes 10 minutes by bus might not be able to be served in 20 minutes on DAR. Conversely, if a trip takes 90 minutes on fixed route, it would be hard to say it is okay to keep a person on DAR for three hours. So, it is best to have a standard that looks at reasonable ride times for trips of various lengths, as proposed in the final report.

72. People that cannot be left alone during a transfer, can you require a personal care attendant?

No. Section 37.5(e) of the U.S. Department of Transportation ADA regulations (49 CFR Part 37) states that “An entity shall not require that an individual with disabilities be accompanied by an attendant.”

In-person assessments

73. What is that cost for in person assessment per test?

As detailed on pages 5-23 to 5-25 of the final report, and Table 5.7, it is estimated that in-person functional assessments would cost \$125 per applicant if only some applicants are required to participate in assessments. If all applicants are asked to participate in assessments, the per applicant cost is estimated to be \$100. The lower cost in the latter case is due to greater assessment volume.

74. Page 5-30, Paragraph 2 mentions that for evaluations of travel options (trip eligibilities) they would only use those riders who are “Conditionally Eligible”. Conditionally eligible persons may only need service for 6 months, so why spend the money and time to make a detailed evaluation of these people only and not include persons with a more permanent eligibility. Just because they are not conditional, doesn’t mean they cannot make any trips by fixed route.

Conditionally eligible riders are not the same as riders who are eligible on a temporary basis. Conditionally eligible riders are typically given eligibility for the full term, but only

for certain conditions. So, for example, a rider may have full term eligibility, but only for trips where the distance to or from the bus stops they need to use is more than six blocks, or there is no accessible, safe path-of-travel to or from these bus stops.

Supplemental Programs

75. What is estimated cost of providing free bus passes per year on a per-city basis?

There are two costs associated with providing free fixed route service to ADA eligible riders – the cost of providing photo IDs and lost revenue on fixed route. First, photo IDs would need to be provided to these riders. If the RPTA and member communities implemented an in-person eligibility determination process, the photos could be taken at the time applicants come in for an interview, and the IDs sent to those determined eligible once a determination is made. The only cost for new applicants would be the photo ID equipment and the processing cost. Assuming two eligibility interview sites, and assuming that photo ID equipment costs about \$10,000, the up-front costs would be \$20,000. Then, assuming 172 applicants a month under the full in-person process (see Table 5.7 in the final report), and assuming \$3.00 per photo ID, there would be an additional \$516 per year in ID materials for new applicants. Then, assuming that about 35% of the current 10,000 ADA eligible riders opted to get the ID and came in to one of the eligibility centers for a photo ID, there would be an additional \$10,500 in ID materials to make 3,500 IDs for current riders. The 35% is based on the typical percent of all ADA riders who can use fixed route service some of the time. Assuming these 3,500 individuals came in for IDs over the course of a year, this would only mean that about 14 IDs per day (seven per day at each of the two eligibility centers) would need to be made, something that should be able to be handled by the clerical staff at the eligibility centers. Alternately, the RPTA might want to have one or two additional sites, which would require an additional \$10-20,000 in photo ID equipment.

Total first year costs would therefore be between \$30,500 and \$50,500 for the photo ID machines (depending on whether two or four were purchased), and for IDs for the current riders. Ongoing annual costs would be \$516 for processing IDs for new applicants. Assuming three machines and a \$40,500 first year cost, and an allocation based on the percentage of ADA trips each community, the estimated cost per community are shown in the table below. Given the small ongoing costs, RPTA may want to consider assuming this cost.

The second type of cost – lost fixed route revenue – is difficult to estimate. There is no data on how many trips are taken by ADA paratransit eligibility individuals on the fixed route system. Based on national eligibility determinations, about 30% of ADA eligible individuals are able to sometimes use fixed route service. The other 70% are not able to use fixed route under any conditions and would therefore not be riding the fixed route service and paying fares. There are currently about 10,000 ADA eligible individuals in the RPTA area. Thirty percent would mean 3,000 individuals. Only a portion of the trips

made by the 30% of ADA individuals are on the fixed route. Assume that on average these individuals might use fixed route once per week. This would mean that about 156,000 trips per year are made by ADA eligible individuals on fixed route. If these individuals did not have to pay the \$0.60 fare for persons with disabilities, the lost revenue would be \$93,600 per year.

Potential savings would be significant. Assume about 654,527 ADA trips in 2010. Other transit agencies across the country that offer free fixed route the country have reported a 5-15% shift from paratransit to fixed route as a result of free fixed route fares for ADA riders. So, assuming a 10% shift (an average of the peer experience), this would mean 65,453 trips shifted to fixed route in 2010. Then, assuming a net operating cost of \$33.43 per trip in 2010 (\$35.93 minus \$2.50 fare), the potential operating cost savings in 2010 alone would be \$2,188,094. This cost savings would probably be realized by each community in the same percentages as shown in Table 5 below.

Table 5. Estimated Costs and Savings of Free Fixed Route Fare Program

Community	Estimated ADA Trips in 2010	Percent of ADA Trips	Share of \$40,500 First Year Cost	Share of \$516 Annual Ongoing Costs	Share of \$93,600 Lost Fixed Route Revenue	Share of Estimated Annual \$2,188,094 Savings
Chandler	24,063	3.7%	\$1,498.50	\$19.09	\$3,463	\$80,959
Gilbert	16,644	2.5%	\$1,012.50	\$12.90	\$2,340	\$54,702
Mesa	134,042	20.5%	\$8,302.50	\$105.78	\$19,188	\$448,560
Scottsdale	32,362	4.9%	\$1,984.50	\$25.28	\$4,586	\$107,217
Tempe	32,335	4.9%	\$1,984.50	\$25.28	\$4,586	\$107,217
Phoenix	362,168	55.3%	\$22,396.50	\$285.35	\$51,761	\$1,210,016
Paradise Valley	83	0.1%	\$40.50	\$0.52	\$94	\$2,188
SW Communities	24,568	3.7%	\$1,498.50	\$19.09	\$3,463	\$80,959
Glendale	27,600	4.2%	\$1,701.00	\$21.67	\$3,931	\$91,900
Peoria	552	0.1%	\$40.50	\$0.52	\$94	\$2,188
Sun Cities	110	0.1%	\$40.50	\$0.52	\$94	\$2,188
TOTALS	654,527	100%	\$40,500	\$516	\$93,600	\$2,188,094

76. What is the estimated annual cost for taxi subsidy service on a per-city basis?

The annual cost for taxi side-subsidy service in each city will depend on the parameters set by that city. A conservative estimate is that the cost of a taxi trip is about half that of a Dial-a-Ride trip. If the taxi service is a supplement to Dial-a-Ride or ADA Dial-a-Ride, it is possible to calculate and control the costs in several ways.

- Cap the number of monthly trips for each individual
- Limit eligibility
- Limit trip purpose (e.g., dialysis)
- Charge a percentage (not a set amount) of the trip cost to the user

Table 7.2 on page 7-15 of the final report gave several examples of current taxi programs in Maricopa County that indicate the kinds of costs that might result from programs with different sets of policies and rules. That table is provided again as Attachment 3.

To estimate the cost of a comprehensive city-wide Taxi Subsidy Program for each city in Maricopa County, we looked for guidance to Scottsdale which currently operates a city-wide taxi service for residents over 65 and people with disabilities. Scottsdale provides eligible people with 20 trip vouchers per month which pay 80% of a one way fare up to \$10.00 per trip. Since the trips in Scottsdale are unusually short, in estimating the cost of such a service in the other cities we have used \$16.00 as the average trip cost instead of the \$12.10 cost reported by Scottsdale. If every community implemented a program similar to that now available in Scottsdale, the costs would be as shown in Table 6 below. These numbers should be considered rough estimates since each city has unique characteristics that could affect the demand for subsidized taxi service. It would be prudent to conduct additional research before initiating a taxi program.

Table 6. ESTIMATED CITY-WIDE TAXI SUBSIDY SERVICE COSTS
(BASED ON SCOTTSDALE EXPERIENCE)

City	Population (2000 Census)	Estimated number of Taxi trips annually	Subsidy Cost including admin of 24%
Avondale	35,800	6,717	\$107,472
Buckeye	6,417	1,203	19,263
Chandler	176,338	33,084	529,345
El Mirage	7,518	1,411	22,568
Gilbert	109,936	20,625	330,014
Glendale	218,596	41,012	656,198
Goodyear	18,779	3,523	56,372
Litchfield Park	3,813	715	11,446
Mesa	397,215	74,524	1,192,390
Paradise Valley	13,629	2,557	40,913
Peoria	108,462	20,349	325,589
Phoenix	1,320,994	274,841	3,965,460
*Scottsdale	*202,744	*38,000	*460,000
Sun City	38,155	7,159	114,536
Sun City West	26,264	4,928	78,841
Surprise	30,886	5,795	92,656
Tempe	158,426	29,723	475,575
Tolleson	4,963	931	14,898
Youngtown	3,007	564	9,026

* Actual experience reported by Scottsdale for 2005-2006

If this type of program is considered too costly, various policies and rules could be applied to limit the overall service. Again, the examples in Attachment 3 give options for doing this and the likely costs for programs with various policies and limitations.

77. What is the estimated annual cost for travel training on a per-city basis?

Three types of travel training are recommended in the final report. One-on-one training is estimated to cost about \$300,000 per year. This would result in 200 individuals being trained to use fixed route service. Assuming an average annual trip rate of 210 trip per year per eligible rider (420,311 trips in 2006 divided by 2,000 regular riders), and assuming that a third of the trips by the 200 persons trained are made by fixed route rather than paratransit after training, and assuming a \$33.43 net paratransit cost, the estimated annual savings from these 200 trainings would be \$468,020 (a net savings of \$168,020 per year). The share of costs and savings by community can be calculated using the relative trip percentages in the table included to the answer to Question #75 above.

The second type of training recommended is group training. This training would be done with the proposed RPTA administrative staff and using available extraboard fixed route buses and drivers during off-peak periods. There would be some minor vehicle operating costs and costs for small gift certificates for trainees, but overall the costs would be minimal. Costs would be on the order of \$30-40,000 per year if eight group training were done in various communities. Again, if these costs were not just absorbed by the RPTA as part of administering the regional service, the costs to each community could be estimated based on the relative trip percentages in the table in Question #75 above. Savings from additional trips on fixed route would likely far outweigh these minor costs. At \$33.43 net cost per paratransit trip, the break-even would be if only 1,046 trips per year were shifted to fixed route.

The third type of recommended training is fixed route bus orientations. Again, this would be done by available RPTA public relations or customer service staff and available fixed route buses and extraboard drivers during off-peak hours. There would be marginal costs for vehicle operations to and from the orientations and fixed route bus information distributed at the orientations. Assuming one orientations per month, and a cost of \$500 per orientation, the annual cost would be on the order of \$26,000. If these costs were not just absorbed by the RPTA as part of administering the regional service, the costs to each community could be estimated based on the relative trip percentages in the table in Question #75 above. Again, savings could be expected to far outweigh costs, with the break-even being achieved if just 778 trip per year were shifted to fixed route.

78. The study recommends expanding transit options such as the taxi programs. Will regional funding for these services be researched? What is the impact, if any, on ADA ridership if these alternative types of programs cannot be continued due to funding regional ADA?

Providing additional travel options such as supplemental taxi services is viewed as a local city option. A regional framework within which local services can be consistently provided is proposed, but funding this type of service is viewed as a local choice. Similarly, reducing any existing services is a local decision. Without more specific information about the exact local taxi service (eligibility requirements, current use, fares, etc.), it is not possible to predict impacts on ADA ridership of service reductions.

79. Quality of service provided to the disabled and senior community can be addressed through methods other than Dial-a-Ride. In Scottsdale, total ridership on Dial-A-Ride dropped by 27% over the last six fiscal years as we have expanded mobility options with taxi cab vouchers, local circulator services and improved frequencies/expanded hours on our fixed route bus service. Because of the progress we have made, we are reviewing the regional paratransit program proposal very closely to ensure that its recommendations are a positive step for the mobility choices our community can afford to provide.

Taken as a comment. No response required.

80. Although Cab Voucher programs are complementary in nature, representing a small portion of the overall paratransit system, the language found in the Regional Paratransit Study suggests regionalization of service at some point. Prior to consideration of this concept with member agencies, the RPTA should continue its development/improvement of processes currently used in its administration of the East Valley Ride Choice taxi subsidy program. Specifically at issue would be fare media and the potential for fraud and abuse (use of generic coupon books vs. specified trip coupons), and lack of immediate financial control in the event of cost overruns, customer service/satisfaction, and the ability to respond quickly to the requests of social service professionals during critical situations.

Taken as a comment. No response required.

81. Can the related and supplemental services be implemented without using the in-person certification process as the source of participants? If so, how?

We would strongly recommend that a free fixed route service program not be implemented unless an in-person ADA eligibility determination process is adopted. The experience around the country, documented in a national research project ("Transit Operations for Individuals With Disabilities," TCRP Project B-1A) indicated that if free fixed route fares are offered for ADA eligible riders and there is not an in-person eligibility process, the number of ADA applications skyrockets and there is significant lost revenue on fixed route service.

Also, the success of one-on-one travel training programs has been reported to be greatly enhanced by in-person eligibility processes. Typically, it is difficult to get

individuals to come forward on their own to request one-on-one travel training. If an in-person eligibility process is used, applicants with the potential to benefit from training are identified almost every day and can be linked to travel training. The RPTA and member communities could still implement the bus orientations and group trainings without in-person eligibility, but implementing one-on-one trainings would probably not be successful without in-person eligibility.

Finally, paratransit-to-fixed-route “feeder” service is not even possible without detailed eligibility determination. In our opinion, the type of detail needed to determine if feeder service is appropriate for individual riders can only be obtained through an in-person process.

RPTA Process

82. The Resolution is planned to be approved prior to regional plan approval by local city councils. This is a deviation of prior RPTA practices. Why is the practice changing?

and

Why is a resolution proposed for implementation of the regional study? This seems to be a strong message of RPTA’s desire to move this plan forward quickly.

RPTA will not be using a resolution when this study comes before the Board for action.

83. What input is planned from the VMOCC and the FOAC?

The answers to the questions listed here will be made available to the members in late January. The answers will be formally presented to VMOCC and FOAC on February 15. The Study will be on the TMC agenda on March 5, and if needed again on April 2. These committees will be asked to consider recommending action to the RPTA Board. The Study will be on the RPTA Board agenda for information on March 20, and for action on April 17. Both VMOCC and FOAC have already had informational presentations on the Study Report. Individual briefings will continue to be available upon request throughout the process.

84. The proposal to use Proposition 400 unallocated funds to defray over \$34 million of the planned program’s costs is a major concern. The 2003 Regional Transportation Plan did not include a regionalized Dial-a-Ride system, although it did provide funding to communities (excluding Phoenix) for paratransit costs associated with supergrid service. We believe it is prudent to delay action on this proposal until the Board receives the next update to the Transit Lifecycle Program financial model. Local funds are most likely the only other true option to pay for any increased costs attributed to this plan. If so, is there, or will there be an agreed-upon formula for determining cost

allocation for each municipality, and a contingency to address any other funding shortfalls, short and long-term? The final source of these funds needs to be identified at the time of adoption of any changes to the current service delivery system. If local funds are the source for regionalization, it will be critical to go through the local review process before Board action.

The Regional Transportation Plan that was adopted in 2003 stated that “Under the plan, ADA complimentary (sic) paratransit service would be regionally funded, while Dial-a-Ride would continue to be locally funded.” Although this does not suggest regionally operated ADA, it does state that ADA costs would be funded regionally. Early in the development of the Transit Life Cycle Program policies and financial model, it was recognized that the funding allocated to ADA was not enough to fully fund ADA service as required by the plan. The adopted policy essentially provided for a regional stipend for ADA service that the cities could use, up to a maximum each year.

85. Will the committees (VMOCC and TMC) see the revised timeline before it goes to the Board for approval in March 2008?

These committees were presented with the revised timeline prior to it being presented to the Board. The revised timeline was presented to the Board on November 29. The Board extended the action date from March 20 to April 17, 2008.

86. Pg 3-7 discusses transfers from East Valley Dial-a-ride to fixed route being free of cost. The new fare policy eliminates all transfers. How will this affect recommendations in this study?

Since the new fare policy took effect, East Valley Dial-a-Ride and Surprise Dial-a-Ride are providing all-day fixed route passes to paratransit riders who have paid a paratransit fare and wish to transfer to fixed route service. Passengers transferring to a participating Dial-a-Ride from Valley Metro fixed route receive a discount of 50 cents on the Dial-a-Ride fare. This applies to ADA and non-ADA trips. RPTA feels this is in keeping with the spirit of encouraging the use of fixed route service whenever possible. Other cities are not doing this, but are requiring that an additional fare be paid.

If the study’s recommendation for free fixed route passes for ADA eligible riders is implemented, there will no longer be a need to specifically provide for transfers between paratransit and fixed route. The free fixed route bus pass, as mentioned elsewhere, would only be implemented in tandem with an in-person certification process.

87. Page 6-26 “Member Community Responsibilities and Input”. We suggest that a committee for each sub-region should be formed to go over the detailed statistical information before being brought to VMOCC. This information is large and detailed and can be very time consuming. Currently, the East Valley Partners meet monthly to go over statistical data for fixed route and EVDAR services and I see no need for this to change. Bringing all this information

instead of a less detailed summary will overrun the VMOCC meetings that already are long.

We would agree with this suggestion. The last bullet point in the “Member Community Responsibilities and Input” section of the final report, on page 6-26, suggests that, in addition to member communities participating on a regional Advisory Committee, local communities could, at their choice, also have local committees or groups to feed into the regional committee. The East Valley Partners certainly could continue to meet to review matters related to East Valley service and then the issues discussed there could be brought to the full regional Advisory Committee. Similarly, communities in other areas could either have local groups/committees or could form sub-regional groups such as the East Valley Partners to review information for their areas. We would see this additional local input as a plus in the overall monitoring of the regional paratransit service.

88. Page 6-44 “Proposed Regional Performance Standards”: It should be added that the standards should also meet the Service Efficiency and Effectiveness standards already approved.

The standards identified in the Service Effectiveness and Efficiency Study have and will continue to apply to paratransit service.

89. As has been discussed at several regional meetings, questions and uncertainties exist with the proposed implementation of the Regional Paratransit Study. While it is not possible to have all questions answered prior to undertaking such a large project, it is concerning that additional areas (impacts brought on by participating in the plan) and options have not been addressed in the study.

It is in response to this concern on the part of the members that RPTA and the consulting team embarked on this process of requesting and answering questions over the last few months. Hopefully the process has addressed these concerns. RPTA is forming an ongoing working group made up of VMOCC members to continue the process of defining and detailing incremental future steps.

Implementation

90. With regard to the Regional Paratransit Study, the service quality data that has been collected indicates that the most important areas to focus on are: 1) doing a better job of reducing the delays associated with ride times (when compared to comparable bus trips) and with transfers; and, 2) reducing confusion related to the reservation process and the hours/days of operation. These issues can likely be addressed using incremental approaches rather than implementing the full suite of recommendations. One way to do this might be for the Board to consider implementing a regional call center as a

first step, having the least amount of impact, and continue to review further milestones as more service quality and financial data become available.

This is essentially what is being proposed in Phase I. The two call centers now operating in the East Valley and for the Phoenix/PV/SW area would be combined into a single, regional call center. The actual service provision in the East Valley and in the Phoenix area would continue as is – and the existing providers may even be the service providers (depending on renegotiation and bid processes). As we have said, this really builds on the current services and gets us to a regional system with relatively little change and disruption.

Then, in the West Valley, the proposed Phase I design only takes on ADA trips in the West Valley and allows communities to continue to provide non-ADA service directly. Again, this is intended to meet ADA obligations for comparable regional service without major changes in the West Valley. As is noted in responses to previous questions, ADA riders in the West Valley would even have the option to continue to use their community DAR services as general public or senior riders since they would be eligible under both systems. The design basically gives ADA riders in the West Valley the option to call the central call center for more direct, comparable regional service, or for local service, at their discretion.

91. Page 6-62, Paragraph 4. Regarding the Contract Administrator from RPTA to be located at the call center. This does not give any quality assurance for the actual operations and maintenance of the services. At least one Contract Administrator should be located at both the Operations and Maintenance location of the dedicated provider as well as one at the call center. Paragraph 4, exactly what staff is being referred to?

As is done in Denver, Portland, and Seattle, the administrative staff is proposed to be at the call center because that is where it is easiest to monitor the functioning of the overall operation. Note, though, that there are five Contract Administrators proposed. It would be the job of these Contract Administrators to monitor the service provider operations as well as make on-street monitoring observations. As is done in other areas, these Contract Administrators would rotate between the various service providers so that they would have an understanding of all on-street operations and so that they would not tend to be associated too closely with any one service provider. Typically, Contract Administrators observe service provider pull-out and run coverage, driver trainings, vehicle maintenance, and other key functions. They also make on-street monitoring observations.

The RPTA staff referred to in the last paragraph on page 6-62 are the staff that assist in managing the East Valley service and contract. The member community staff in this paragraph refers to individuals who may now be managing and administering local services that would become part of the regional operation.

92. Page 5-19, next to the last bullet reads “Member communities are reported to be encouraging riders to apply for ADA Paratransit in order to increase access to Proposition 400 Funding”. I do not think that this is advisable and reflects negatively on the many communities who do not encourage this.

It is duly noted that this is only being done in some communities and a change will be made to the final report to indicate that “Some communities are reported...”

Attachment 1

Ridership and Cost Estimates for Phase I Regional Service in 2011 and 2012

Pages 6-54 to 6-59 of the final report detail the process used to develop ridership projections, vehicle-hour projections, fleet needs, operating costs, and capital costs for the first year of Phase I of the regional paratransit service (FY2010). This attachment describes the estimates and calculations made to arrive at projected Phase I regional paratransit service costs for years two and three (FY2011 and FY2012). The process used was similar to that used for FY2010.

Ridership Estimates

The regression analysis of recent ridership trends, detailed in Section 4.4 of the final report, was extended through FY2011 and FY2012. These regressions were then used to estimate ridership in FY2011 and FY2012 for Phase I services – ADA and non-ADA services in the East Valley, Phoenix, Paradise Valley, and the SW Communities, as well as ADA services in Glendale, Peoria, and the SCAT area.

In addition to the regression analysis, which just considered recent ridership trends and projected these through FY2012, additional inter-region travel due to changes in transfer policies were considered. As noted on pages 6-56 to 6-57 of the final report, the comparison of fixed route and DAR regional travel suggested that a more regional paratransit program would increase ADA inter-regional travel in the East Valley by 13.6% over three years, by 1.2% in the Phoenix/PV/SW area over three years, and by 31.2% in the West Valley over three years. The ridership estimates used in the final report to develop FY2010 costs included first year increases at one-third of these amounts. For FY2011, the analysis included two-third of these increases in FY2011 and full inter-regional travel in FY2012. These additional inter-regional trips were then added to the expected increase in ridership suggested by the basic regression analysis.

So, for example, the regression analysis indicated that ADA ridership in Chandler in FY2010 would be 23,027. This estimate was multiplied by 1.045 to allow for a 4.5% increase in ridership due to increased inter-regional trip-making (one-third of the 13.6% increase predicted over three years). The result was an estimated FY2011 ridership in Chandler of 24,063. In FY2011, the regression indicated that Chandler's ADA ridership would increase to 25,124. This was multiplied by 1.09 to allow for a 9% increase in travel due to more inter-regional trips (two-thirds of the expected 13.6%). The result was 27,385 estimated ADA trips in Chandler in FY2011. In FY2012, the regression analysis suggested an ADA ridership in Chandler of 27,222. This number was multiplied by 1.136 to allow for the full 13.6% increase in inter-regional travel in the third year of implementation. The resulting estimate was 30,924 ADA trips in Chandler in FY2012.

Table 1-1 on the following page shows the estimated ridership for each community/area involved in Phase I implementation for FY2010, FY2011, and FY2012. Table 1-2 then shows local and inter-regional travel in each area.

Table 1-1. Estimated Phase I Regional Paratransit Ridership in FY2010, FY2011, and FY2012

Community	FY 2010			FY 2011			FY 2012		
	ADA	Non-ADA	Totals	ADA	Non-ADA	Totals	ADA	Non-ADA	Totals
East Valley:									
Chandler	24,063	4,545	28,608	27,385	4,545	31,930	30,924	4,545	35,469
Gilbert	16,644	3,098	19,742	19,348	3,098	22,446	22,235	3,098	25,333
Mesa	134,042	8,120	142,162	154,565	8,120	162,685	176,689	8,120	184,809
Scottsdale	32,362	15,226	47,588	36,579	15,226	51,805	41,066	15,226	56,292
Tempe	32,335	13,064	45,399	36,556	13,064	49,620	41,047	13,064	54,111
Sub-Total East Valley	239,446	44,053	283,499	274,434	44,053	318,487	311,962	44,053	356,015
Phoenix/PV/SW:									
Phoenix	362,168	103,981	466,149	389,713	103,981	493,694	417,465	103,981	521,446
Paradise Valley	83	0	83	84	0	84	84	0	84
SW Communities	24,568	0	24,568	29,071	0	29,071	33,608	0	33,608
Sub-Total Phoenix/PV/SW	386,819	103,981	490,800	418,867	103,981	522,848	451,157	103,981	555,138
Glendale ADA	27,600	0	27,600	30,200	0	30,200	32,800	0	32,800
Peoria ADA	552	0	552	604	0	604	656	0	656
SCAT ADA	110	0	110	120.8	0	121	131.2	0	131
Total Ridership Phase I	654,528	148,034	802,562	724,226	148,034	872,260	796,705	148,034	944,739

Table 1-2. Local and Inter-Regional Travel Estimates by Community, FY2010, FY2011, and FY2012

Community	FY 2010		FY 2011		FY 2012	
	Local	Regional	Local	Regional	Local	Regional
East Valley:						
Chandler	27,572	1,036	29,669	2,261	31,767	3,702
Gilbert	19,025	717	20,848	1,598	22,671	2,662
Mesa	136,390	5,772	149,923	12,762	163,456	21,353
Scottsdale	46,194	1,394	48,785	3,020	51,376	4,916
Tempe	44,007	1,392	46,602	3,018	49,197	4,914
Sub-Total East Valley	273,188	10,311	295,827	22,660	318,467	37,548
Phoenix/PV/SW:						
Phoenix	464,706	1,443	490,601	3,093	516,496	4,950
Paradise Valley	83	0	83	1	83	1
SW Communities	24,470	98	28,840	231	33,209	399
Sub-Total Phoenix/PV/SW	489,259	1,541	519,524	3,324	549,788	5,350
Glendale ADA	25,000	2,600	25,000	5,200	25,000	7,800
Peoria ADA	500	52	500	104	500	156
SCAT ADA	100	10	100	21	100	31

Note that in the East Valley and Phoenix, the regression analysis showed a recent trend of decreased non-ADA ridership. In fact, by FY2012, the straight analysis based on trends from 2001 to 2007 suggested that non-ADA ridership might go to zero by FY2012. Since the level of non-ADA ridership is a choice of each community, and since we did not want to assume that it would continue to be reduced through FY2012, the non-ADA ridership estimates continue FY2007 non-ADA ridership levels through FY2012.

Also, the regression analysis showed a recent leveling off of ADA trips in Glendale. In fact, ADA ridership decreased slightly between FY2005 and FY2006. It was felt that this was due to introduction of GUS bus services, travel training, and other efforts. Rather than continue to show a decrease in ADA ridership to FY2012, it was decided to hold ADA ridership constant through FY2012 at 25,000 trips (similar to the FY2006 level of 24,270).

It should also be noted that ADA ridership in Peoria and the SCAT area fluctuated in recent years – some years increasing and some years decreasing. It was decided to hold ADA ridership in these areas constant through FY2012 at levels similar to those in FY2006.

Vehicle-Revenue-Hours

The next step in the process was to use ridership estimates and productivity estimates to develop estimates of the number of vehicle-revenue-hours that would be needed to provide Phase I service in FY2010, FY2011, and FY2012.

To do this, it was assumed that current service productivities would continue for most trips, but that the new inter-regional trips would be provided at a lower productivity (to take into account the longer trip lengths). As detailed on pages 6-58 to 6-59 of the final report, a productivity of 1.0 was used for additional inter-regional trips in the East Valley and the Phoenix/PV/SW areas. This was significantly lower than the 1.4 to 1.7 productivities in these areas for current service. In the West Valley, a productivity of 2.0 was used for additional inter-regional trips, which again is lower than the 2.6 to 3.5 productivities reported by Glendale, Peoria and SCAT for current services.

The formula used to estimate vehicle-revenue-hours for FY2010 was as follows:

Revenue-Hours (FY2010) = (Inter-regional Trips 2010/Inter-Regional Productivity) + ((Intra-Regional Trips 2010/IntraRegional Trips 2006) X 2006 Revenue-Hours).

The first part of the formula simply divided the expected new inter-regional trips by the estimated inter-regional productivity to get the number of estimated revenue-hours for the new inter-regional trips. The second part of the formula took the ratio of trips in 2010 to those in 2006 and multiplied it by the number of revenue-hours reported in 2006. Basically this applied the 2006 productivity to the estimated intra-regional trips in

2010. Note that the term “intra-regional trips” in this formula means all trips in 2010 except the new, extra inter-regional trips due to changes in transfer policies.

So, for example, from Table 1-2, the estimated new inter-regional trips in the East Valley in FY2010 are 10,311. This is divided by the 1.0 inter-regional trip productivity to get 10,311 revenue-hours needed in 2010 for these trips. Then, the other trips in East Valley in 2010 (shown as the “Local” trips in Table 1-2 are divided by the 2006 trips in the East Valley and then multiplied by the 2006 revenue-hours in the East Valley in 2006. The actual numbers are (273,188/205,354) X 121,607. This indicated that 161,777 revenue-hours will be needed to provide the rest of the trips in the East Valley in 2010. Together, the total revenue-hours for the East Valley then come to 172,088.

Similar formulas were used to generate revenue-hours needed in each area in FY2011 and FY2012. Table 1-3 below provides the results of this part of the analysis.

Table 1-3. Estimated Revenue-Hours for Phase I Regional Paratransit, FY2010 to FY2012

Community/Service	FY 2006 Rev-Hrs	FY 2010 Rev-Hrs	FY 2011 Rev-Hrs	FY2012 Rev-Hrs
East Valley (ADA & Non-ADA)	121,607	172,088	197,844	226,139
Phoenic/PV/SW (ADA & Non-ADA)	283,516	369,594	394,144	418,936
Glendale ADA	8,582	10,140	11,440	12,740
Peoria ADA	120	154	180	206
SCAT ADA	22	39	44	49
Sub-Totals West Valley	8,724	10,333	11,664	12,995
TOTALS	413,847	552,015	603,652	658,070

Fleet Needs

The next step was to use the predicted revenue-hours to develop fleet needs. This was done by taking the ratios of revenue-hours in each year compared to 2006 revenue-hours and then multiplying by the number of vehicles in the fleet in 2006. Basically, this increased the 2006 fleet proportional to the increases in vehicle-hours each year. The formula for FY2010 can be expressed as:

$$2010 \text{ Vehicles} = (2010 \text{ Rev-Hrs}/2006 \text{ Rev-Hrs}) \times 2006 \text{ Vehicles}$$

So, for example, a fleet of 63 vehicles was needed in the East Valley in 2006 to provide 121,607 revenue-hours of service. The estimate for 2010 is 172,088 revenue-hours. The 2010 East Valley fleet is then estimated as (172,088/121,607) X 63, or 89 vehicles.

Similar formulas were used for the other areas and for FY2011 and FY2012. The resulting fleet estimates are shown in Table 1-4 below. Note that in Peoria and the SCAT area, the number of hours only suggests about one-tenth of a vehicle, but a full vehicle is added anyway (in the Peoria row) in FY2011 and FY2012) to be conservative.

Table 1-4. Phase I Regional Paratransit Fleet Estimates, FY2010-FY2012

Community/Service	FY 2006 Vehicles	FY 2010 Vehicles	FY 2011 Vehicles	FY2012 Vehicles
East Valley (ADA & Non-ADA)	63	89	102	117
Phoenic/PV/SW (ADA & Non-ADA)	120	156	167	177
Glendale ADA	6	7	8	9
Peoria ADA	0	1	1	1
SCAT ADA	0	0	0	0
TOTALS	189	253	278	304

Capital Costs

The fleet estimates were then used to develop a vehicle replacement and expansion plan and capital funding estimates. This information is provided in Table 1-5 below.

Table 1-5. Phase I Vehicle Replacement and Expansion and Funding, FY2010 to FY2012

	FY2010	FY2011	FY2012	FY2013	FY2014
Total Fleet Size	253	278	304	332	363
Replacement Vehicles	49	49	49	49	49
Expansion Vehicles	8	25	26	28	31
Total Capital Cost	\$ 3,420,000	\$ 4,573,200	\$ 4,774,050	\$ 5,048,399	\$ 5,402,442
Federal Share (80%)	\$ 2,736,000	\$ 3,658,560	\$ 3,819,240	\$ 4,038,719	\$ 4,321,954
Local Share (20%)	\$ 684,000	\$ 914,640	\$ 954,810	\$ 1,009,680	\$ 1,080,488

In year one of the regional service (FY2010), it is assumed that a fleet of 253 vehicles will be operated by the various participating communities. Assuming a five year useful life for these vehicles, 20% of this inherited fleet (or 49 vehicles per year) will need to be replaced from FY2010 through FY2014. The fleet estimates developed in Table 1-4 for each year of the program are then plugged in as the total fleet sizes to determine the number of expansion vehicles needed each year. Note that only 8 new expansion vehicles are needed in the first year (for the West Valley) since the other areas will have existing fleets that can be simply transferred for regional operation. Note that this therefore does not require Glendale to make vehicles available from its existing fleet in 2010. It is felt that until the real impacts of rider choices to either use the regional ADA service or continue to use the existing West Valley operations is known, it is best to leave all current vehicles with the West Valley systems.

For the total fleet size in FY2013 and FY2014, the rate of fleet increase from FY2011 to FY2012 is applied.

Total capital cost estimates assume per vehicle costs of \$60,000 in FY2010. This cost is increased 3% per year through FY2014. Federal share of this total cost is assumed to be 80% and the local share assumed to be 20%.

Operating Costs

Operating costs for FY2010 through FY2012 were then developed. This included estimated call center costs as well as service provider costs. Call center costs for FY2011 and FY2012 were developed by simply multiplying the 2010 estimated costs by the ratio of 2011 and 2012 trips to the 2010 trips and then allowing for an inflation factor of 3% each year. So, for example, the 2010 call center costs were estimated at \$2,541,852. This would serve an estimated 802,562 trips. In FY2011, the ridership is expected to rise to 872,260. The estimated FY2011 call center costs are therefore $(872,260/802,562) \times \$2,541,852 \times 1.03$, or \$2,845,475. Note that, as explained on page 6-65 of the final report, the call center cost estimate for 2010 included all facility costs, overhead costs, telephone costs, computer hardware and software costs, as well as all staffing costs. This was a full cost estimate using call center budget information from similar-sized systems. Also note that the resulting FY2011 and FY2012 estimates are probably conservative since there probably some fixed costs that would not increase due to increased trip-making and call volume.

Table 1-6. Estimated Operating Costs, FY2010 to FY2012

	FY 2010	FY 2011	FY 2012
Regional Call Center	\$ 2,541,852	\$ 2,845,475	\$ 3,174,373
East Valley Operation			
Rev-Hrs	172,088	197,844	226,139
Cost/Hr.	\$ 52.17	\$ 53.73	\$ 55.34
Cost	\$ 8,976,971	\$ 10,630,148	\$ 12,514,950
Phoenix/PV/SW Operation			
Rev-Hrs	369,594	394,144	418,936
Cost/Hr.	\$ 52.17	\$ 53.73	\$ 55.34
Cost	\$ 19,279,871	\$ 21,177,337	\$ 23,184,693
West Valley Operation			
Rev-Hrs	10,333	11,664	12,995
Cost/Hr	\$ 56.28	\$ 57.97	\$ 59.71
Cost	\$ 581,541	\$ 676,143	\$ 775,898
Sub-Total - Operating Cost	\$ 28,838,383	\$ 32,483,629	\$ 36,475,541
TOTAL COSTS	\$ 31,380,235	\$ 35,329,105	\$ 39,649,914

Service provider/operations costs were then estimated by multiplying the expected number of revenue-hours in each area by the expected per-hour service provider operating rate in each area. Note that, as explained on pages 6-65 and 6-66 of the final report, the per hour rates were developed based on actual bid experiences of similar-sized peer systems, with costs then increased 3% per year to 2010. The rates estimated in the final report for 2010 are then increased another 3% per year for FY2011 and FY2012.

The call center costs, service provider operating costs, and capital costs from Tables 1-5 and 1-6 above were then plugged into to spreadsheets shown in response to Question #16 to develop estimates of costs per community. The same method of allocation explained on pages 6-75 to 6-77 of the final report was used. This method allocated costs to communities based on the number of trips provided to each community, adjusted by the different productivities in each area. By applying a productivity adjustment factor to the trips in each community, the relative efficiency of service in each area was taken into consideration. This then accounted for different trip lengths in each area as well as different patterns of grouping trips in each area.

Administrative Costs

An estimate of RPTA administrative costs for FY2010 is provided on page 6-68 of the final report. In the “Summary of Costs and Proposed Funding” section on pages 6-71 and 6-72, the FY2010 costs are then increased by 3% per year. As noted in the response to Question #16 above, these costs include staff salaries, fringe benefits, and related overhead costs.

Attachment 2

**Ridership and Cost Estimates for Regional Service in 2010
Including Surprise non-ADA Service**

Ridership and Cost Estimates for Regional Service in 2010 Including Surprise non-ADA Service

	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
Est. FY10 Operating Cost						\$ 2,626,504	\$ 29,622,194	\$ 720,000	\$ 32,968,698
Phoenix/Central	490,800	59.1832%	1.4400	1.1049	64.5285%	\$ 1,694,844	\$ 19,114,765	\$ 464,605	\$ 21,274,215
Phoenix	466,149	56.2107%	1.4400	1.1049	61.3771%	\$ 1,612,073	\$ 18,181,256	\$ 441,915	\$ 20,235,244
SW Communities	24,568	2.9625%	1.4400	1.1049	3.2348%	\$ 84,963	\$ 958,228	\$ 23,291	\$ 1,066,482
Paradise Valley	83	0.0100%	1.4400	1.1049	0.0109%	\$ 287	\$ 3,237	\$ 79	\$ 3,603
Subtotals	490,800	59.1832%	1.4400	1.1049	64.6229%	1,697,323	19,142,721	465,285	21,305,329
East Valley	283,499	34.1858%	1.7734	0.8972	30.2660%	\$ 794,937	\$ 8,965,442	\$ 217,915	\$ 9,978,294
Chandler	28,608	3.4497%	1.6499	0.9644	3.2939%	\$ 86,516	\$ 975,740	\$ 23,716	\$ 1,085,972
Gilbert	19,742	2.3806%	1.4488	1.0982	2.5886%	\$ 67,990	\$ 766,808	\$ 18,638	\$ 853,437
Mesa	142,162	17.1426%	1.9254	0.8264	14.0265%	\$ 368,407	\$ 4,154,959	\$ 100,991	\$ 4,624,356
Scottsdale	47,588	5.7384%	1.7849	0.8914	5.0649%	\$ 133,030	\$ 1,500,333	\$ 36,467	\$ 1,669,830
Tempe, incl Guadalupe	45,399	5.4744%	1.6162	0.9845	5.3363%	\$ 140,157	\$ 1,580,721	\$ 38,421	\$ 1,759,300
Subtotal	283,499	34.1858%	1.7734	0.8972	30.3103%	796,100	8,978,561	218,234	9,992,895
Glendale	27,600	3.3282%	2.0000	0.7956	2.6127%	\$ 68,623	\$ 773,938	\$ 18,811	\$ 861,372
Peoria	552	0.0666%	2.0000	0.7956	0.0523%	\$ 1,372	\$ 15,479	\$ 376	\$ 17,227
Sun City	110	0.0133%	2.0000	0.7956	0.0104%	\$ 273	\$ 3,085	\$ 75	\$ 3,433
Surprise	26,728	3.2230%	2.0000	0.7956	2.5301%	\$ 66,454	\$ 749,486	\$ 18,217	\$ 834,157
TOTALS	829,289	96.7770%	1.5911	NA	100.0000%	2,626,504	29,622,194	720,000	32,968,698

(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.

(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

Attachment 3

Examples of Existing Taxi Subsidy programs in Maricopa County Showing Costs and Service Policies

SELECTED TAXI PROGRAMS IN MARICOPA COUNTY FY 2006

	Area Served	Eligibility Guidelines	Fare Media	% of Subsidy	Average Subsidy Per Trip Average User Cost	Program Cost	Trips provided	Taxi Providers
Phoenix Employment Program Initiated in 1984 contracted to LIFE	Phoenix	Disability prevents use of Transit	Preprinted Vouchers Usually 42 per month	75% of taxi fare up to \$15.00 +15% gratuity	\$12.30 subsidy per trip \$3.90 user cost	\$62,021 including 21% admin	3,760 trips 22 people	Open to all Taxi Companies- 4 companies used
Phoenix Dialysis Program Initiated in 1999 contracted to LIFE	Phoenix	Dialysis Trips	Preprinted Vouchers Usually 27 per month	75% of taxi fare up to \$15.00 +15% gratuity	\$10.67 subsidy per trip \$3.47 user cost	\$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	\$11.87 subsidy per trip \$2.97 user cost	\$370,000 + \$80,000 admin+ \$10,000 supplies	38,000 trips	Open to all Taxi Companies- 3 companies used
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	\$13.23 subsidy per trip \$4.13 user cost	\$27,912 including 29% admin	877 trips 29 people	Open to all Taxi companies- 3 companies used
Mesa Coupons for Cabs, from 2002 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	\$15.68 subsidy per trip \$3.08 user cost	\$120,160 38% admin	679 people registered, 7663 trips	Open to all taxi companies

