



SUMMARY

The Phoenix region is within Maricopa County, Arizona. Maricopa County is located in south central Arizona, has a population of 3,817,117, and covers 9,200 square miles. The Phoenix region is comprised of two urbanized areas, Phoenix-Mesa and Avondale-Goodyear. The region contains multiple jurisdictions involved in the facilitation of transit services. The region contains entities that operate and fund service and entities that purchase from the operating agencies. These transit services operated under a unified brand name, Valley Metro. The following list provides the cooperative/coordinated public transportation activities within the Phoenix region:

- In 1993, the transit providers voted on a unifying name for transit within the region, Valley Metro. This set into motion unifying regional transportation decision-making and coordination as well as unifying the passenger fare structure.
- The transit providers offering the majority of fixed route bus service within the region are Regional Public Transportation Authority (RPTA), City of Phoenix, and Tempe. Jurisdictions enter into intergovernmental agreements with transit providers for service. Transit providers buy and sell service by revenue mile in order to compensate for cross-jurisdictional issues.

FINDINGS

Service Overview

Within Maricopa County, several jurisdictions are involved in the facilitation of transit services. The modes of transit available in the region include light rail, fixed route bus, ADA complementary paratransit, local demand response transit services, and vanpool. Fixed route bus includes circulator, local, bus rapid transit, express, and park and ride services. Three primary agencies that contract for fixed route transit service in the Phoenix area are the RPTA, the City of Phoenix, and the City of Tempe. The standard service delivery method within the region is contracting to third-party transportation providers. RPTA, City of Phoenix, and City of Tempe contract with private companies to operate fixed route for the region. Several additional cities fund transit services by contracting through RPTA, City of Phoenix, or City of Tempe. Table 1 provides the arrangement of entities contracting for service and the entities funding service. Figure 1 illustrates the urbanized areas and cities that fall within Maricopa County.

Table 1. Entities Funding and Contracting for Transit Service

Entities Funding Transit Service	Entities Contracting for Fixed Route Transit Service		
	<i>RPTA</i>	<i>Phoenix</i>	<i>Tempe</i>
RPTA	×	×	×
City of Phoenix	×	×	×
City of Tempe	×	×	×
City of Mesa	×		×
City of Glendale*		×	
City of Chandler	×		×
City of Peoria		×	
City of Scottsdale*	×	×	×
Town of Buckeye	×		
City of Avondale	×	×	
City of Goodyear		×	
City of Surprise	×		
Town of Gilbert	×		
Litchfield Park		×	
Tolleson	×	×	

*Glendale and Scottsdale directly operate or independently contract for local service.

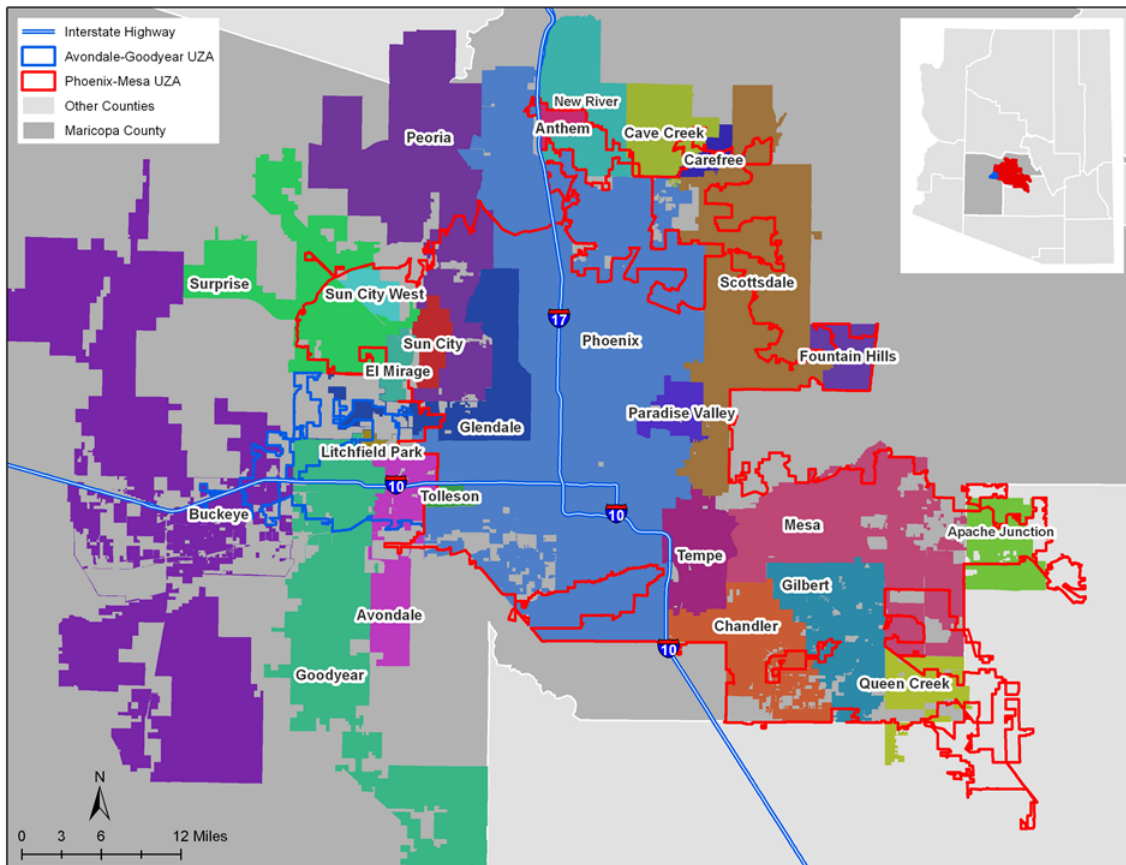


Figure 1. Urbanized Areas and Cities in Maricopa County

History and Valley Metro Buy-in

The RPTA was formed in 1985 as the result of Proposition 300 in which Phoenix-area voters approved a one-half percent sales tax increase for expansion of the local freeway system and expansion of mass transit. The RPTA was then chartered under the laws of the state of Arizona. In the late 1980s, the region expressed interest in a regional transit provider and rail service. The 1989 Valtrans proposal was advanced by RPTA and became a ballot proposition. The ballot proposition included regional bus and automated passenger rail components. The proposal was defeated at the polls because of concerns about noise, cost, and overall effectiveness.

In the 1980s and early 1990s, the region had a fragmented transit system, with the majority of transit service provided by City of Phoenix (Phoenix Transit System). The cities of Mesa and Scottsdale implemented their own services starting in 1990. The jurisdictions in the county wanted more transit services for their respective cities. Many purchased transportation service from the Phoenix Transit System; however, the municipalities preferred not to use the Phoenix Transit System brand within their jurisdiction. The region's municipalities worked with RPTA to create a regional identity. From these efforts, Valley Metro was created. City of Phoenix and the surrounding municipalities agreed to the regional branding of the vehicles. Valley Metro did not begin operations as an integrated regional transit service, under its own brand identity, until 1993. Political will of the municipalities played a large role in the successful implementation of the Valley Metro brand. Several of the municipalities were eager to have a regional system and knew that the City of Phoenix needed to be involved in the conversations with RPTA in the creation of a new identity.



In 1993, the Valley Metro board adopted the name Valley Metro as the identity for the regional transit system in the Phoenix metropolitan area. Under the Valley Metro brand, local governments joined to brand the valley-wide transit system that the public sees. The Valley Metro Board member agencies include Avondale, Buckeye, Chandler, El Mirage, Gilbert, Glendale, Goodyear, Maricopa County, Mesa, Peoria, Phoenix, Scottsdale, Surprise, Tempe, Tolleson and Wickenburg.

Valley Metro in the 21st Century

In November 2004, voters approved the Regional Transportation Plan ("Proposition 400") and a continuation of the regional sales tax including a larger share allocated to transit. The sales tax funds regional bus service, bus rapid transit, and light rail and other transit enhancements.

RPTA is the fiscal agent for Proposition 400 transit revenues. In addition, many of the cities within the urbanized area have a local option sales tax for local transit services. The following list provides the sales tax revenues approved by each of the cities:

- City of Tempe - 0.5 percent³
- City of Phoenix - 0.4 percent
- City of Glendale - 0.5 percent
- City of Mesa - 0.5 percent (Quality of Life tax – a portion is used for transit)
- City of Peoria - 0.3 percent (transportation tax – a portion is used for transit)
- City of Scottsdale - 0.2 percent (transportation tax up to 50 percent can be used for transit)

³ http://www.mag.maricopa.gov/pdf/cms.resource/RTP_2010-Annual-Report_Final_v15-WEB.pdf

In September 2007, the Valley Metro Board adopted the mission, vision and goals as a part of the Valley Metro strategic plan:

- Mission: At RPTA we develop and deliver an integrated regional transit system with excellence, in collaboration with member agencies and through public and private partnerships. In doing so, we improve the quality of life and the environment, and support economic development.
- Vision: Enable people in Maricopa County to travel with ease using safe, accessible, efficient, dependable, and integrated public transportation services.
- Goals:
 - Deliver cost effective transit services
 - Deliver on Proposition 400 projects and assist with city transit projects
 - Integrate transit services across the region
 - Increase transit visibility (marketing, customer satisfaction, public-private partnerships)
 - Hire/retain and develop top talent at every level
 - Contribute to an enhanced quality of life in the region (air quality, congestion, services)

In November 2007, the Board adopted the Strategic Plan Resolution 2007-04, which provides the chief executive officer, staff, member agency representatives, business, media and the public with knowledge of the Board's intent to create a single regional transit agency for all modes of transit.

Demographics

For comparative purposes, TTI gathered key demographic characteristics for comparison of Maricopa County to Fort Bend County, as summarized in Table 2.

Table 2. Maricopa County and Arizona Quick Facts

QuickFacts	Maricopa County	Fort Bend County
Population, 2011 estimate	3,880,244	606,953
Population, 2010	3,817,117	585,375
Persons 65 years and over, percent, 2011	12.5%	7.7%
White persons, percent, 2011 (a)	85.4%	58.3%
Black persons, percent, 2011 (a)	5.4%	21.5%
American Indian and Alaska Native persons, percent, 2011 (a)	2.7%	0.6%
Asian persons, percent, 2011 (a)	3.7%	17.5%
Native Hawaiian and Other Pacific Islander persons, percent, 2011 (a)	0.3%	0.1%
Persons reporting two or more races, percent, 2011	2.5%	1.9%
Persons of Hispanic or Latino Origin, percent, 2011 (b)	30.0%	24.2%
White persons not Hispanic, percent, 2011	58.3%	36.1%
Foreign born persons, percent, 2006-2010	15.9%	24.5%
Language other than English spoken at home, pct age 5+, 2006-2010	26.5%	37.0%
Veterans, 2006-2010	282,952	25,352
Mean travel time to work (minutes), workers age 16+, 2006-2010	25.7	30.6
Housing units in multi-unit structures, percent, 2006-2010	25.1%	10.2%
Median household income 2006-2010	\$55,054	\$79,845
Persons below poverty level, percent, 2006-2010	13.9%	8.0%

(a) Includes persons reporting only one race.

(b) Hispanics may be of any race, so also are included in applicable race categories.

Source: US Census Bureau State & County QuickFacts

Metropolitan Planning Organization (MPO)

The regional MPO in the Phoenix metropolitan region is the Maricopa Association of Governments (MAG). MAG consists of 25 member agencies, which include the cities and jurisdictions within the area, three Indian Communities, representatives of the Arizona Department of Transportation, and Maricopa County. The MPO policy-making body is called the Regional Council. The Regional Council consists of elected officials from each of the 25 member agencies. MAG consists of several committees that provide policy recommendations for specific topic areas. The transit committee made up of representatives of MAG member agencies and transit providers in the region. The MAG transit committee is responsible for programming federal transit funds and reviewing and providing recommendations on regional transit studies.

Valley Metro Service Characteristics

Valley Metro services include:

- Local, LINK, Express and RAPID commuter bus service
- METRO light rail
- Neighborhood circulators
- Dial-a-Ride
- Vanpool service
- Online carpool matching system
- Assistance to local businesses to help them meet the Maricopa County trip reduction goals through alternative modes of transportation (bus, carpool, vanpool, bike, telework, etc.)

Valley Metro Rail provides light rail transit that operates between the cities of Phoenix, Tempe, and Mesa. There are currently five planned extensions: Central Mesa Light Rail Extension, Phoenix West, Northwest Light Rail Extension into northern Phoenix, western Phoenix and Glendale, south into Tempe (now revised to become the Tempe Modern Streetcar).

Within the region, there are two primary demand response transit providers: City of Phoenix and East Valley Dial-A-Ride. East Valley Dial-A-Ride provides demand response transit service to Tempe, Scottsdale, Chandler, Gilbert, and Mesa. Additional dial-a-ride services in the region include the following: City of El Mirage, Southwest Valley ADA, Paradise Valley ADA, City of Peoria, City of Glendale, and City of Surprise.¹

Table 3 provides the service data for all transit services (bus, rail, and demand response) reported to the National Transit Database (NTD) in 2010 for the Phoenix area.

Table 3. 2010 National Transit Database Modal Characteristics

Agency	Operating Expense	Passenger Trips	Revenue Miles	Revenue Hours
City of Phoenix	\$174,737,452	37,700,632	22,993,529	1,810,853
RPTA (EVDAR)	\$62,555,164	7,747,543	8,332,235	588,830
City of Tempe	\$38,746,996	8,877,964	6,701,356	564,795
City of Glendale	\$3,348,078	210,852	530,854	42,281
City of Scottsdale	\$2,591,676	651,532	413,272	82,370
Surprise Dial-A-Ride	\$602,585	22,310	83,861	8,561

Source: NTD 2010

¹ Short Range Transit Plan and Valley Metro Website

Intergovernmental Agreements (IGAs) for Service

Intergovernmental agreements are structured similarly throughout the region. Each jurisdiction purchasing service pays for the same expenditures (operations expenses, depreciation of facilities and vehicles – does not include park and rides and transfer centers). These are included in a per mile cost. The per mile cost is passed onto those entities funding transportation service for their respective jurisdictions. The rates depend on the negotiated contract rate with the third-party operator. The local and express routes have different operational costs because of the types of service operated. Table 4 provides example contract rates.

Table 4. Example Contract Rate Calculation Between RPTA and Veolia

	RPTA			Total
	Veolia Local	Veolia Express	Valutrans	
Direct costs				
Contractor costs	\$24,635,907	\$2,737,323	\$1,479,653	\$28,852,883
Fuel	\$2,491,811	\$276,868	\$316,599	\$3,085,278
Insurance	\$41,056	\$4,562	\$8,329	\$53,947
Support Costs				
O&M facilities maintenance	\$1,840,275	\$204,475	\$40,665	\$2,085,415
O&M facilities security	\$89,875	\$9,986	\$0	\$99,861
Fare collection costs	\$77,760	\$8,640	\$13,600	\$100,000
Fare collection system	\$454,505	\$47,710	\$14,327	\$516,542
Scheduling	\$143,909	\$15,106	\$4,536	\$163,551
Operations Control Center	\$200,030	\$20,998	\$6,306	\$227,334
Vehicle Management System	\$4,100	\$430	\$129	\$4,659
VMS costs	\$96,186	\$0	\$19,531	\$115,717
Agency staff - contract oversight	\$569,731	\$63,303	\$29,493	\$662,527
Hastus - software maintenance	\$102,031	\$10,710	\$3,216	\$115,957
VMS - software maintenance	\$31,095	\$3,264	\$980	\$35,339
Depreciation (local share only, no federal)				
Fleet	\$791,900	\$83,100	\$25,000	\$900,000
Facilities	\$263,448	\$27,655	\$0	\$291,103
Credits				
Preventive maintenance	-\$494,875	-\$51,948	\$0	-\$546,823
Alt fuel tax credit	\$0	\$0	\$0	\$0
Total Costs	\$31,833,619	\$3,514,130	\$1,962,364	\$37,310,113
Total Credits	-\$494,875	-\$51,948	\$0	-\$546,823
Revenue Miles	5,664,941	594,662	178,577	6,438,180
Total cost per mile	\$5.6194	\$5.9095	\$10.9889	\$5.7951
Credits per mile	-\$0.0874	-\$0.0874	\$0.0000	-\$0.0849

The entities sponsoring transit service are responsible for funding the revenue miles operated in their jurisdiction unless such funding is provided by the RPTA through Public Transportation Funds derived from Proposition 400. If an entity wants a transit route crossing multiple jurisdictions, but the neighboring jurisdictions do not want the service, the sponsoring agency would be responsible for funding the entire route.

The operating agencies (Phoenix, Tempe, and RPTA) incur the cost of operations and the other(s) sponsoring agencies reimburse the operating agency monthly. The operating agencies (Phoenix, Tempe, and RPTA) report the operating statistics to the NTD. Entities sponsoring services share facility and vehicle costs based upon revenue miles operated within the jurisdiction. This includes vehicles and operations and maintenance facilities (does not include bus stops or park-and-ride locations). Vehicle depreciation rates depend on the type of bus route (local or express route due to different vehicle types).

Fares and Transfers

RPTA sets the fares for the region's transit service. The RPTA Board of Directors and City of Phoenix City Council set and approve fare changes. The fare structure is shared throughout the region. Table 5 provides the regional fare structure for regular local and express service.

Table 5. Fare Structure

Local Full Fare	
1-Ride	\$1.75
All-day pass	\$3.50
All-day pass (on-board bus)	\$5.25
3-day pass	\$10.50
7-day pass	\$17.50
31-day pass	\$55.00
Express/RAPID Fare	
1-Ride	\$2.75
All-day pass	\$5.50
All-day pass (on-board bus)	\$7.25
31-day pass	\$85.00
Local Reduced Fare	
1-Ride	\$0.85
All-day pass	\$1.75
All-day pass (on-board bus)	\$2.60
3-day pass	\$5.25
7-day pass	\$8.75
31-day pass	\$27.50
Persons with a disability, seniors age 65 and older, Medicare cardholders and youths ages 6 through 18, qualify for reduced fares and youths ages 6 through 18, qualify for reduced fares on local bus and light rail. Passengers must have valid proof of eligibility to use reduced fares.	

Source: http://www.valleymetro.org/paying_your_fare/fare_options

There are no free transfers from one service to another or from one route to another route unless one purchases an all day pass. Each time a passenger boards a bus, the passenger pays a fare. The City of Phoenix handles all of the fare media transactions and transit operators collect cash fares. City of Phoenix allocates fare revenue based on boarding locations. The transit vehicles are equipped with sophisticated fare boxes able to allocate fare revenue correctly to the multiple sponsors of the service.

Fleet

Table 6 provides an overview of the region transit fleets owned by RPTA, City of Phoenix, and City of Tempe.

Table 6. Agency Vehicles

Agency	Mode Code	Vehicle Length (ft)	Total
RPTA	Demand Response	22	63
	Bus	22	4
		40	159
		60	10
		63	10
RPTA Total			246
City of Phoenix	Demand Response	21	142
		25	43
	Bus	26	42
		30	12
		40	381
		45	56
		60	64
City of Phoenix Total			740
City of Tempe	Bus	24	43
		30	43
		35	36
		40	58
		45	8
City of Tempe Total			188

Source: NTD 2010

Facilities

Maintenance and operations facilities are owned by the operating agencies – RPTA, City of Phoenix, and City of Tempe. Maintenance and operations facility depreciation and maintenance is included in the per mile cost for each of the sponsoring agencies. Agencies do share maintenance and operations facilities.

The entity retaining ownership of bus stops and park-and-ride lots are responsible for maintaining the facility. Costs are not shared for these types of facilities. The entity that retains ownership is also responsible for legal liabilities.

Service Coordination

To coordinate transit services, RPTA developed a process for service creation and implementation. The following list provides the general process for service implementation:

- A jurisdiction goes to RPTA planners with an idea or demonstrated need for a new route.
- RPTA planners determine what the cost will be and which operating agency can best operate the proposed service.
- If the proposed service involves multiple jurisdictions, RPTA must work with all of the jurisdictions involved in the service

In some instances, RPTA acts as a broker. For example, if Chandler wants a new route or to increase service, RPTA determines who best to operate (RPTA, Tempe, or Phoenix) then Chandler sends funds through RPTA, to the operating agency. The operating agency uses the funds to purchase service through their contractor. Sometimes existing routes may be changed from one operating agency to another for more efficient operation – this is done by RPTA and approved through the board of directors.

The amount of tax revenue each entity collects and its share of Proposition 400 revenues influences the level of service for each sponsored route. The level of service affects seamless regional service. For example, when a route crosses multiple jurisdictions, one of the jurisdictions may only have funding to pay for 30-minute headways; whereas a neighboring jurisdiction along the route may want 15-minute headways. Entities pay for the desired level of service, but this leads to more trips taken along a certain leg (within the jurisdiction wanting shorter headways) of a particular route. This leads to buses turning around at the edge of particular jurisdictions. The jurisdictions that typically fund higher levels of service are Phoenix, Tempe, and Glendale.

The Strategic Planning initiatives in 2007 were successful in getting entities on board for regional consolidation. Tempe will consolidate its fixed route bus operations with RPTA – RPTA will be the operator and expected savings are around \$1million annually. RPTA and METRO (the operator of light rail service) combined its staff and share a single CEO effective March 1, 2012.

Promotion and Public Information

RPTA receives additional funding revenue from Proposition 400 funds to support regional planning and transit initiatives. Because of this, RPTA is responsible for promotion and public information of services. The following list provides a list of RPTA's responsibilities:

- RPTA maintains and funds the one call/one click program <http://www.valleymetro.org/>
- RPTA is responsible for the design and cost of the vehicle branding
- RPTA is responsible for regional transit marketing activities