

Fort Bend to Downtown Houston Seamless Regional Transit

An Overview of Regional Transit Services in Selected Areas

TTI will conduct case study research to document transit systems in complex metropolitan areas that operate regional transit services involving multiple transit providers.

The purpose of this working document is to provide an overview of seven selected metropolitan areas as background. This document includes data and maps to highlight political jurisdictions, population, transit systems, and the level of transit services in each area. The overview of each area includes preliminary identification of regional transit services that represent regional coordination and integration of services.

Selected metropolitan areas

- **Atlanta**
- **Central Puget Sound/Seattle**
- **Chicago**
- **Dallas/Fort Worth/Denton**
- **Phoenix**
- **San Diego**
- **Washington DC/Northern Virginia**

The next step in the research will be to collect detailed data through telephone calls and websites about the examples of successful seamless transit service across jurisdictional boundaries.

During our meeting Thursday, we will discuss the specific questions and additional information that TTI will gather for each selected area.

7/26/2012

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Atlanta Region

The Atlanta metropolitan planning area consists of 20 counties in northern Georgia. The region contains three urbanized areas (UZAs) Atlanta, Cartersville, and Gainesville. Table 1 provides a list of the counties and UZAs. The Atlanta Regional Commission (ARC) is the regional planning and intergovernmental coordination agency for a 10-county portion of the regional Atlanta area, including Cherokee, Clayton, Cobb, DeKalb, Douglas, Fayette, Fulton, Gwinnett, Henry and Rockdale counties. ARC also produces and collects data for the larger, 20-county area for air quality purposes. These include the 10 counties above, plus Barrow, Bartow, Carroll, Coweta, Forsyth, Hall, Newton, Paulding, Spalding and Walton counties. The region contains two MPOs. ARC is the MPO for 13 counties and parts of five counties within the region, and the Gainesville-Hall MPO serves Hall County and the Gainesville UZA.

Table 1. Area Population and Size.

Area	2000 Population	2010 Population	Square Miles
Cherokee County	141,903	214,346	434.41
Clayton County	236,517	259,424	144.33
Cobb County	607,751	688,078	344.52
DeKalb County	665,865	691,893	271.14
Douglas County	92,174	132,403	201.03
Fayette County	91,263	106,567	199.32
Fulton County	816,006	920,581	534.32
Gwinnett County	588,448	805,321	436.78
Henry County	119,341	203,922	326.55
Rockdale County	70,111	85,215	132.10
Barrow County	46,144	69,367	162.94
Bartow County	76,019	100,157	470.11
Carroll County	87,268	110,527	503.84
Coweta County	89,215	127,317	445.82
Forsyth County	98,407	175,511	247.17
Hall County	139,277	179,684	429.29
Newton County	62,001	99,958	279.20
Paulding County	81,678	142,324	314.34
Spalding County	58,417	64,073	199.59
Walton County	60,687	83,768	330.00
Total 20-County Region	4,228,492	5,260,436	6406.80
Atlanta UZA	3,499,840	4,515,419	2645.35
Cartersville UZA	33,685	52,477	50.60
Gainesville UZA	88,680	130,846	126.27

The largest city within the region is Atlanta. The region contains several suburban communities. Figure 1 provides a map of the area and the locations of the municipalities within the region.

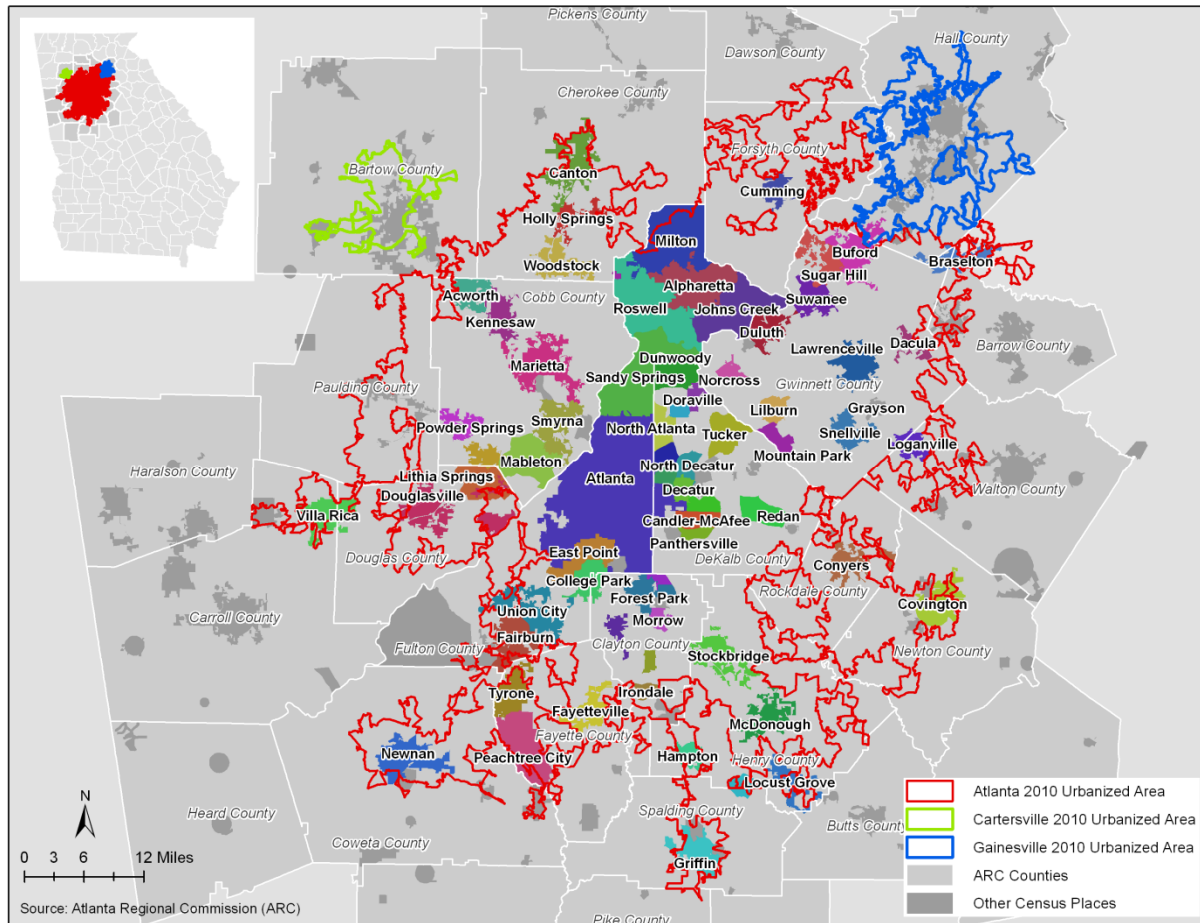


Figure 1 Municipalities and Urbanized Areas within the Atlanta Region

Transit Providers

The region contains one transit authority and multiple county based transit agencies. The following list provides the primary public transit providers in the region and Table 2 summarizes operating statistics reported to the National Transit Database (NTD).

- *Metropolitan Atlanta Rapid Transit Authority (MARTA)* - MARTA operates rail rapid transit (heavy rail) and a bus system, including ADA complementary paratransit, primarily within the boundaries of Fulton and DeKalb counties. MARTA operates a network of bus routes linked to the rapid transit system consisting of 48 miles (77 km) of rail track with 38 train stations.
- *GRTA Xpress* is a commuter transportation service, operating peak periods weekdays on 34 routes serving the Downtown, Midtown and Buckhead areas of Atlanta and the Perimeter Center area. The Georgia Regional Transportation Authority (GRTA) is a state agency with a board of directors appointed by the governor of Georgia. GRTA works to improve Georgia's mobility, air quality and land use practices. GRTA operates the Xpress commuter bus service and “ensures short-range transportation infrastructure plans in metro Atlanta provide a return-on-investment for Georgia taxpayer dollars”.
- *Cobb Community Transit (CCT)* provides local bus service within Cobb County and express bus service connecting Cobb County with Midtown and Downtown Atlanta.

- Gwinnett County Transit (GCT) provides bus service weekdays for commuters traveling between three park and ride lots in Gwinnett County and Downtown Atlanta. In addition, one (103A) route operates from the MARTA Five Points station in downtown Atlanta to Gwinnett Place Mall, Discover Mills and other major employment locations in the I-85 corridor.
- Douglas County Rideshare (DCR) is a commuter-oriented program that operates work-trip vanpools, provides carpool-matching assistance, builds and maintains commuter facilities, and participates in transit and public transportation planning and marketing.

Table 2. 2010 National Transit Database Reported Statistics.

Agency	Operating Expense	Passenger Trips	Revenue Miles	Revenue Hours
MARTA	\$408,675,413	146,249,114	55,180,604	3,291,041
GRTA	\$19,225,813	1,813,603	4,174,419	138,064
CCT	\$20,968,695	4,679,382	4,399,141	242,534
GCT	\$13,273,278	2,117,140	2,531,742	134,845
DCR	\$624,844	163,034	1,071,357	27,096

Other county, community, or university based transit services in the Atlanta region include the following:

- Cherokee Area Transportation System (CATS) provides transportation services for residents of Cherokee County. Service is provided to major destinations throughout the county.
- Coweta Transit Dial-A-Ride provides transit services to business, commercial and activity centers in Coweta County.
- Henry County Transit (HT) provides curb-to-curb service based on a first-come-first-served reservation system to the citizens of Henry County.
- Paulding County Transit is a public service of Paulding County. Passengers are picked up and transported to destinations such as the hospital, Health Department, Department of Family and Children Services, doctor's office, pharmacies, employment, shopping areas, etc.
- Hall Area Transit (HAT) provides public transportation services to Hall County and the Gainesville UZA. HAT offers seven fixed routes and curb-to-curb demand response transit service within the county.
- Fulton County Dial-A-Ride Transportation Services (DARTS) is an on-demand transportation service for seniors with limited access to transit in Fulton County. The program is open to eligible seniors who live in Fulton County.
- The Buckhead Uptown Connection (The Buc) "The Buc" is a community shuttle service designed to provide frequent connections between area hotels, restaurants, offices, shopping destinations and the Buckhead and Lenox MARTA rail stations.
- Emory University Shuttle Service provides free service for the Clifton Road campus, the Clairmont campus, the Briarcliff campus, Executive Park, Emory University Hospital Midtown, Grady Memorial Hospital and commuter park and ride lots.
- Georgia Institute of Technology Stinger Bus System (Tech Trolley) Tech Trolley serves the Georgia Tech campus and Midtown Atlanta.
- Georgia State University Transit Panther Express serves the downtown Atlanta campus of Georgia State University.

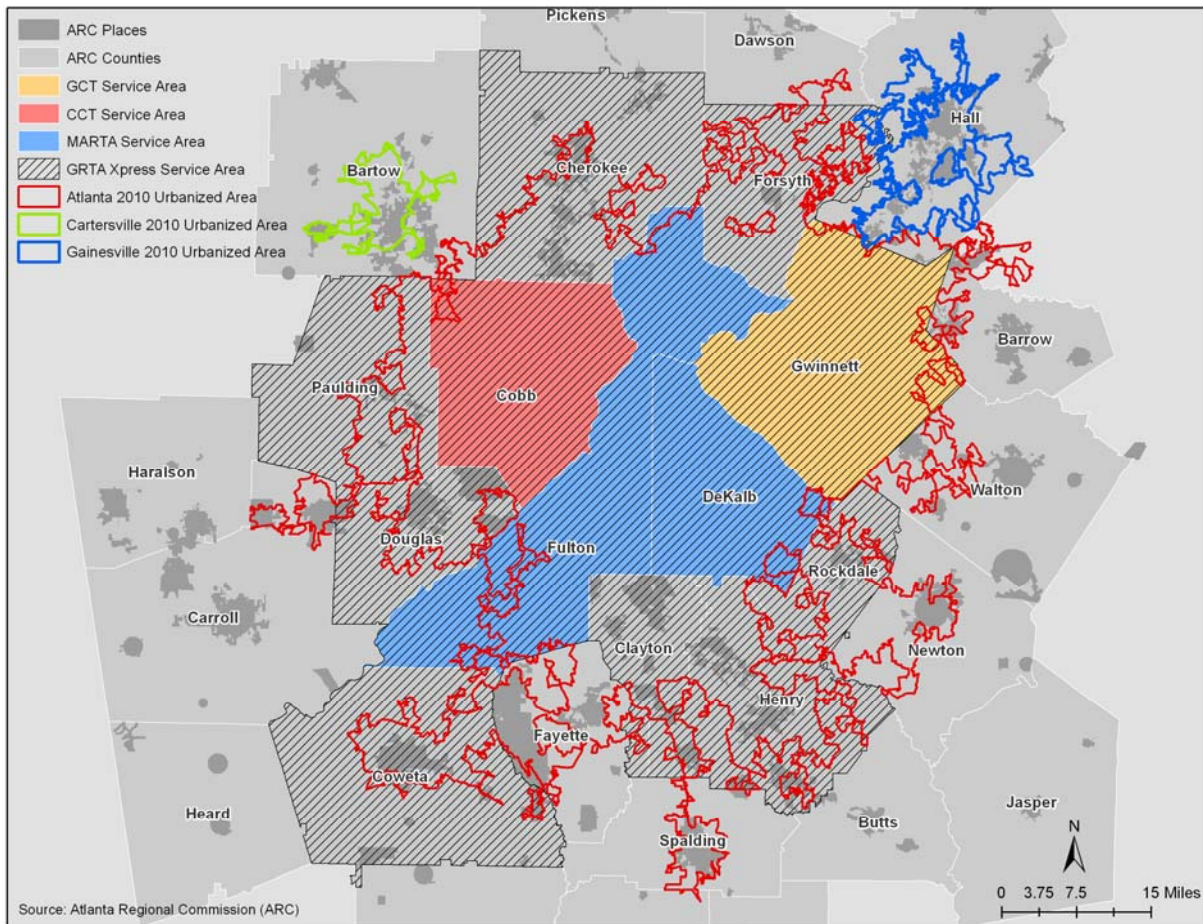


Figure 2. Transit Service Areas and Urbanized Areas within the Atlanta Region

Examples of Coordinated and Integrated Services

Regional Routes and Services

- MARTA operates mainly in Fulton and DeKalb counties, with bus service to two destinations in Cobb County and a single rail station in Clayton County at Hartsfield-Jackson Atlanta International Airport.
- GRTA Xpress routes are aligned with and provide free transfers to and from the MARTA rail and bus services, allowing riders to complete trips throughout the metropolitan Atlanta area. Xpress park and ride lots are located throughout the region, typically close to interstate highways or major arterial roads.
- Cobb Community Transit provides express bus service connecting Cobb County with Midtown and Downtown Atlanta.
- Gwinnett County Transit provides commuter service between three park and ride lots in Gwinnett County and Downtown Atlanta. In addition, one (103A) route travels from the MARTA Five Points station in Downtown Atlanta to Gwinnett Place Mall, Discover Mills and other major employment locations in the I-85 corridor.

Central Puget Sound Region

The Central Puget Sound Region (CPSR) is comprised of four counties: King, Kitsap, Pierce, and Snohomish. The CPSR is located in the western portion of Washington and covers a large geographic area. The CPSR contains three urbanized areas, which are the Seattle-Tacoma-Everett UZA, Bremerton UZA, and Marysville UZA. Table 1 displays the population and square miles of each county and each UZA. Figure 1 provides the location and geographic boundaries of the UZAs.

Table 1. Area Population and Size.

Entity	2000 Population	2010 Population	Square Miles ¹
King County	1,737,034	1,931,249	2,126
Kitsap County	231,969	251,133	396
Pierce County	700,820	795,225	1,679
Snohomish County	606,024	713,335	2,089
Total	3,275,847	3,690,942	6,290
Seattle-Tacoma-Everett UZA	2,712,205	3,059,393	1,010
Bremerton UZA	178,369	198,979	136
Marysville UZA	114,372	145,140	82

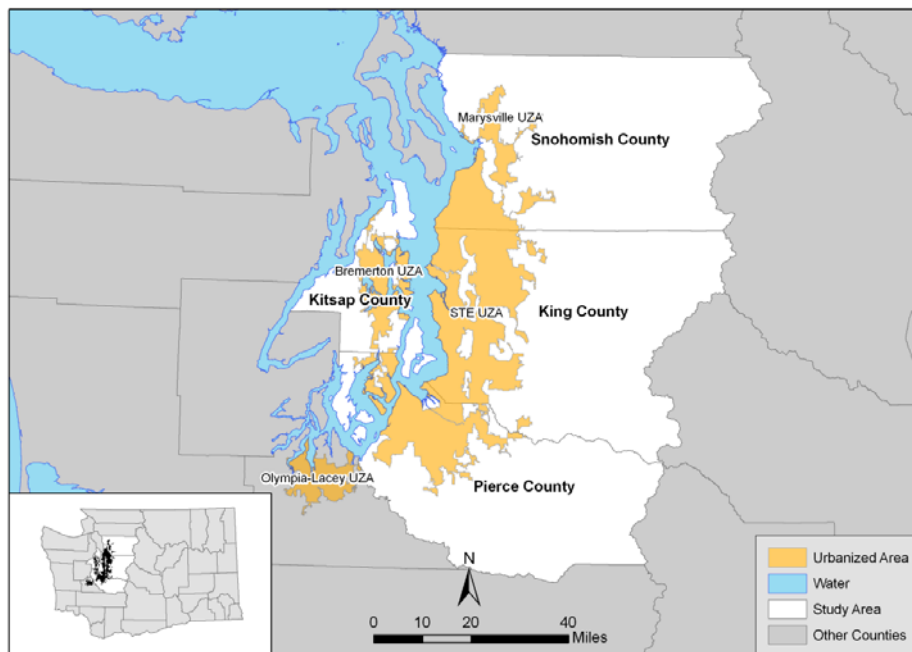


Figure 1. Central Puget Sound Region Urbanized Areas.

The CPSR contains 82 cities and towns. Table 2 provides a list of the municipalities with populations greater than 20,000 located within the CPSR. Figure 2 provides a map of the municipalities in the region.

¹ <http://www.psrc.org/assets/366/FullReport.pdf>

Table 2. Jurisdiction Populations.

Jurisdiction	2000 Population	2010 Population
Seattle	563,374	608,660
Tacoma	193,556	198,397
Bellevue	109,569	122,363
Everett	91,488	103,019
Federal Way	83,259	89,306
Kent	79,524	92,411
Lakewood	58,211	58,163
Renton	50,052	90,927
Redmond	45,256	54,144
Kirkland	45,054	48,787
Auburn	40,314	70,180
Bremerton	37,259	37,729
Lynnwood	33,847	35,836
Puyallup	33,011	37,022
Burien	31,881	33,313
Bothell	30,150	33,505
SeaTac	25,496	26,909

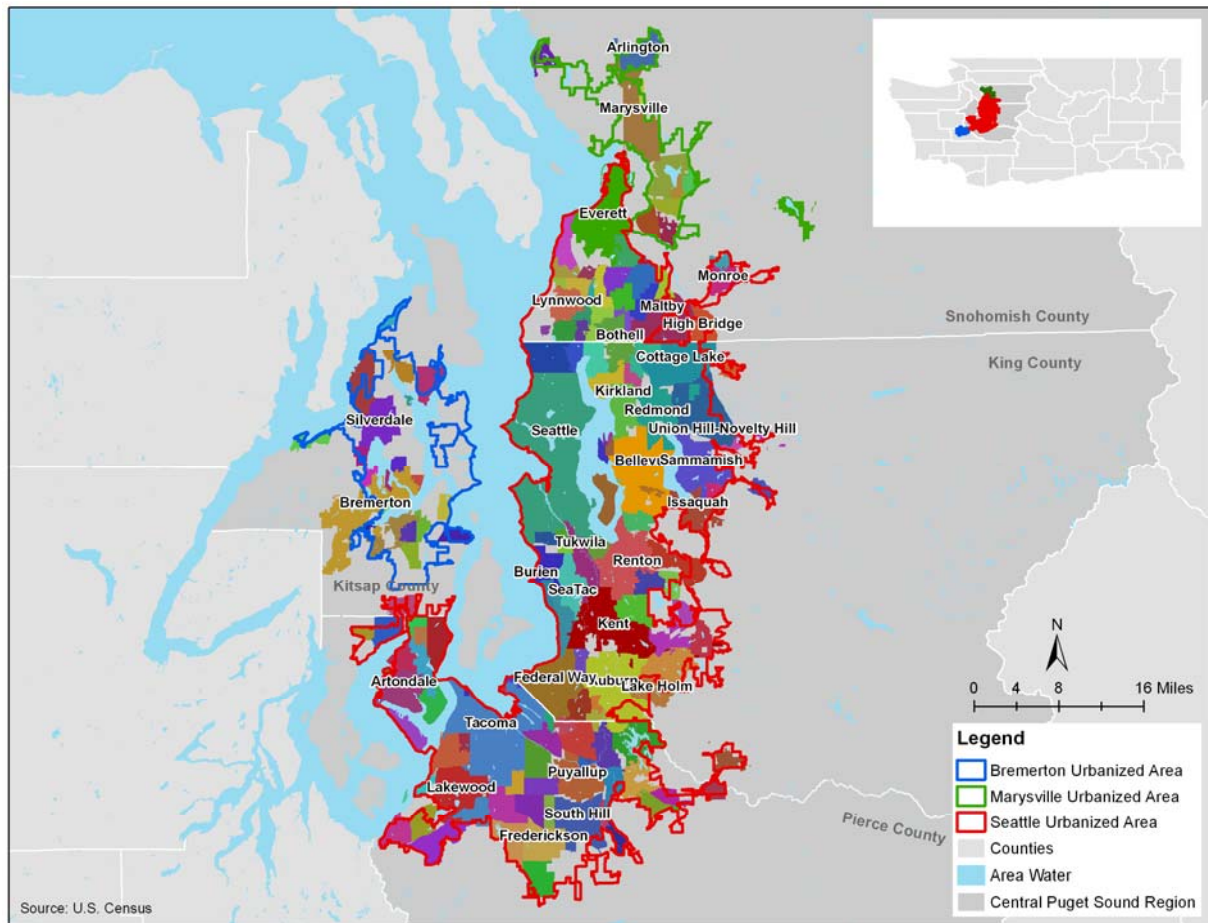


Figure 2. Map of Local Jurisdictions

The CPSR contains several transit providers operating a variety of transit modes. Transit modes include fixed route bus, demand response, streetcar, light rail, monorail, commuter rail, vanpool, and ferryboat. Fixed route bus service includes circulator, local, express, and park and ride services. Demand response transit service provides door-to-door American Disability Act (ADA) accessible transportation throughout the region. Streetcar and light rail transit provide short distance urban transportation in densely developed areas. Commuter rail transit provides intercity passenger rail service linking the cities of Tacoma, Seattle, and Everett.

The region straddles the central portion of Puget Sound and contains several bays and waterways. These waterways create barriers within the urbanized area. As a way to provide transportation to accommodate these barriers, ferryboat transportation is offered as an extension of the state highway network for automobiles and passengers through Washington State Ferries, and for passenger-only ferries through various transit, port, and county providers.

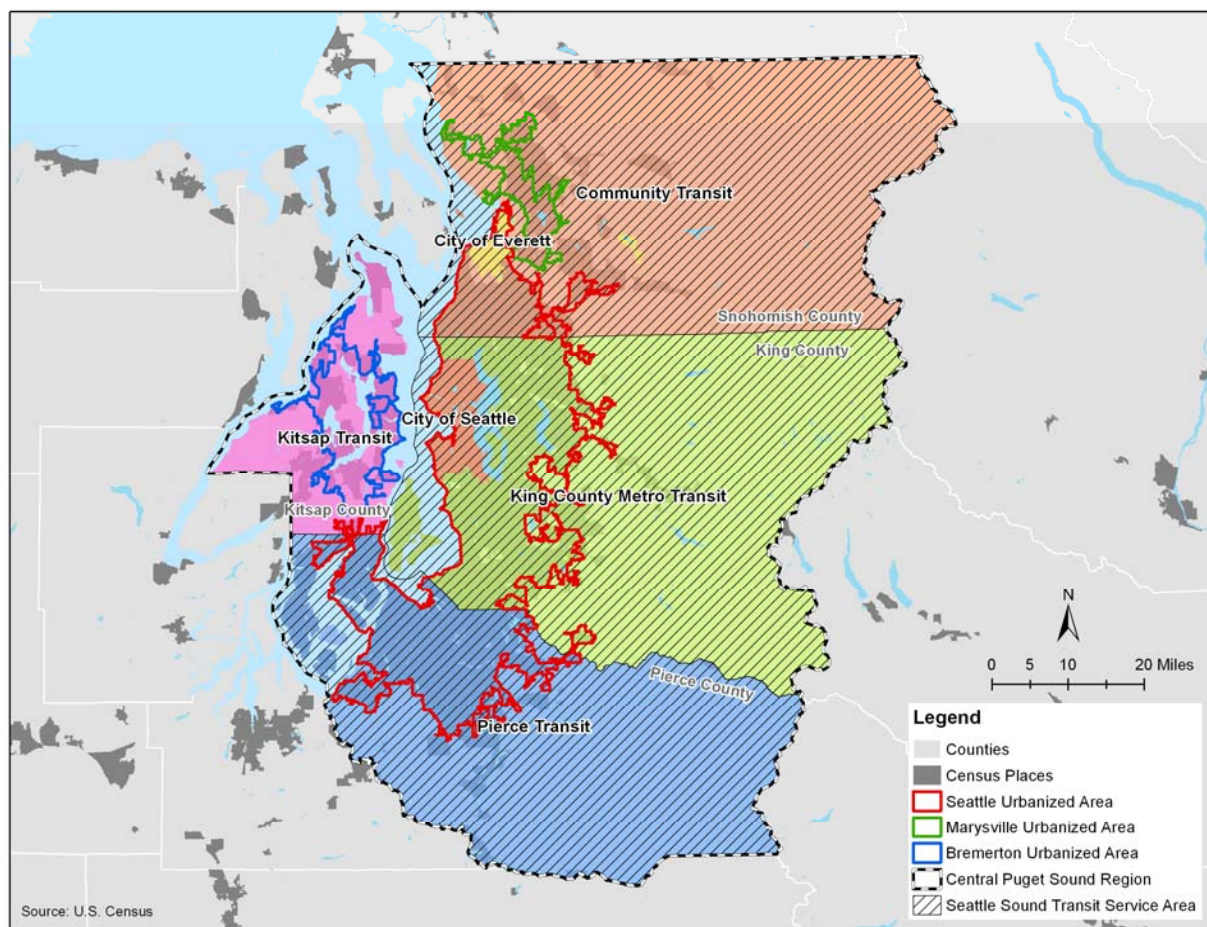


Figure 3. Transit Providers in the Central Puget Sound Region

Transit Providers

The following list identifies the public transportation providers in the region and a short description of each.

- Central Puget Sound Regional Transit Authority (Sound Transit) is a regional transit provider. Sound Transit offers express bus, commuter rail, and light rail service in Snohomish, King, and Pierce Counties. Sound Transit contracts with each of the counties to operate the express bus service for the region, contracts with BNSF for commuter rail service and Amtrak for vehicle maintenance and with King County Metro for light rail service.
- King County Department of Transportation (Metro Transit) King County Metro Transit serves King County with express, local, and circulator bus service. Metro Transit also provides vanpool and paratransit service. Sound Transit contracts with Metro Transit to provide light rail service.
- Pierce County Public Transportation Benefit Area Corporation (Pierce Transit) serves Pierce County with express, local, and circulator bus service. Pierce Transit also provides vanpool and paratransit service.
- Snohomish County Public Transportation Benefit Area Corporation (Community Transit) serves Snohomish County with express, local, and circulator bus service. Community Transit also has bus rapid transit, vanpool, and paratransit service.
- City of Everett (Everett Transit) serves the City of Everett with express, local, and circulator bus service. Everett Transit also provides paratransit service.
- Kitsap Transit provides public transportation to the county of Kitsap. Kitsap transit has express, local, and circulator bus service. Kitsap also has ferryboat, vanpool, and paratransit services.
- City of Seattle offers monorail and streetcar service within the City of Seattle. The monorail system provides a link from downtown Seattle to Seattle Center, which is a fairground, arts, and entertainment district in Seattle. The City of Seattle contracts with King County Metro to operate the streetcar. The streetcar travels from South Lake Union to downtown Seattle.
- Washington State Department of Transportation (WSDOT) provides auto and passenger ferryboat transportation in the CPSR as an extension of the state highway system.
- King County Ferry District provides passenger ferryboat service to various parts of King County.
- Pierce County Ferry System provides water ferry transportation to Steilacoom, Anderson Island, and Ketron Island.

Table 3 provides the National Transit Database statistics to show the service levels of each agency.

Agency	Operating Expense	Passenger Trips	Revenue Miles	Revenue Hours
King County Metro Transit	\$581,721,241	113,637,312	56,906,431	4,109,143
WSDOT Ferries	\$208,388,543	22,614,325	902,801	126,631
Sound Transit	\$172,421,878	23,404,742	15,607,462	738,633
Pierce Transit	\$117,382,138	15,280,450	14,514,647	902,773
Community Transit	\$105,059,070	10,041,136	14,867,607	679,773
Kitsap Transit	\$28,389,216	3,890,958	4,570,445	229,041
Everett Transit	\$18,086,598	2,403,168	2,128,178	173,621
Pierce County Ferry System	\$4,970,443	195,859	40,697	5,579
City of Seattle	\$2,709,895	1,789,137	201,756	19,483
King County Ferry District	\$1,523,203	153,620	28,410	1,421

Metropolitan Planning Organization

Puget Sound Regional Council (PSRC) is the metropolitan planning organization (MPO) for CPSR. Under its regional, state, and federal responsibilities, PSRC is charged with developing policies and decision making in the areas of regional growth management, environmental, economic, and transportation issues in the four-county central Puget Sound Region of Washington. PSRC develops the long-range transportation plan for the region, which sets forth regional transportation goals and objectives, projects growth throughout the region, and develops transportation strategies and recommendations to guide future development. PSRC is also charged with developing the region's Transportation Improvement Program. The TIP is a 4-year list of current transportation projects for the region that is updated every 2–3 years, prepared and approved by the MPO, which it then submits for state and federal review and approval into the State TIP.

The Transportation Policy Board within the PSRC advises the PSRC Executive Board on MPO decisions. The Transportation Policy Board consists 26 voting members and 19 non-voting members. The voting members consist of representation from each of the counties and multiple cities and state representation. The non-voting members consist of representation from transit agencies, PSRC staff, and individuals representing the business community.

Examples of Coordinated and Integrated Services

Regional Routes and Services

- The CPSR contains a regional transit provider in Sound Transit while all other transit providers serve county, subcounty, or municipal jurisdictions. Sound Transit contracts with Community Transit, King County Metro Transit, and Pierce Transit to operate regional express bus; contracts with King County Metro for Link light rail; and contracts with BNSF and Amtrak for Sounder commuter rail. Sound Transit provides cross-jurisdictional service into the counties of Snohomish, Pierce, and King. Figure 3 provides a map of the express bus network and the commuter and light rail corridors sponsored by Sound Transit.
- Sound Transit, as a regional transit agency, has a Transportation Integration Group, which brings together transit managers from across the region to discuss service delivery, operations, construction, and long-range planning issues. This group creates regional transit coordination at the management level rather than elected.² This level of planning helps coordinate regional projects to go into the PSRC TIP.³

Joint Fares

- The CPSR has a reloadable fare card that each of the transit agencies accept called Orca Card. The Orca Card began in 2009, and prior to the Orca Card, each of the transit agencies had an agreement to honor paper transfers from other agencies.⁴



² http://www.leg.wa.gov/JTC/Documents/Studies/TransitAdvisoryPanel/KCMMemo_092910.pdf

³ Jim Moore – Sound Transit

⁴ Peter Stackpole – Pierce Transit



Figure 3. Sound Transit Commuter, Light Rail, and Express Bus Corridors

http://www.soundtransit.org/Documents/pdf/rider_guide/transit_guide/2011_06.pdf

Shared Infrastructure

- The transit providers within the CPSR have a “Good Neighbor Policy.” The Good Neighbor Policy allows transit providers to utilize other entities’ stops or stations. The transit provider owning the bus stop/station is responsible for posting the route numbers of the outside provider serving the stop/station. The favor of posting the route number is expected to be returned by the receiving agency if needed.

Joint Operation

- Pierce Transit has interlocal agreements with the City of Auburn and Metro Transit to provide a feeder service between the Lakeland Hills area within the City of Auburn and the Auburn Sounder train station within the King County Metro Transit service area.
- An interlocal partnership agreement exists between Community Transit and Everett Transit. Community Transit for the Swift bus rapid transit system, which is operated by Community Transit and travels into the Everett Transit service area. The agreement calls for Everett Transit to contribute 0.05 percent of its sales and use tax toward Community Transit. The agreement also calls for Everett Transit to construct the northern terminus for Swift at Everett Station and to provide up to \$4 million for construction of Swift stations within the city limits of Everett, as well as installation of transit signal priority technology at intersections along the Swift route.⁵

⁵ <http://www.commtrans.org/News/New.cfm?id=1229>

Chicago Region

The Chicago region consists of seven counties and two urbanized areas. The UZAs are Chicago and the Round Lake Beach-McHenry-Grayslake. The region is adjacent to Lake Michigan to the east, crosses the Illinois boundary in Wisconsin to the north, and crosses into two counties in Indiana, Lake and Porter County. The regions outside of Illinois are not included in the planning area. Table 1 provides the population and size of each county in the Chicago region and the size and population of each urbanized area.

Table 1. Area Population and Size.

Area	2000 Population	2010 Population	Square Miles
Cook County	5,376,741	5,194,675	945.33
DuPage County	904,161	916,924	327.50
Kane County	404,119	515,269	520.06
Kendall County	54,544	114,736	320.34
Lake County	644,356	703,462	443.67
McHenry County	260,077	308,760	603.17
Will County	502,266	677,560	836.91
Total	8,146,264	8,431,386	3,997
Chicago UZA	8,307,904	8,608,208	2442.75
Round Lake Beach-McHenry-Grayslake UZA	226,848	290,373	152.60

The region contains about 8.6 million people and is expected to grow to 11 million by 2020. The region contains the large cities of Chicago, Aurora, Elgin, Joliet, and Naperville. Figure 1 provides a map of the region including the municipal jurisdictions within the UZA, the county boundaries, and the state boundaries.

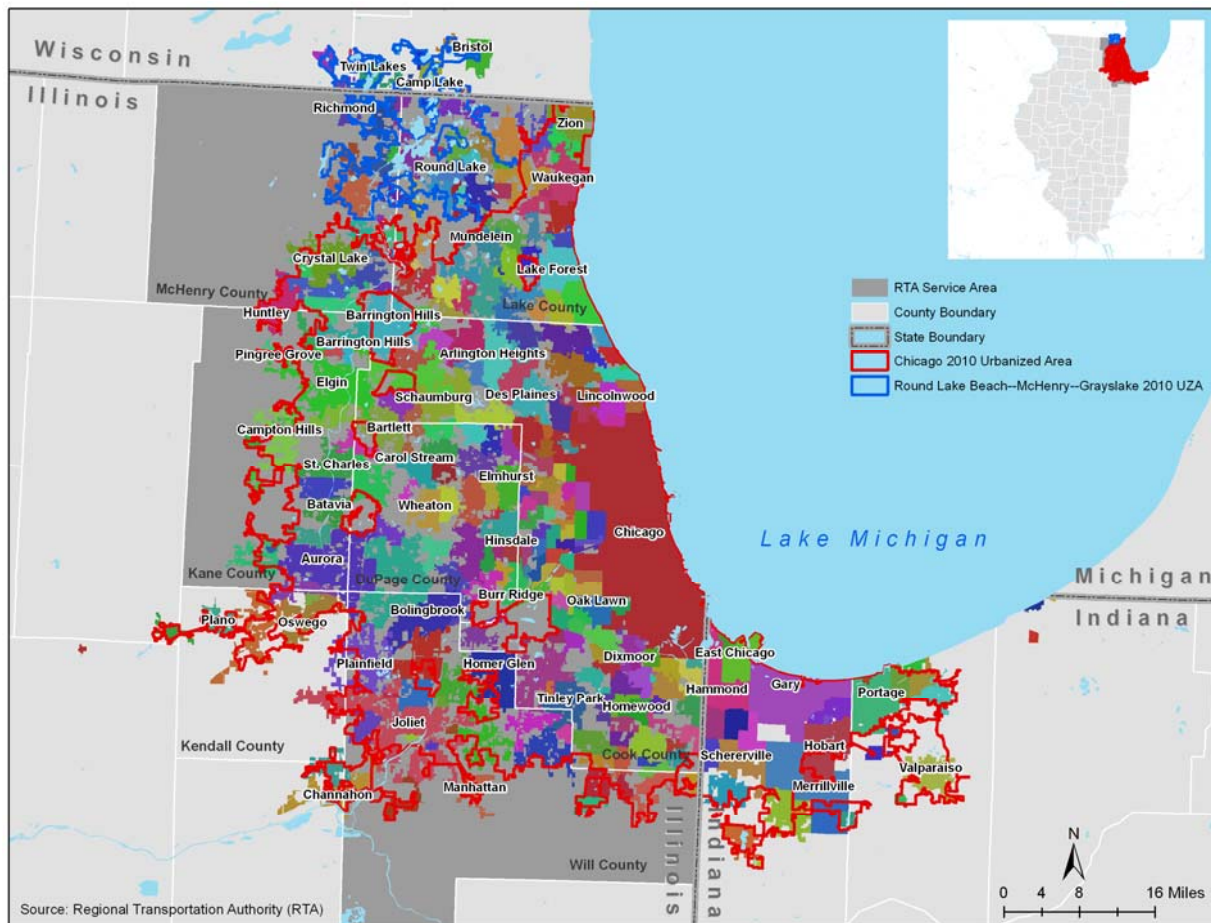


Figure 1. Chicago Metropolitan Planning Area

Transit Authorities

Public transportation service is provided by a regional authority and three operating agencies. The Regional Transportation Authority (RTA) is the financial manager for the transit system and facilitates coordination among the service providers. Three operating agencies fall under the umbrella of the RTA. The three agencies are Chicago Transit Authority (CTA), Metra, and Pace Suburban Bus (Pace). CTA, Pace, and Metra are responsible for setting the levels of service, fares, and operational policies for their respective agency.

- Northern Illinois Regional Transit Authority (RTA) is a special purpose unit of local government and a municipal corporation of the State of Illinois. RTA was created in 1974 upon the approval of a referendum (RTA Act) by the residents of Cook, DuPage, Kane, Lake, McHenry, and Will counties and in 1983, the RTA Act was amended with substantial changes made to the RTA's organization, funding and operations. The amended Act created three "service boards" known as the Chicago Transit Authority (CTA), Metra commuter rail and Pace suburban bus. The RTA's primary responsibilities became financial and budget oversight of CTA, Metra and Pace, and regional transit planning issues.
- Chicago Transit Authority (CTA) provides bus and heavy rail service within Chicago and 40 surrounding suburbs. CTA operates 140 fixed bus routes with 11,493 posted bus stops. The

bus system consists of local and express routes. Additionally, CTA provides “Owl Service” on many routes, which means the route runs 24 hours a day 7 days per week. The CTA ‘L’ (heavy rail service) contains approximately 242.2 miles of track and 144 stations. Parts of the ‘L’ are below ground in subway tunnels, and other parts run at grade or above ground.

- Northeast Illinois Regional Commuter Railroad Corp (Metra) operates commuter rail service in Chicago and its suburbs. Metra serves 240 transit stations. About 50 percent of the Metra trips travel to one of four downtown Chicago transit terminals.
- Pace Suburban Bus Division offers suburban bus service throughout the greater metro area as well as providing vanpool, demand responsive service, and ride matching (carpooling) information for the entire region including Chicago.

Table 2. 2010 National Transit Database Reported Statistics.

Agency	Operating Expense	Passenger Trips	Revenue Miles	Revenue Hours
CTA	\$1,161,941,896	516,873,050	121,854,875	9,435,662
Pace Bus	\$177,245,148	32,308,514	35,040,308	2,092,781
Pace Paratransit	\$114,861,024	2,769,464	25,365,727	1,756,485
Metra	\$562,779,173	70,534,886	43,143,575	1,397,021

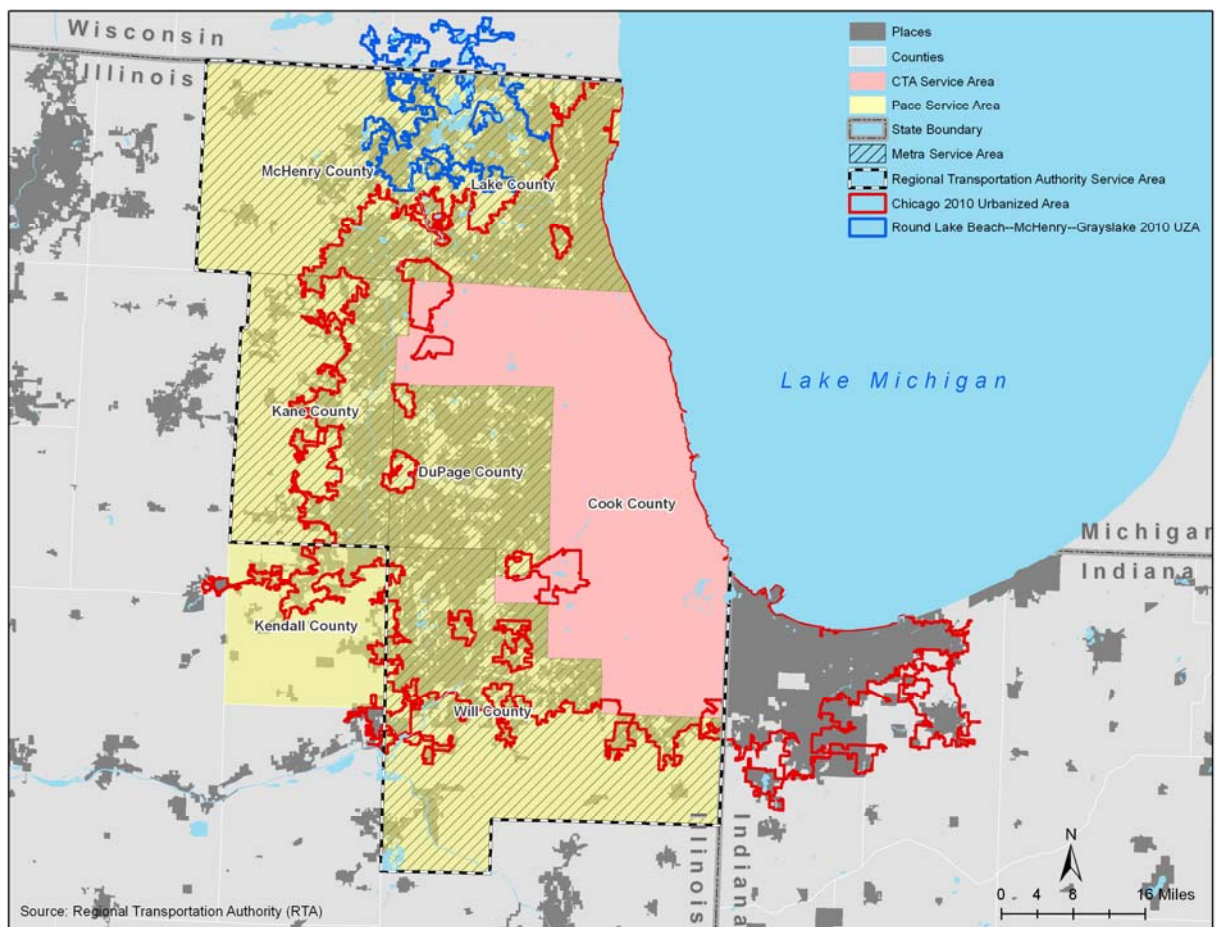


Figure 2. Transit Providers in the Chicago Metropolitan Area

The Chicago Metropolitan Agency for Planning (CMAP) is the regional planning organization and MPO for the northeastern Illinois Counties of Cook, DuPage, Kane, Kendall, Lake, McHenry, and Will. CMAP guides the implementation of regional plan “GO TO 2040” which provides transportation, housing, economic development, open space, and environmental planning strategies for the region’s 284 communities. CMAP provides a platform for long range coordinated multimodal transportation planning.

Examples of Coordinated and Integrated Services

RTA plays a key role in coordinating public transportation services within the complex Chicago region. The amendment to the RTA Act in 1983 made RTA responsible for coordinated efforts between the three "service boards" CTA, Metra, and Pace suburban bus. RTA is responsible for facilitating decisions requiring regional perspective, including the coordination of transit service across the three agencies.

Shared Infrastructure

- The transit providers in the region share many transit centers in order to facilitate seamless transfers between services. The region contains 306 locations where at least two of the three transit providers share stops for transit services.

Regional Routes and Services

- Pace is a regional transit authority that provides cross-jurisdictional access within the Chicago region and provides an example of transit service consolidation. Pace was created by the 1983 RTA Act. The purpose was to unify the multiple suburban transit providers that existed at the time. Pace is governed by a 13 member Board of Directors comprised of representatives from the suburban counties and suburban portions of Cook County.
- Inter-state transportation - Northern Indiana Commuter Transportation District (NICTD) provides commuter service between South Bend, IN and Chicago IL. This service shares ROW with the Metra Electric Line when it enters into Illinois. (<http://www.nictd.com/>).

Planning initiatives

- Regional Transit Coordination Plan (RTCP) – House Resolution 234 (1999) – provided funding for RTA to lead the development of a regional transit plan. The plan investigated the following items:
 - Physical coordination (i.e. transfer locations)
 - Information coordination (i.e. shared signage, maps and schedules)
 - Service coordination (i.e. shared signage, maps and schedules)
 - Fare coordination (i.e. shared fare opportunities)

The RTCP was completed in 2006 and created a series of reports documenting regional recommendations, some of which have been implemented

Shared Infrastructure

- RTA interagency signage – electronic signs are currently being installed (Summer 2012) at four locations in the RTA service area. These signs will serve as prototypes at these locations. The signs will provide interagency rider information including maps, route diagrams, and schedules. The signs will be located at the following for locations and serve the listed transit providers:
 - Davis Street – Evanston (CTA Rail and Bus, Metra, and Pace)

- Joliet Union Station – Metra and Pace
 - 95th and Western – CTA Bus and Pace
 - Van Buren/Library/Jackson – (CTA Rail and Bus, Metra
- After a six-month testing and evaluation period, the RTA will develop and adopt design standards for additional signs at interagency locations throughout the region.

Information Coordination/Integration

- RTA Interagency Trip Planner – RTA provides a coordinated trip planner on the RTA website. The tool allows a transit patron to type in a start and end location and desired travel time. The tool incorporates the transit services of CTA, Metra, and Pace and provides the appropriate bus/train to ride to get to the desired location.

Dallas/Fort Worth/Denton

The North Central Texas region consists of 12 counties and three urbanized areas. The UZAs are Dallas-Fort Worth-Arlington (DFWA), Denton-Lewisville, and McKinney. Table 1 provides the population and size of each county in the region and the size and population of each urbanized area.

Table 1. Area Population and Size.

Area	2000 Population	2010 Population	Square Miles
Collin County	491,675	782,341	848
Dallas County	2,218,899	2,368,139	880
Denton County	432,976	662,614	889
Ellis County	111,360	149,610	940
Hood County	41,100	51,182	422
Hunt County	76,596	86,129	841
Johnson County	126,811	150,934	729
Kaufman County	71,313	103,350	786
Parker County	88,495	116,927	904
Rockwall County	43,080	78,337	129
Tarrant County	1,446,219	1,809,034	863
Wise County	48,793	59,127	905
Total	5,197,317	6,417,724	9136
Dallas-Fort Worth UZA	4,145,659	5,121,892	1779
Denton-Lewisville UZA	299,823	366,174	145
McKinney UZA	54,525	170,030	74

In addition to the many counties, the North Central Texas region contains numerous municipalities. Figure 1 provides a map of the area with several jurisdictions shown to display the complexity of the region.

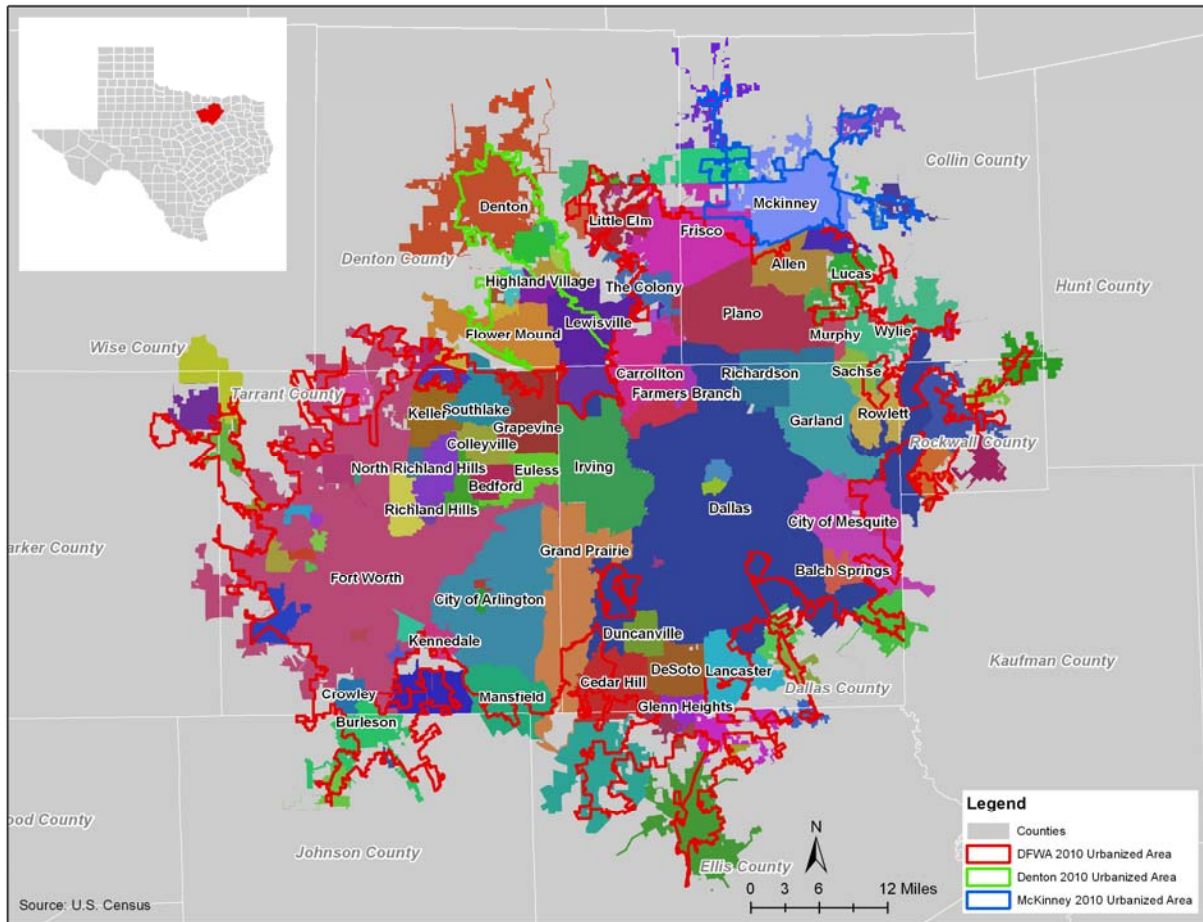


Figure 1. North Central Texas Metropolitan Planning Area.

Transit Providers

The North Central Texas MPA includes three transit authorities, four transit providers that serve only seniors and people with disabilities within specific cities, and five transit districts. One transit district is also the transit provider in a small urbanized area. Figure 2 provides the jurisdictional boundaries of the transit authorities and urban transit providers in the Dallas-Fort Worth MPA as compared to the UZA outline.

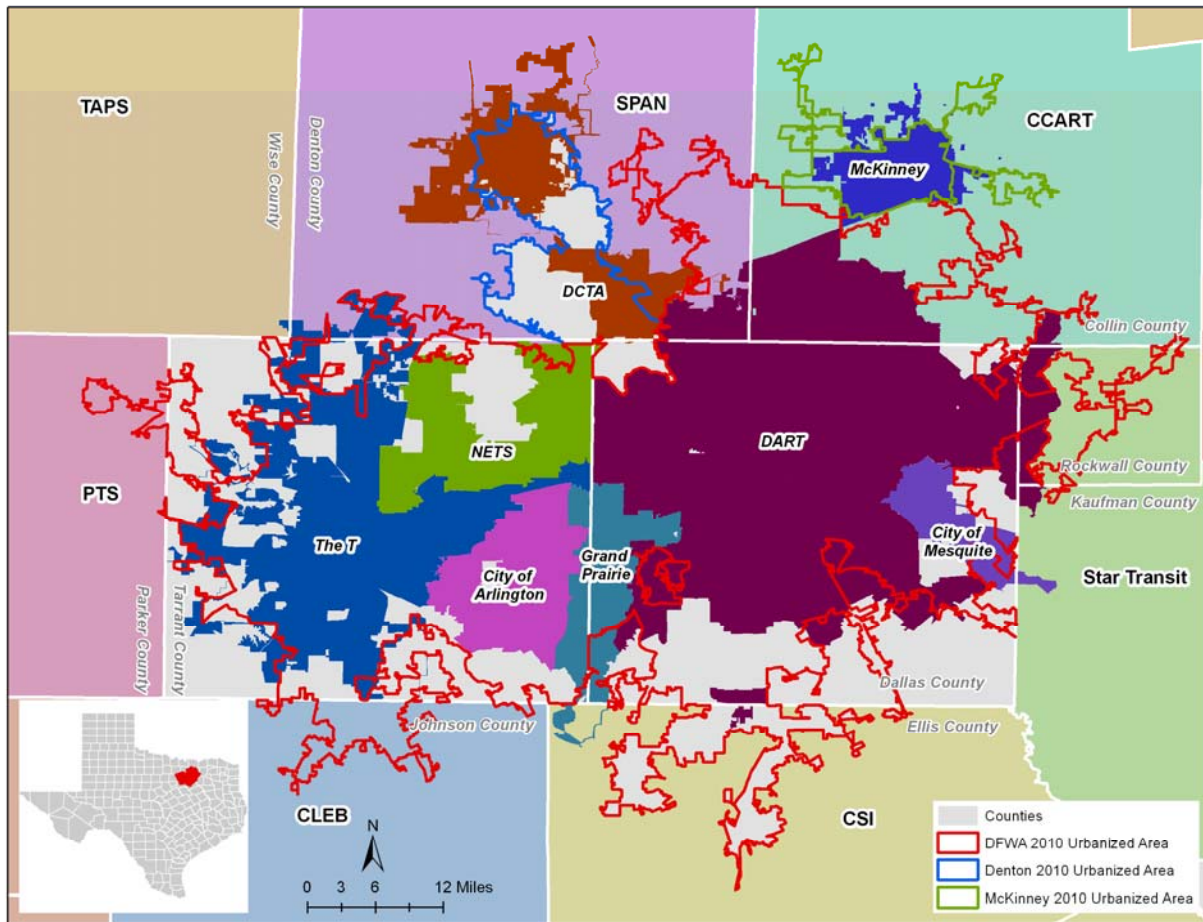


Figure 2. Transit Providers in the North Central Texas Region.

Transit Authorities

These transit providers are funded by a regional sales tax dedicated to transit.

- *Dallas Area Rapid Transit (DART)* is the regional transit authority for the city of Dallas and 12 surrounding cities. The local sales tax for DART is 1 percent. DART operates over 130 bus routes consisting of local fixed-route, express park-and-ride, circulator, and neighborhood demand response service. DART has three light rail lines and 72 miles of light rail track (Green, Blue, and Red Lines). DART is constructing a new light rail line (Orange) and extensions to two of the current lines are underway. The extensions and new line will increase the length of the system to 93 miles of light rail track. DART also provides vanpool and Americans with Disabilities (ADA) complementary paratransit service. DART and the Fort Worth Transportation Authority jointly operate the Trinity Railway Express (TRE) commuter rail line between the cities of Fort Worth and Dallas.
- *Fort Worth Transportation Authority (The T)* is the regional transportation authority for Fort Worth and provides service within the cities of Fort Worth, Blue Mound and Richland Hills. The T provides local fixed route bus service, express park-and-ride, ADA complementary paratransit, circulator routes, and vanpool service. The T and DART jointly operate the TRE commuter rail.

- Denton County Transportation Authority (DCTA) is the county transportation authority in Denton County. DCTA provides fixed route transportation within the cities of Denton and Lewisville and ADA complementary paratransit in both cities and in Highland Village. DCTA also operates the A-Train, which is a new 21-mile commuter rail line that travels from Denton, TX to Carrollton, TX.

Rural-Urban Transit Districts

- City of Cleburne – City/County Transportation is a rural transit district serving Johnson County. The transit district also includes a portion of the DFWA urbanized area.
- Star Transit is a rural transit district serving Kaufman and Rockwall Counties. The Star Transit district includes a portion of the DFWA UZA.
- Public Transit Services (PTS) is a rural transit district serving the counties of Jack, Palo Pinto, and Parker. The PTS service area includes a portion of the DFWA UZA.
- Special Programs for Aging Needs (SPAN) is a rural transit district serving the non-urbanized areas of Denton County and a portion of the DFWA urbanized area in the county.
- Collin County Area Regional Transit - (CCART) is a rural transit district serving Collin County. CCART also serves the small urban area of McKinney on behalf of the City of McKinney.

Services for Seniors and People with Disabilities

The North Central Texas region includes four limited eligibility transit providers. These four agencies are:

- City of Arlington – (Handitran)
- City of Mesquite - Mesquite Transportation for the Elderly and Disabled – (MTED)
- City of Grand Prairie – (The Grand Connection)
- Northeast Transportation Services – (NETS) comprised of the cities of Bedford, Euless, Grapevine, Haltom City, Hurst, Keller, and North Richland Hills.

These cities did not vote to join one of the regional transit authorities in Dallas or Tarrant County (Dallas Area Rapid Transit or Fort Worth Transportation Authority). These cities sponsor transit services only for seniors and people with disabilities. NETS has an interlocal agreement with The T to provide transit services, and The T subcontracts to a non-profit transportation provider.

Table 2 provides the National Transit Database (NTD) statistics to show the service levels of each agency. For agencies without online NTD reports, the data are statistics reported to Texas Department of Transportation (TxDOT).

Table 2. 2010 National Transit Database and TxDOT Reported Statistics.

Agency	Operating Expense	Passenger Trips	Revenue Miles	Revenue Hours
Arlington	\$2,632,508	112,840	648,999	44,152
CCART	\$1,565,751	67,771	496,068	41,181
CCART (Rural)*	\$391,229	17,333	111,079	6,165
Cleburne*	\$943,116	31,242	266,779	17,806
DART	\$426,024,625	59,985,395	45,469,027	2,908,228
DCTA	\$9,658,636	2,333,716	1,781,008	126,371
Grand Prairie	\$573,057	39,209	132,270	12,715
Mesquite	\$705,898	40,774	283,888	21,855
NETS*	\$653,849	24,394	227,754	14,992
PTS*	\$1,395,137	77,480	822,977	32,792
SPAN*	\$1,539,199	65,057	586,386	32,096
Star*	\$2,171,740	117,721	1,187,147	60,908
The T	\$59,527,949	6,936,669	7,217,781	541,459

*TxDOT reported data

As seen in Figures 1 and 2, multiple city jurisdictions and transit agency jurisdictions exist within the region. The extensive fragmentation of boundaries creates the need for regional transit coordination and integration. The next section documents regional successes and challenges in transit coordination or integration.

Examples of Coordinated and Integrated Services

NCTCOG is the Council of Governments for the 16-county North Central Texas Region. NCTCOG is responsible for regional coordination of planning and policy decisions in the areas of transportation, air quality, water quality, and human services. NCTCOG serves as the metropolitan planning organization for the North Texas MPA. NCTCOG's Executive Board provides coordinated regional policy direction and fiduciary oversight, while the Regional Transportation Council (RTC), comprised of local elected officials and representatives of the region's transportation providers, serves as the region's independent transportation policy body. As the MPO, NCTCOG and the RTC are responsible for planning and implementing transportation programs and projects aimed at reducing regional congestion, enhancing mobility, and improving air quality. Included in these activities are the development of the federally required Metropolitan Transportation Plan, the Transportation Improvement Program, a Congestion Management Process, and the Unified Planning Work Program.

North Central Texas transit providers promote regional coordination and service integration by offering cross-jurisdictional transit service.

Examples of Regional Coordination and Integration

Joint Powers

- Trinity Railway Express – Trinity Railway Express is a 33-mile commuter rail line linking Fort Worth to Dallas. DART and The T jointly provide the commuter rail service. The service crosses into both DART and the T service areas.



- NETS –The cities of Bedford, Euless, Grapevine, Haltom City, Hurst, Keller, and North Richland Hills have an interlocal agreement with the T to provide provides demand response transportation to seniors and people with disabilities. This service is known as NETS. The T subcontracts to a non-profit agency to operate the transit service.

Regional Routes and Services

- A-Train – DCTA operates the A-Train, which is a new 21-mile commuter rail line stretching from downtown Denton to the Trinity Mills DART light rail station where patrons can transfer to DART bus or light rail services.
- City of Cleburne – The City of Cleburne operates a commuter route to downtown Fort Worth. The T contracts with Cleburne to stop at the The T park-and-ride in Burleson to pick-up passengers. Cleburne accepts The T's fares and passes on this route.
- City of Mesquite - The City of Mesquite entered into an interlocal agreement with DART to jointly fund the operation of a DART express route between Hanby Stadium in Mesquite and the Lawnview Station on the DART Green Line. Mesquite is currently not part of the DART service area, but Mesquite was able to gain support to fund this service. McKinney and Allen would like similar connections to DART service; however, member DART cities have concerns about transit services for cities outside the jurisdiction who have not been contributing funding to the DART system.
- Tarrant County Transportation Services – The T contracts to a non-profit agency to provide transportation service to a number of cities outside The T service area in Tarrant County. The T provides this service under contract with TxDOT, funded with FTA Section 5310¹ funds and local matching funds are provided by the participating cities.
- Member DART cities have concerns about transit services for cities outside the jurisdiction who have not been contributing to the DART system.
- The T operated park-and-ride from Arlington to downtown Fort Worth starting in 2008. The City of Arlington contributed \$75,000 annually toward the project. The service was cancelled in 2011 because of low ridership and lack of public funding. The riders of the service were transitioned in vanpools.

¹ FTA Section 5310 provides formula funding to States for the purpose of assisting private nonprofit groups in meeting the transportation needs of the elderly and persons with disabilities when the transportation service provided is unavailable, insufficient, or inappropriate to meeting these needs. http://www.fta.dot.gov/grants/13093_3556.html

Planned Services

- The T Commuter Rail – The T is planning a 37-mile commuter rail line from southwest Fort Worth to the DFW Airport. The earliest The T could open the rail line is in 2015 (originally called the Northeast to Southwest Rail Line, recently changed name to TEX).
- Grapevine has purchased land for a TEX station and is contributing funding to the project; however, Grapevine is not a member city of The T.

San Diego

The San Diego region is in Southern California along the west coast of San Diego County. Table 1 displays the population and square miles of San Diego County and the urbanized area (UZA). The region consists of 18 cities and a large unincorporated area. Table 2 shows the population of the 18 cities. Figure 1 illustrates San Diego County, the urbanized area, and the cities within the UZA.

Table 1. Area Population and Size.

Area	2000 Population	2010 Population	Square Miles
San Diego County	2,813,833	3,095,313	4,200
San Diego UZA	2,674,436	2,956,746	732

Table 2. Jurisdiction Populations.

Jurisdiction	2000 Population	2010 Population
San Diego	1,223,400	1,307,402
Chula Vista	173,556	243,916
Oceanside	161,029	167,086
Escondido	133,559	143,911
El Cajon	97,555	99,478
Vista	94,869	93,834
Carlsbad	78,247	105,328
Encinitas	58,014	59,518
San Marcos	54,977	83,781
La Mesa	54,749	57,065
National City	54,260	58,582
Santee	52,975	53,413
Poway	48,044	47,811
Imperial Beach	26,992	26,324
Lemon Grove	24,918	25,320
Coronado	24,100	18,912
Solana Beach	12,979	12,867
Del Mar	4,389	4,161

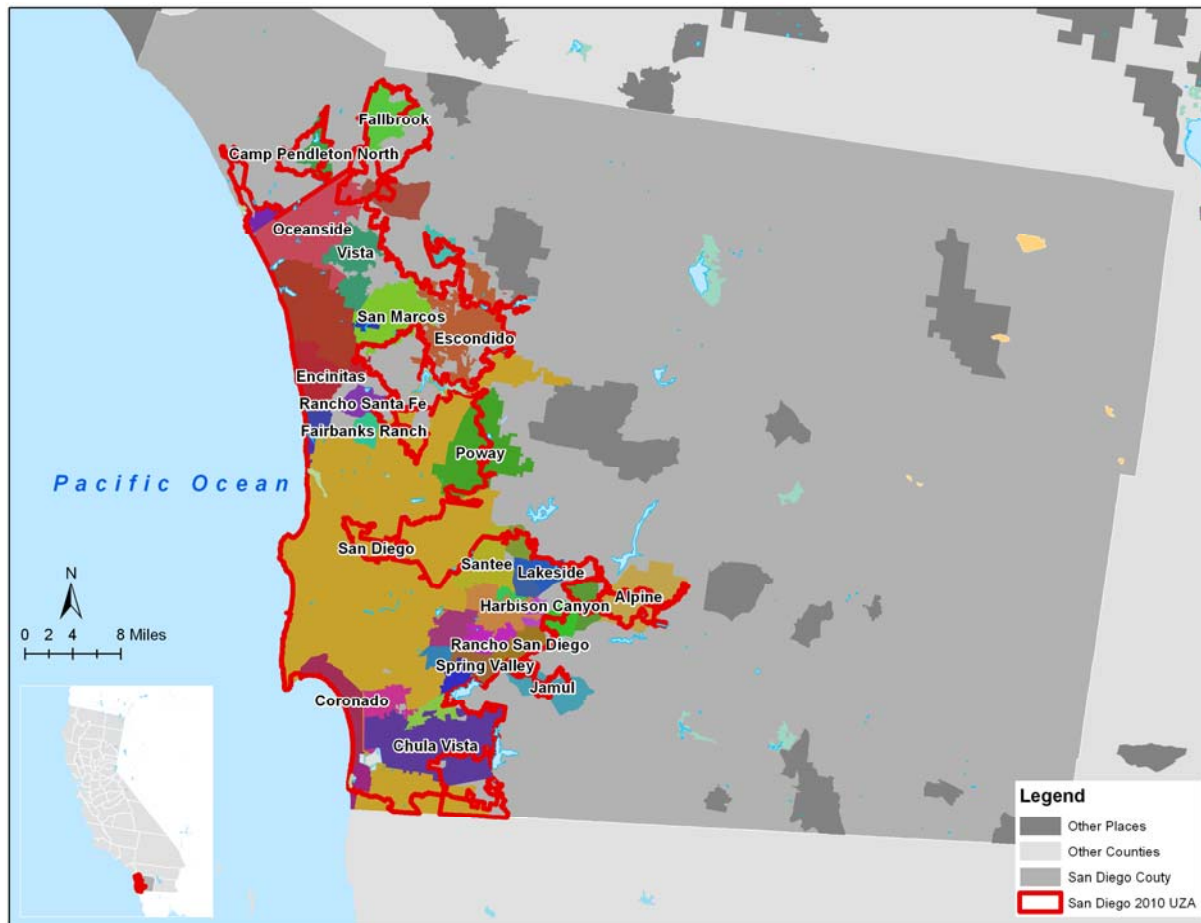


Figure 1. Municipalities and Urbanized Areas within San Diego County.

Regional Governance

The San Diego Association of Governments (SANDAG) is responsible for land use, transportation, and air quality planning to the San Diego region. In 2003, California Senate Bill 1703 consolidated transit planning, programming, project development, and construction under SANDAG. Also serving as the metropolitan planning organization (MPO), SANDAG allocates millions of dollars each year in local, state, and federal funds for the region's transportation network. SANDAG develops the Regional Transportation Plan, the long-range vision for buses, rail, highways, major streets, bicycle travel, walking, goods movement, and airport services, and the Regional Transportation Improvement Program. SANDAG consists of the 18 cities and the County of San Diego. A board of directors governs SANDAG. The board of directors is composed of mayors, council members, and county supervisors from each of the 19 local governments.¹ Additionally, there are supplemental advisory members from Imperial County, the U.S. Department of Defense, Caltrans, San Diego Unified Port District, Metropolitan Transit System, North County Transit District, San Diego County Water Authority, Southern California Tribal Chairmen's Association, and Mexico.

¹ <http://www.sandag.org/index.asp?fuseaction=about.home>

SANDAG administers TransNet, which is the half-cent sales tax for local transportation projects that was first approved by voters in 1988, and then extended in 2004. TransNet provides for the expansion of the region's transportation system. SANDAG allocates TransNet revenue thirds between among highway, transit, and local road projects.

The Transportation Policy Committee advises the SANDAG Board of Directors on major transportation policy matters. The Transportation Policy Committee also provides oversight for the major highway, transit, regional arterial, and regional bikeway projects funded under the Regional Transportation Improvement Program, including the TransNet Program of Projects.

Transit Providers

As a result of the governance change in 2003 establishing SANDAG as a consolidated regional agency and the passage of TransNet in 2004, decision makers fundamentally changed the structure of public transportation service in the region. The paragraphs below provide information on the transit providers in the region and Figure 2 provides a map of the transit service areas.

Public transit service is provided throughout the county by the following two transit agencies:

- *Metropolitan Transit System (MTS)* - The Metropolitan Transit Development Board (MTDB) was created in 1975 by the passage of California Senate Bill 101 and came into existence on January 1, 1976. Effective 2003, Senate Bill 1703 merged MTDB's long-range planning, financial programming, project development, and construction functions into the regional agency, SANDAG. In 2005, MTDB consolidated transit services as subsidiary divisions under the name Metropolitan Transit System (MTS).

MTS has three operating divisions: MTS Bus, MTS Trolley, and MTS Access and ADA Suburban Paratransit. MTS Bus is the local fixed route, express park and ride, and circulator bus service within the MTS service area. MTS Trolley is the brand for three light rail lines. MTS Access and ADA Suburban Paratransit provide ADA complementary paratransit service within a $\frac{3}{4}$ mile boundary of any operating fixed transit service (bus or rail).

Chula Vista Transit is a member of MTS and operates 10 bus routes and one trolley line. Chula Vista Transit is operated by the City of Chula Vista and maintains its own brand unique to the Chula Vista region.

MTS owns San Diego Vintage Trolley, Inc., which restores and operates vintage trolley cars in downtown San Diego. MTS also owns the San Diego and Arizona Eastern Railway Company (SD&AE).

- *North County Transit District (NCTD)* operates the BREEZE bus services, the COASTER commuter rail operations, SPRINTER light rail operations, and ADA paratransit within its service area. The NCTD service area covers the northwestern portion of the county, while MTS covers the remainder of the county.

Table 3 provides the NTD statistics to show the service levels of each agency. Figure 2 displays the MTS and NCTD service areas.

Table 3. 2010 National Transit Database.

Agency	Operating Expense	Passenger Trips	Revenue Miles	Revenue Hours
MTS	\$203,981,733	79,377,826	27,816,321	2,176,734
Chula Vista (CVT)*	\$6,612,541	3,400,609	1,134,357	109,589
NCTD	\$74,087,212	11,333,866	8,191,335	507,361

*CVT is part of the Metropolitan Transit System (MTS), but reports separately to the NTD.

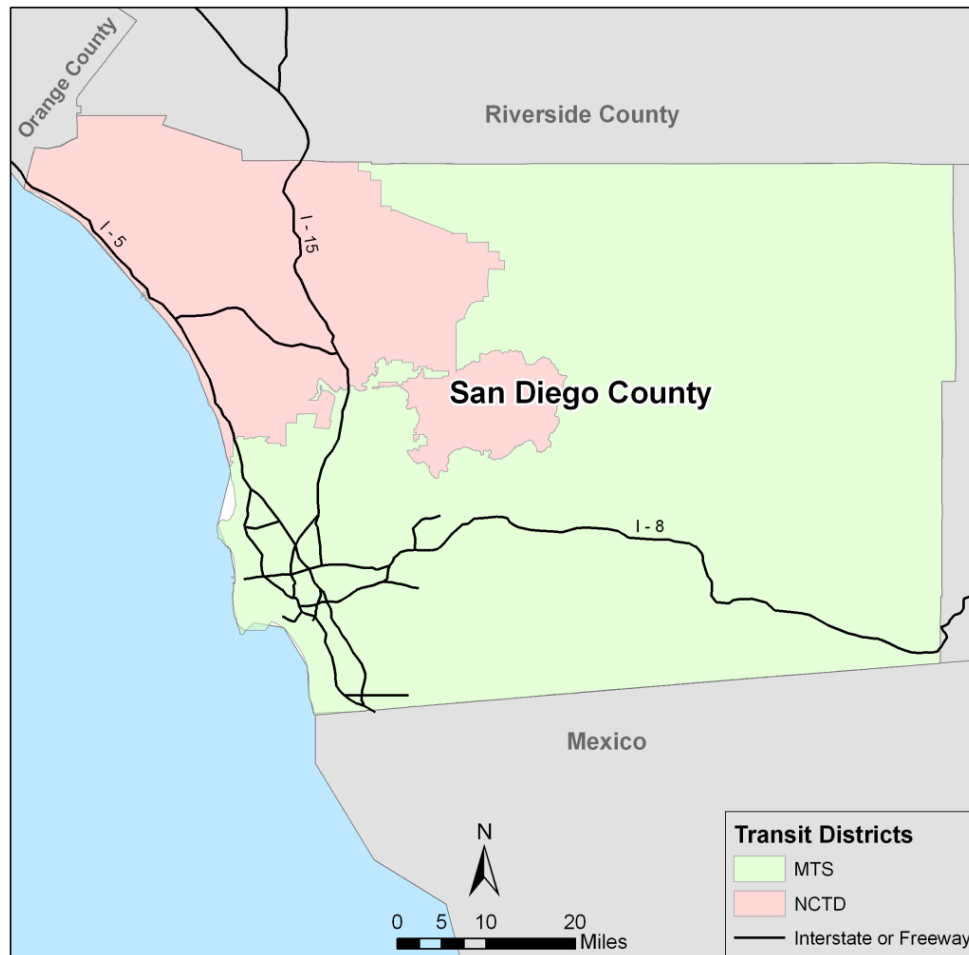


Figure 2. Transit Service Areas.

Examples of Coordinated and Integrated Services

The public transportation providers offer cross-jurisdictional transportation service within the San Diego region.

Consolidated Transit Service

- San Diego MTS is the result of consolidating multiple providers under one name. MTS contains 11 member jurisdictions. The member jurisdictions include San Diego, Chula Vista, Coronado, El Cajon, Imperial Beach, La Mesa, Lemon Grove, National City, Poway, Santee,

and San Diego County. Elected officials from each jurisdiction serve as the Board of Directors. Chula Vista Transit is a member of MTS and operates 10 bus routes and one trolley line.

Regional Routes and Services

- The NCTD Coaster commuter rail service has three stops in the MTS service area, and two NCTD bus routes connect to the MTS services within the MTS service area.

Joint Fares

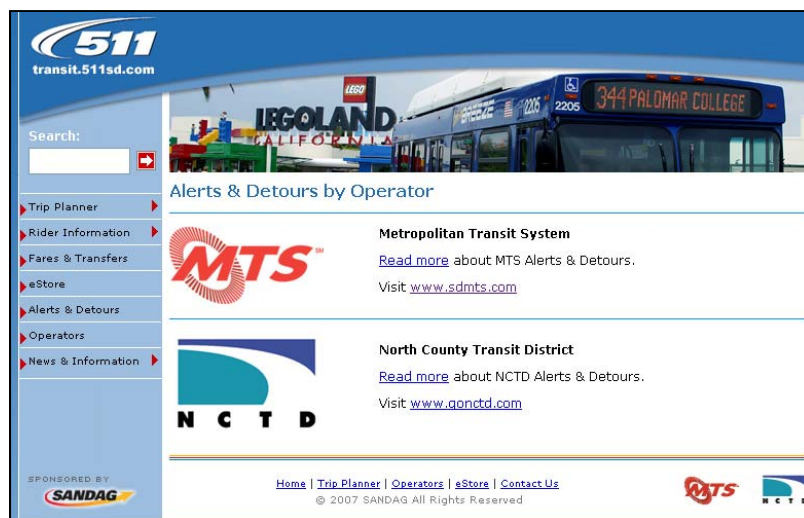
- MTS and NCTD have a regional pass used for NCTD and MTS non-premium bus service, NCTD Sprinter light rail service, and MTS Trolley light rail service.
- NCTD and MTS have a revenue sharing agreement that allows each agency to receive pass revenue based on the amount of regional pass boardings each agency receives.
- NCTD and MTS have a separate revenue sharing agreement that allow NCTD Coaster pass holders to use MTS services. This agreement provides MTS with 5 percent of the Coaster pass revenue. MTS is currently negotiating a new revenue sharing agreement to reflect data available from the use of the regional smart card and to prepare for regional bus rapid transit service to be operated by MTS. The bus rapid transit service is projected to increase the number of transfers between the agencies' services when it comes on line.

Joint Operation

- NCTD and MTS have a separate agreement that has MTS operating Coaster service in Sorrento Valley (within MTS service area), with NCTD subsidizing operating costs.

Information Sharing

- SANDAG sponsors "511," which is a free phone and Web service that consolidates the region's transportation information into a one-stop resource. The site provides information on transit news updates, maps, schedules, and fare information.



Washington, D.C./Northern Virginia/Maryland

TTI is continuing efforts to uncover additional regional transit services for this section.

The Washington, D.C. region is made up of the District of Columbia and eight Counties in Northern Virginia and Maryland. Table 1 provides a list of the counties and population, along with UZA statistics.

Table 1. Area Population and Size.

Area	2000 Population	2010 Population	Square Miles
District of Columbia	572,059	601,723	61.05
Charles County	120,546	146,551	457.75
Frederick County	195,277	233,385	660.22
Montgomery County	873,341	971,777	491.25
Prince George's County	801,515	863,420	482.69
Maryland Total	1,990,679	2,215,133	2,092.00
Arlington County	189,453	207,627	25.97
Fairfax County	969,749	1,081,726	390.97
Loudon County	169,599	312,311	515.56
Prince William County	280,813	402,002	336.40
Virginia Total	1,609,614	2,003,666	1,268.90
Total	4,172,352	4,820,522	3,421.86
Washington UZA	3,933,920	4,586,770	1,321.73

The region is part of the Boston to Washington megalopolis and contains a large number of municipalities. Figure 1 provides a map of the region, showing the breakdown of municipalities and county and state boundaries.

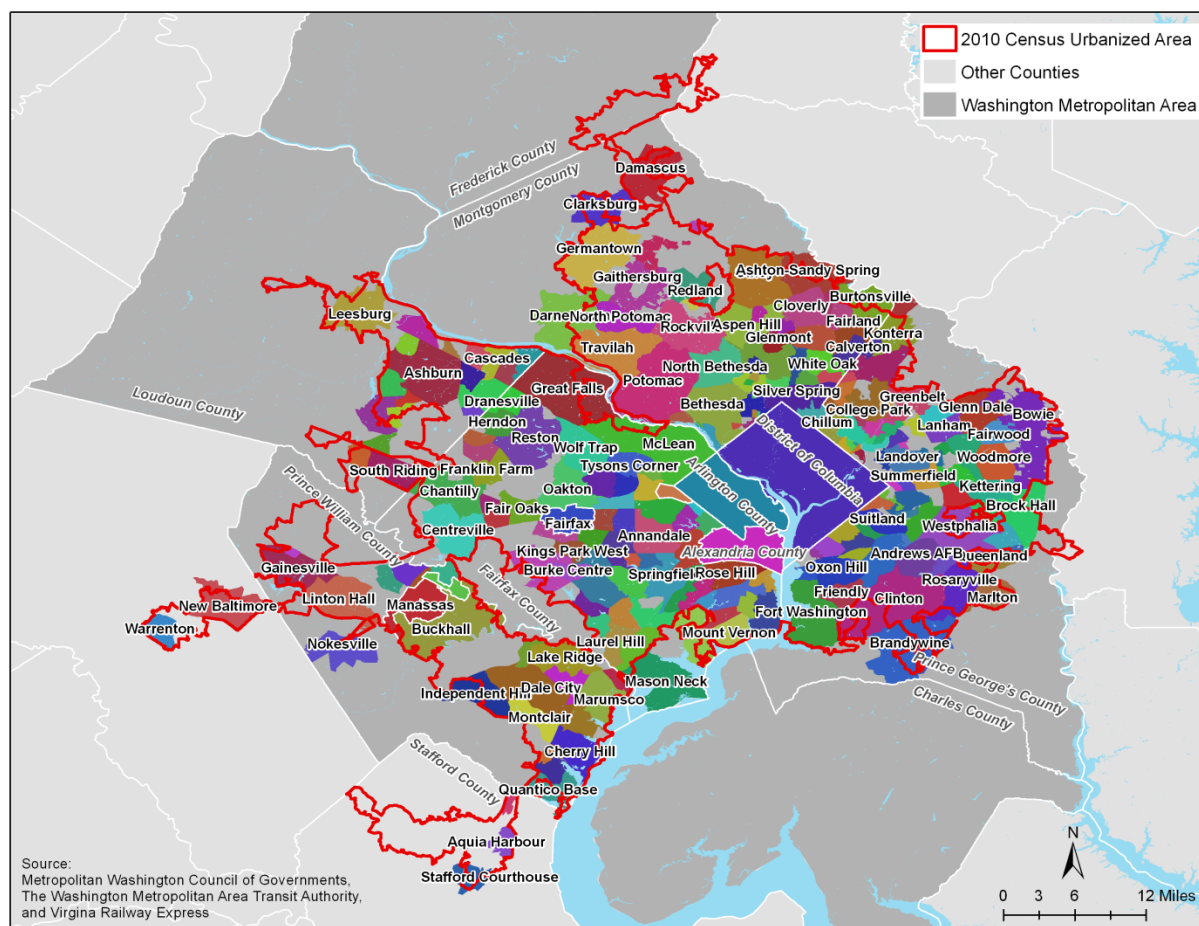


Figure 1. Municipalities and Urbanized Areas in the Region

Metropolitan Transportation Organization

The Metropolitan Washington Council of Governments houses the National Capital Region Transportation Planning Board (TPB), which is the designated MPO for the region. Members of the TPB include representatives of local governments; state transportation agencies; the Maryland and Virginia General Assemblies; the Washington Metropolitan Area Transit Authority; and non-voting members from the Metropolitan Washington Airports Authority and federal agencies.

Transit Authorities

- *Washington Metropolitan Area Transit Authority (WMATA)* was created by an interstate compact in 1967 to plan, develop, build, finance, and operate a balanced regional transportation system in the national capital area. Metrorail and metrobus serve a population of 3.5 million within a 1,500 square mile area. Metro and the federal government are partners in transportation. Thirty-five Metrorail stations serve federal facilities and nearly half of Metro's peak period commuters are federal employees.
- *Maryland Transit Administration (MTA)* is a division of the Maryland Department of Transportation. MTA operates local and commuter buses, light rail, heavy rail, Maryland Area Regional Commuter (MARC) Train Service, and a comprehensive paratransit system. MTA also manages the taxi access system, and directs funding and statewide assistance to

Locally Operated Transit Systems (LOTS) in each of Maryland's 23 counties, Baltimore City, Annapolis and Ocean City.

Joint Powers

- Virginia Railway Express (VRE) Virginia Railway Express provides commuter rail service from the Northern Virginia suburbs to Alexandria, Crystal City and downtown Washington, D.C., along the I-66 and I-95 corridors. The service operates 29 trains from 18 stations. The VRE is a partnership of Northern Virginia Transportation Commission (NVTC) and Potomac and Rappahannock Transportation Commission (PRTC).

County Agencies

- Fairfax Connector is a part of Fairfax County Virginia and provides local fixed route and express bus service to the county. Additionally, Fairfax Connector provides demand response transportation to eligible patrons.
<http://www.fairfaxcounty.gov/connector/pdf/policiesbrochure.pdf>
- Arlington Transit (ART) is part of Arlington County Virginia and provides fixed route and demand response bus service within the county. ART supplements the Metro system and provides connections Metrorail and the VRE.
- Loudoun County Transportation Services belongs to Loudoun County Virginia. Loudoun County provides local and commuter bus service within the county. Loudoun County has 13 park-and-ride lots for commuter service. The commuter service travels into West Falls Church Metro Station, Rosslyn Metro Station, the Pentagon, and into Washington D.C.
- Frederick County Transit offers public fixed-route transit and commuter service within Frederick County. Additionally, Frederick County provides information on commuter services and park and ride locations for MTA services.
- Montgomery County Transit (RIDE ON) provides 83 fixed routes within Montgomery County and is designed to complement the service provided by the other transit providers in the Montgomery County. Ride-ON coordinates with other transit and transportation providers. The RIDE ON service coordinates with WMATA's Metrobus and Metrorail and MTA's MARC commuter rail and commuter bus systems.
- Prince George's County Transit (TheBus) offers 25 local fixed-routes within Prince George County. The fixed-route service has 18 routes that offer transfers to Metrorail stations in Prince George County. Additionally, TheBus has one route serving the University of Maryland campus, and students, faculty and staff can TheBus service ride fare-free. TheBus also provides curb-to-curb demand response transportation (Call-A-Bus) throughout the county for eligible individuals. TheBus also offers a Call-A-Cab program for senior and/or disabled residents. The Call-A-Cab allows eligible individuals to purchase discounted coupon books for taxicab transportation service.

Regional Transit

- Virginia Regional Transit provides fixed route and demand response transportation in 11 counties in Virginia. The focus of the service is to provide individuals living in small urban or rural areas with transit service. The service also works with neighboring providers to coordinate routes and schedules for seamless transfers. VRT offers each locality they serve the opportunity to name its respective bus service. VRT operates the following services - Front Royal Area Transit (FRAT), Town of Orange Transit (TOOT), Circuit Rider,

Coordinated Area Transportation (CATS), Culpeper Connector, and Blue Ridge Community College (BRCC) Shuttle.

- Central Maryland Regional Transit (CMRT) manages by contract public transit services in Howard County, Anne Arundel County, Prince George's County, and the City of Laurel Transit.

Municipal Agencies

- City of Fairfax City-University-Energysaver (CUE Bus) system is owned and operated by the City of Fairfax in conjunction with George Mason University (GMU). GMU provides an annual operating subsidy to the CUE Bus. CUE provides transit service within Fairfax and to/from the Vienna/Fairfax-GMU Metrorail Station and the GMU Fairfax campus.
- Alexandria Transit Company (Dash) provides 13 fixed-routes within the City of Alexandria, and connects with Metrobus, Metrorail, and Virginia Railway Express. DASH serves the Alexandria Metrorail Stations and the Pentagon Metrorail station during morning and evening peak periods.

Regional Commissions

Northern Virginia Transportation Commission (NVTC) manages and controls the functions, affairs, and property of the Northern Virginia Transportation District--which was created by the 1964 Acts of Assembly to facilitate "planning and developing a transportation system for Northern Virginia and for the safety, comfort and convenience of its citizens and for the economical utilization of public funds." NVTC is an advocate of adequate, stable, and reliable funding to finance public transit and supports improved efficiency of the region's transportation system. Twenty commissioners make up NVTC's Board of Directors. Thirteen are locally elected officials from its six member jurisdictions: Arlington (3), Fairfax (5), and Loudoun (1) counties, and the cities of Alexandria (2), Fairfax (1), and Falls Church (1). Six of the 20 commissioners are appointed from the General Assembly (2 senators and 4 delegates). The other commissioner, currently the director of the Virginia Department of Rail and Public Transportation (VDRPT), represents the Virginia Secretary of Transportation. NVTC also appoints Virginia's two principal and two alternate members to the Board of Directors of the Washington Metropolitan Area Transit Authority (WMATA or Metro) and is a co-owner of the Virginia Railway Express, appointing three voting members and an alternate to VRE's Operations Board.

The Potomac and Rappahannock Transportation Commission (PRTC) is a regional transportation district comprised of six jurisdictions: Prince William, Stafford and Spotsylvania Counties and the Cities of Manassas, Manassas Park and Fredericksburg. PRTC was established in 1986 to help create and oversee the Virginia Railway Express (VRE) commuter rail service and to assume responsibility for bus service implementation. PRTC provides commuter and local bus (OmniRide) services in Prince William County and the Cities of Manassas and Manassas Park, as well as a free ridematching service. In addition, PRTC continues to operate VRE in partnership with the Northern Virginia Transportation Commission, which represents the Counties of Arlington, Fairfax and Loudoun and the Cities of Alexandria, Fairfax and Falls Church.

Table 2. 2010 National Transit Database.

State	Agency	Operating Expense	Passenger Trips	Revenue Miles	Revenue Hours
The District of Columbia	WMATA	\$1,442,921,263	418,125,650	128,074,349	8,369,269
Maryland	CATS	\$1,617,093	143,308	821,084	60,983
	MTA	\$570,763,245	104,190,623	48,356,599	3,326,249
	TheBus	\$22,731,554	3,620,255	2,877,163	226,468
	RIDE ON	\$103,742,038	28,063,392	14,306,021	1,117,685
	Frederick County Transit	\$5,556,893	786,711	1,148,910	83,520
Virginia	ART	\$9,313,884	2,088,170	1,150,379	115,810
	CUE	\$2,850,899	929,897	431,564	33,536
	Fairfax Connector	\$58,123,839	9,629,993	7,714,381	528,481
	PRTC	\$24,036,102	3,176,349	2,965,161	155,650
	VRE	\$52,411,450	4,016,589	1,851,922	59,010

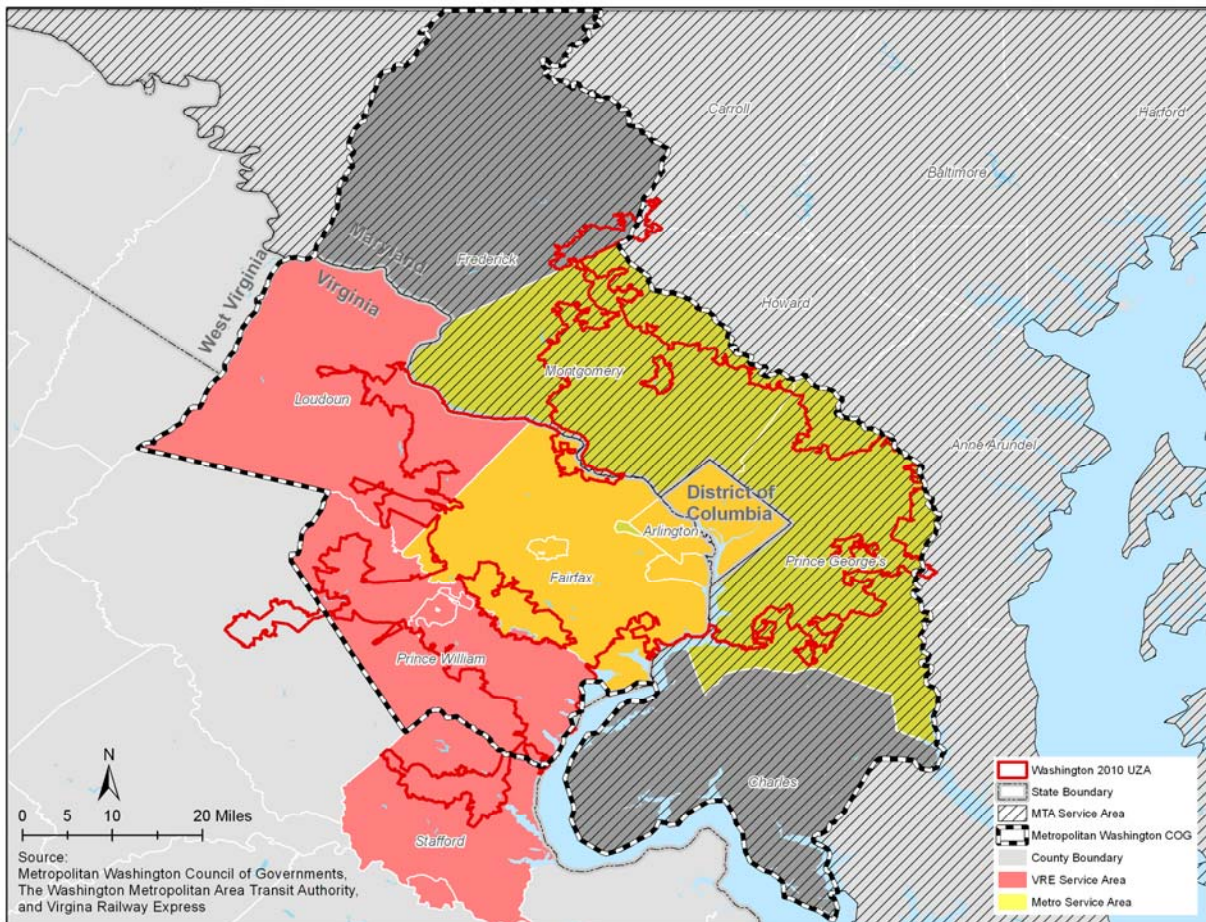


Figure 2. Transit Providers in the Washington Metropolitan Region

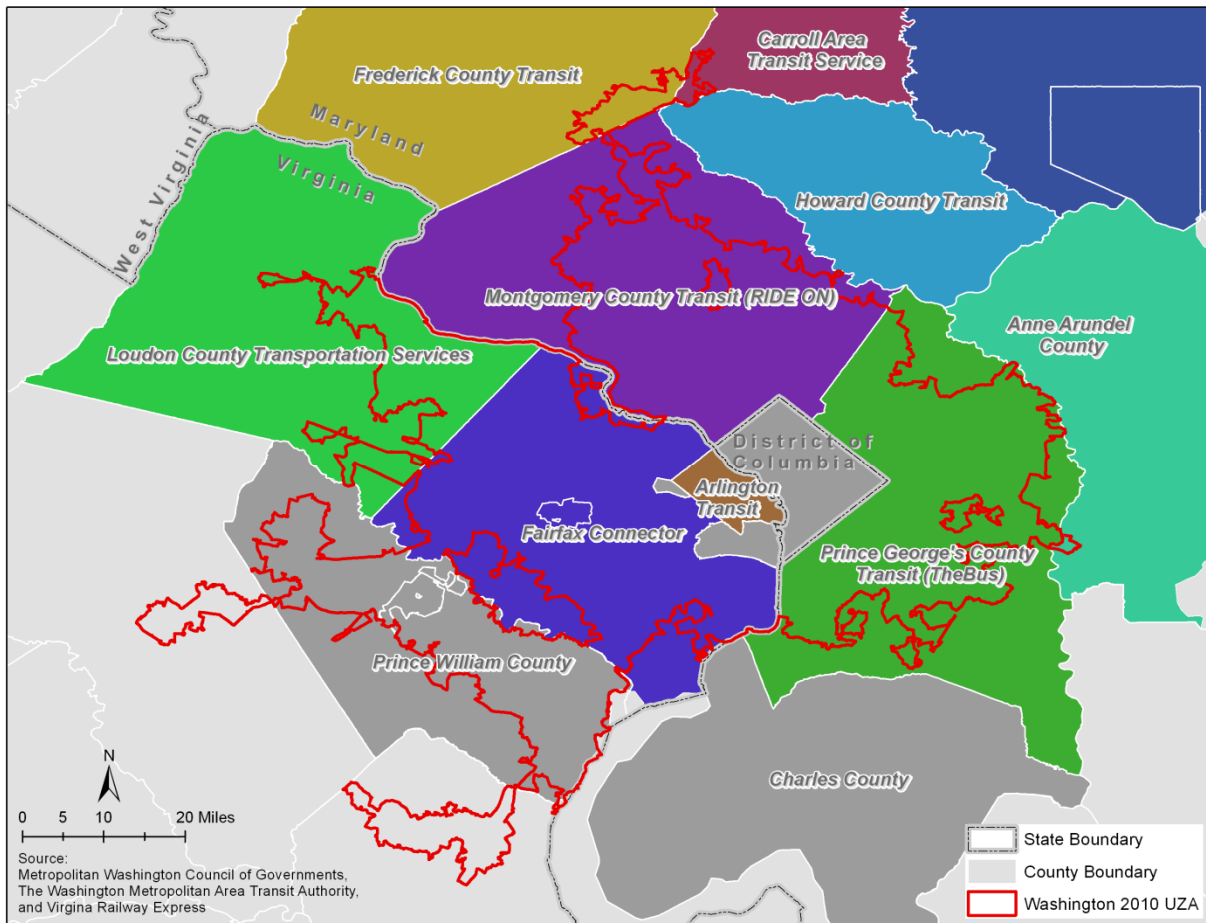


Figure 3. County Transit Providers in the Washington Metropolitan Region

Examples of Coordinated and Integrated Services

The Washington D.C. Region contains several examples of coordinated and/or integrated services. This section provides examples of transit information, infrastructure, and service coordination/integration.

Information Coordination/Integration

The region has several initiatives for transit information coordination and integration. The following list provides the accomplishments:

- Transportation Resource Information Point (www.mdtrip.org) provides one location of information on public transportation in Maryland. The website allows a user to select a county and type of transportation mode and it will retrieve a list of public and private transportation providers in the region. The website also provides real time departures and maps and schedules on available transportation services in Maryland. The website also provides a trip planner including the multiple transit providers.
- Several of the county transit provider websites provide information on the public transit services offered within the county (in addition to the service provided by the county). For example, Montgomery County Transit (RIDE ON) provides information on Metrorail and Metrobus service and fares.

Shared Infrastructure

Many of the transit stations in the region serve as interagency facilities. The list below provides a few stations that serve as transfer points between modes and between agencies:

- ❑ Union Station – Metrorail, Metrobus, Amtrak, MARC, VRE, taxicabs, and tour buses
- ❑ King Street - Metrorail, Metrobus, Amtrak, VRE, and DASH
- ❑ New Carrollton – Metrorail, Metrobus, Amtrak, MARC
- ❑ Pentagon – Metrorail, Metrobus, Fairfax Connector and PRTC OmniRide

The West Ox Bus Operations Center is jointly funded and occupied by Fairfax County and WMATA. The facility has space for 100 WMATA buses and 75 Fairfax buses. The agencies have a joint use agreement in which WMATA pays for portion of the operating and maintenance costs to the county.

<http://www.fairfaxcounty.gov/dmb/fy2012/advertised/volume2/100.pdf>

Joint Powers

The VRE is joint powers agreement between NVTC and PRTC and provides two commuter rail lines from D.C. to suburban portions of Virginia.



Joint Fares

CharmCard is the smart card fare system provided in Maryland SmarTrip is the smart card fare system provided in D.C. The two cards work on MTA, WMATA, VRE, and County Transit Providers. Despite the difference in names (CharmCard vs. SmarTrip), these cards are essentially the same and work on the same services.



Joint Operation

In 2008, the Centreville/Chantilly Metrobus routes (12s and 20s) were converted to Fairfax Connector operations. These are local- non-regional bus routes.

Regional Routes and Services

- WMATA provides service in Arlington and Fairfax Counties in Virginia and Montgomery and Prince George Counties in Maryland. Each of these counties operates separate county transit service.
- County providers coordinate with WMATA and MTA to provide seamless transfers. Many of the county providers offer bus service to Metrorail stations where patrons can transfer and travel to DC area.
- Loudoun County Transit operates multiple rush hour service routes from park and ride lots in Loudoun County to Washington D.C.
- Loudoun County operates the Tysons Express Bus Service, which includes two routes one originating in Leesburg, VA and the other originating in Hamilton, VA. Both routes travel to Tysons Corner in Fairfax County, VA. The service began operation in 2010 and is funded by Metropolitan Washington Airports Authority's Dulles Corridor Metrorail Project. Loudoun County purchased four commuter buses that include free WiFi.
- The Washington Metropolitan Area Transit Authority (WMATA), Fairfax County, Loudoun County, Town of Herndon and the Metropolitan Washington Airports Authority (MWAA), are constructing a 23.1-mile transit system in the rapidly growing Dulles Corridor in Fairfax and Loudoun counties, Virginia.
- The MARC train a commuter rail system providing rail service to Harford County, MD; Baltimore, MD; Washington D.C.; Brunswick, MD; Frederick, MD, and Martinsburg, WV.

Phoenix/Maricopa County, AZ

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. Table 1 provides the population and square miles of each UZA, and Figure 1 displays the location and geographic boundaries of the UZAs.

Table 1. Area Population and Size.

Area	Population 2000	Population 2010	Square Miles
Maricopa County	3,072,149	3,817,117	9,200
Total Urbanized Area	2,974,924	3,826,155	1,235
Phoenix-Mesa UZA	2,907,049	3,629,114	1,147
Avondale-Goodyear UZA	67,875	197,041	88

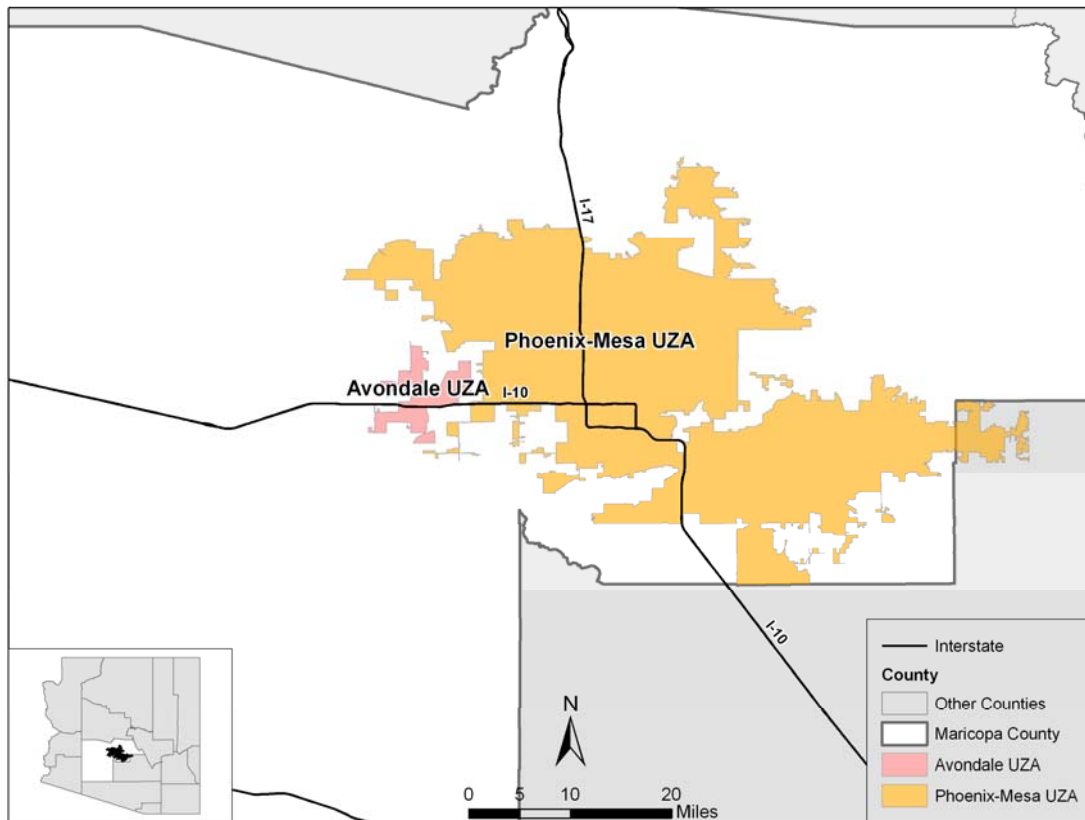
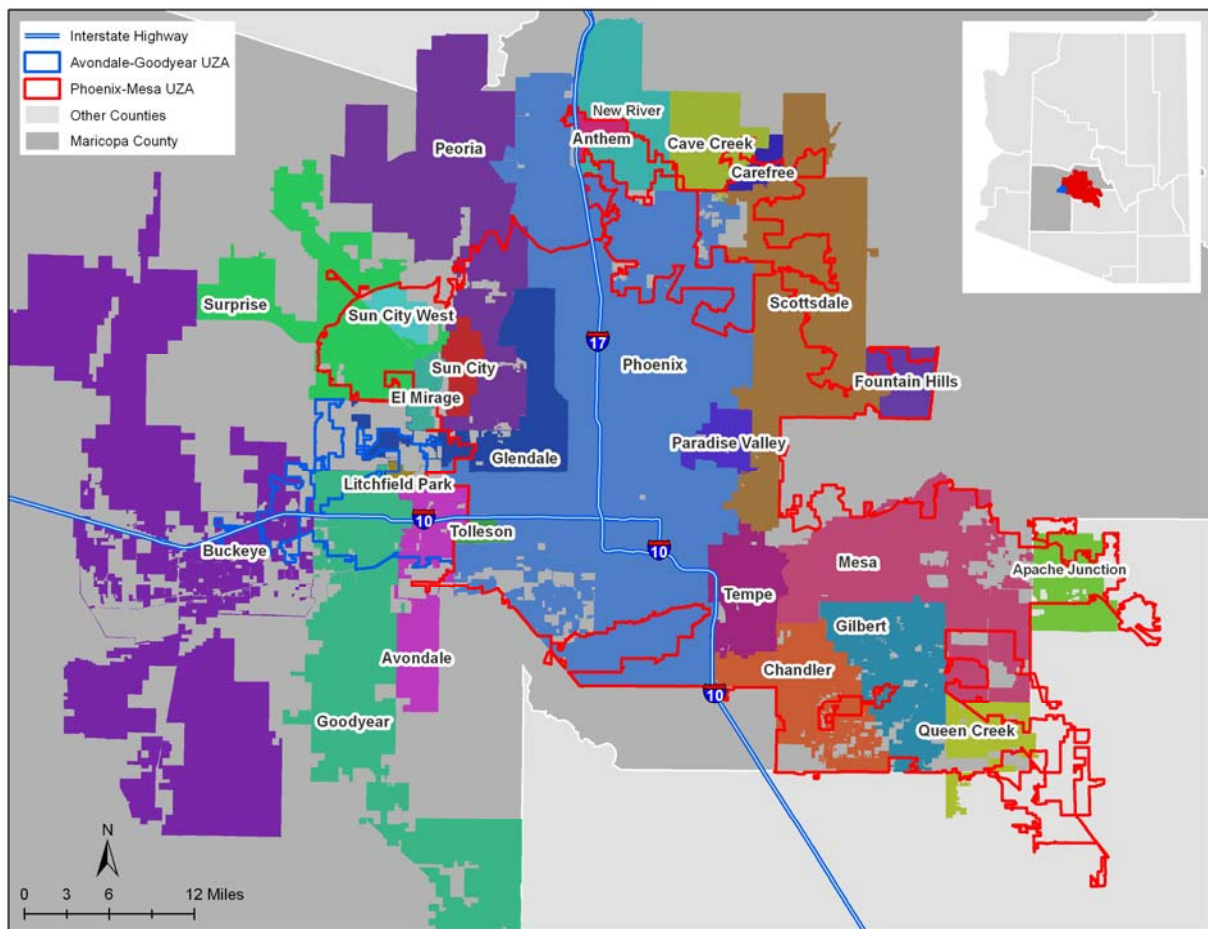


Figure 1. Urbanized Areas within Maricopa County.

The region contains several sizable cities. Table 2 lists cities within the Phoenix region with a population above 15,000. Figure 2 provides the locations and boundaries of the jurisdictions.

Table 2. Jurisdiction Populations

Jurisdiction	2000 Population	2010 Population
Phoenix	1,321,045	1,445,632
Mesa	396,375	439,041
Chandler	176,581	236,123
Glendale	218,812	226,721
Scottsdale	202,705	217,385
Tempe	158,625	161,719
Peoria	108,364	154,065
Surprise	30,848	117,517
<i>Avondale</i>	35,883	76,238
<i>Goodyear</i>	18,911	65,275
Sun City	38,309	37,499

**Figure 2. Jurisdictions in Urbanized Areas.**

Within the region, 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, the Regional Public Transportation Authority (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 3 provides the arrangement of entities contracting for service and the entities funding service.

Table 3. Arrangement of 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	X		
City of Phoenix	X	X	X
City of Tempe	X	X	X
City of Mesa	X		X
City of Glendale ^[1]	X	X	
City of Chandler	X		X
City of Peoria		X	
City of Scottsdale ^[2]	X	X	X
Town of Buckeye	X		
City of Avondale	X	X	
City of Goodyear		X	
City of Surprise		X	
Town of Gilbert	X		
Litchfield Park		X	
Tolleson		X	

The RPTA was formed in 1985 as the result of Phoenix-area voters approving a one-half percent sales tax increase for expansion of the local freeway system, and for expansion of mass transit. The RPTA was then chartered under the laws of the state of Arizona. Valley Metro, as an integrated regional transit service, did not begin operations under its own brand identity until 1993. In 2002, 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 and created bus rapid transit and light rail, among other things.

RPTA is the fiscal agent for Proposition 400 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 received 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)

¹ Directly operates circulator service

² Directly contracts with Ollie the Trolley for circulator service.

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



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.

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.

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, and central Mesa.

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. The following dial-a-ride services provide demand response service to the region: City of El Mirage, Southwest Valley ADA, Paradise Valley ADA, Sun Cities Area Transit, City of Peoria, City of Glendale, and City of Surprise.¹

Table 4. 2010 National Transit Database.

Agency	Operating Expense	Passenger Trips	Revenue Miles	Revenue Hours
RPTA	\$62,555,164	7,747,543	8,332,235	588,830
City of Phoenix	\$174,737,452	37,700,632	22,993,529	1,810,853
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

Metropolitan Planning Organization (MPO)

The regional MPO in the Phoenix metropolitan region is 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 governing and policy-making body for the MPO 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. MAG contains a transit committee made up of representatives of MAG member cities 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.

Examples of Coordinated and Integrated Services

Within the region, the number of transit providers creates jurisdictional boundary issues.

- As mentioned previously, 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.
- Currently, the transit providers offering the majority of fixed route bus service within the region are 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.

¹ Short Range Transit Plan and Valley Metro Website

The attached excerpt from the Valley Metro Short Range Transit Program provides the specifics of the complicated intergovernmental structure for transit services in the Phoenix region.

**FUNDING SOURCES AND TRANSIT
OPERATORS BY ROUTE
AS OF January 23, 2012**

Local Routes:

Route:	Funded By:	Contracted By:	Operated By:
ALEX	Phoenix	Phoenix	MV Transportation
DASH	Phoenix	Phoenix	Veolia Phoenix
MARY	Phoenix	Phoenix	First Transit
SMART	Phoenix	Phoenix	Veolia Phoenix
Grand Ave Ltd	RPTA, Phoenix	Phoenix	First Transit
GUS 1 & 2	Glendale	Glendale	City of Glendale
GUS 3	Glendale	Glendale	City of Glendale
FLASH	Arizona State University	Tempe	Veolia Tempe
Mercury	Tempe	Tempe	Veolia Tempe
Venus	Tempe	Tempe	Veolia Tempe
Earth	Tempe	Tempe	Veolia Tempe
Mars	Tempe	Tempe	Veolia Tempe
Jupiter	Tempe	Tempe	Veolia Tempe
BUZZ	Mesa	RPTA	Veolia RPTA
downtown trolley	Scottsdale	Scottsdale	Dunn Transportation
Neighborhood Trolley	Scottsdale	Scottsdale	Dunn Transportation
MILLER ROAD Trolley	Scottsdale	Scottsdale	Dunn Transportation
ZOOM	Avondale	RPTA	Valu Trans
METRO LRT	Phoenix, Tempe, Mesa	METRO LRT	METRO Light Rail
LINK – Main St	RPTA	RPTA	Veolia RPTA
LINK – Arizona Ave	RPTA	RPTA	Veolia RPTA
0	Phoenix	Phoenix	Veolia Phoenix
1	Phoenix	Phoenix	Veolia Phoenix
3	Phoenix, Avondale	Phoenix	First Transit
7	Phoenix	Phoenix	Veolia Phoenix
8	Phoenix	Phoenix	Veolia Phoenix
10	Phoenix	Phoenix	Veolia Phoenix
12	Phoenix	Phoenix	Veolia Phoenix
13	Phoenix	Phoenix	First Transit
15	Phoenix	Phoenix	Veolia Phoenix
16	Phoenix	Phoenix	Veolia Phoenix
17	Phoenix, Scottsdale	Phoenix	First Transit

Route:	Funded By:	Contracted By:	Operated By:
17A	Phoenix, Avondale, Goodyear	Phoenix	First Transit
19	Phoenix	Phoenix	Veolia Phoenix
27	Phoenix	Phoenix	Veolia Phoenix
29	Phoenix, Scottsdale	Phoenix	First Transit
30	Phoenix, Mesa, Tempe	RPTA	Veolia RPTA
35	Phoenix	Phoenix	Veolia Phoenix
39	Phoenix	Phoenix	Veolia Phoenix
40	RPTA	RPTA	Veolia RPTA
41	Phoenix, Scottsdale	Phoenix	First Transit
43	Phoenix	Phoenix	First Transit
44	Phoenix	Phoenix	Veolia Phoenix
45	Phoenix, Tempe, Mesa, RPTA	RPTA	Veolia RPTA
48	Tempe	Tempe	Veolia Tempe
50	Phoenix, Scottsdale, RPTA	Phoenix	Veolia Phoenix
51	Glendale, Phoenix	Phoenix	First Transit
52	Phoenix	Phoenix	Veolia Phoenix
56	Phoenix, Tempe, RPTA	Tempe	Veolia Tempe
59	Phoenix, Glendale, RPTA	Phoenix	First Transit
60	Phoenix, Glendale	Phoenix	Veolia Phoenix
61	Phoenix, Mesa, RPTA	RPTA	Veolia RPTA
62	Tempe	Tempe	Veolia Tempe
65	Tempe	Tempe	Veolia Tempe
66	Tempe, GRIC, RPTA	Tempe	Veolia Tempe
67	Phoenix, Glendale, RPTA	Phoenix	First Transit
70	Phoenix, RPTA	Phoenix	Veolia Phoenix
72	RPTA	Tempe	Veolia Tempe
77	Phoenix, RPTA, Mesa	Tempe	Veolia Tempe
80	Phoenix, Glendale	Phoenix	Veolia Phoenix
81	Scottsdale, Tempe, RPTA	Tempe	Veolia Tempe
90	Phoenix, Glendale	Phoenix	Veolia Phoenix
96	RPTA	RPTA	Veolia RPTA
104	Mesa, RPTA	RPTA	Veolia RPTA
106	Phoenix, Scottsdale, Glendale, RPTA	Phoenix	Veolia Phoenix
108	Tempe, Gilbert, Mesa, RPTA	Tempe	Veolia Tempe
112	RPTA	RPTA	Veolia RPTA
120	Mesa	RPTA	Veolia RPTA
122	Phoenix, Glendale	Phoenix	Veolia Phoenix

Route:	Funded By:	Contracted By:	Operated By:
128	Mesa	RPTA	Veolia RPTA
136	RPTA	RPTA	Veolia RPTA
138	Phoenix, Glendale	Phoenix	Veolia Phoenix
154	Phoenix	Phoenix	Veolia Phoenix
156	RPTA	RPTA	Veolia RPTA
170	Phoenix, Glendale, Scottsdale	Phoenix	Veolia Phoenix
184	RPTA, JARC	RPTA	Veolia RPTA
186	Phoenix, Glendale	Phoenix	Veolia Phoenix
251	GRIC	RPTA	Valu Trans

RAPID AND Express ROUTES:

Route:	Funded By:	Contracted By:	Operated By:
SR-51 RAPID	Phoenix	Phoenix	Veolia Phoenix
I-10 East RAPID	Phoenix	Phoenix	Veolia Phoenix
I-10 West RAPID	Phoenix	Phoenix	First Transit
I-17 RAPID	Phoenix	Phoenix	Veolia Phoenix
510	RPTA	Tempe	Veolia Tempe
511	RPTA	RPTA	Veolia RPTA
512	RPTA	Tempe	Veolia Tempe
520	RPTA	Tempe	Veolia Tempe
521	RPTA	Tempe	Veolia Tempe
531	RPTA	RPTA	Veolia RPTA
532	RPTA	RPTA	Veolia RPTA
533	RPTA	RPTA	Veolia RPTA
535	RPTA	RPTA	Veolia RPTA
540	RPTA	RPTA	Veolia RPTA
541	RPTA	RPTA	Veolia RPTA
542	RPTA	RPTA	Veolia RPTA
560	RPTA	Phoenix	First Transit
562	RPTA	RPTA	Valu Trans
563	RPTA	RPTA	Valu Trans
571	Surprise	RPTA	Valu Trans
573	RPTA	RPTA	Valu Trans
575	RPTA	RPTA	Valu Trans

Route:	Funded By:	Contracted By:	Operated By:
581	RPTA	Phoenix	Veolia Phoenix

RURAL ROUTES:

Service:	Funded By:	Contracted By:	Operated By:
685	ADOT, RPTA	RPTA	AJO Transportation

Dial-A-Ride Systems:

Service:	Funded By:	Contracted By:	Operated By:
El Mirage	El Mirage		City of El Mirage
Glendale	Glendale, RPTA		City of Glendale
East Valley DAR	Chandler, Gilbert, Mesa, Scottsdale, Tempe, RPTA	RPTA	Veolia RPTA
Paradise Valley ADA	RPTA, Paradise Valley	RPTA	Veolia RPTA MV Transportation
Southwest Valley ADA	RPTA, Avondale, Goodyear, Litchfield Park, Tolleson	City of Phoenix	MV Transportation
Peoria	Peoria, RPTA		City of Peoria
Phoenix	Phoenix	City of Phoenix	MV Transportation
Surprise	Surprise, RPTA		City of Surprise
MCDRTS	El Mirage, Fountain Hills, weekend Peoria, Sun City, Mobility Center (eff Feb 2011)	RPTA	Total Transit
Other Services:	Funded By:	Contracted By:	Operated By:
Regional Vanpool	RPTA	RPTA	VPSI

NOTE: RPTA began funding ADA service on February 1, 2006.