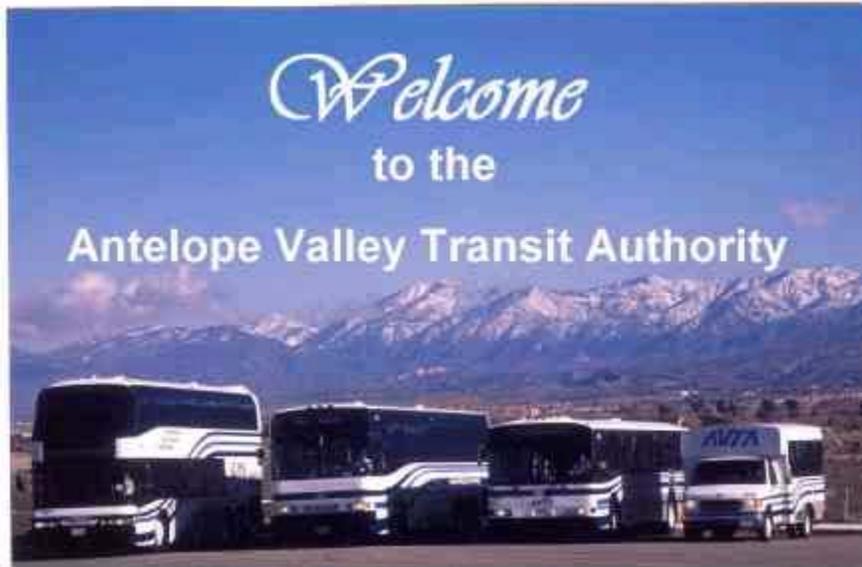


Antelope Valley Transit Authority Comprehensive Long-Range Transit Plan



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**Antelope Valley Transit Authority (AVTA)
Comprehensive Long Range Transit Plan
Final Report**

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Executive Summary

The Antelope Valley Transit Authority (AVTA) is a Joint Powers Authority formed under an agreement among the County of Los Angeles and the cities of Lancaster and Palmdale to provide transit services to the Antelope Valley region. URS developed this Long Range Transit Plan to determine the current level of AVTA service, future conditions that may affect transit services, and recommendations as to how service adjustments and capital funding may be changed to meet future needs. The Long Range Transit Plan:

- provides an overview and comparison of the existing services provided by AVTA with a description of current routes, service times, fares, and operating expenses;
- sets out the current and projected demographics over a 20-year period for the Antelope Valley area and describes future planned land uses that may affect transit in the AVTA area;
- assesses potential options to reduce AVTA's carbon footprint, particularly with regard to green buildings and buses;
- provides recommended service adjustments to accommodate the projected demographic changes and planned land uses in the AVTA service area;
- gives an overview of the current AVTA fleet inventory and describes the anticipated future capital and operating requirements; and
- summarizes the existing AVTA funding sources at the federal, state, and local levels and describes possible other available funding sources.

AVTA provides public transportation services to the Antelope Valley in northern Los Angeles County. AVTA's total service area comprises 1,200 square miles bounded by Kern County to the north, San Bernardino County to the east, the Angeles National Forest to the south, and Interstate 5 to the west. AVTA services provide mobility in the Antelope Valley and in particular, the cities of Palmdale and Lancaster and surrounding unincorporated areas of Los Angeles County. These services include fixed-route transit, Dial-A-Ride services for seniors over the age of 65 and disabled residents, and weekday commuter service. Dial-a-Ride serves the entire 1,200 square mile area. Most local fixed-route transit service is within the urban service area, approximately 140 square miles, while commuter service connects the Antelope Valley to Downtown Los Angeles, Century City, and the West San Fernando Valley.

The study team conducted stakeholder interviews, examined existing AVTA services, compared those services to other agencies with similar characteristics, and analyzed current and projected demographics and growth in the AVTA area to develop an overview of the current status of the AVTA transit system. The following is a summary of these findings:

- Stakeholder interviews – The study team interviewed stakeholders regarding AVTA perspectives, challenges and visions, geographic service regions and peak travel demands, modes of transportation and intermodal connectivity, sustainability considerations, financial considerations, support for transit investment, and means of advancing the discussion of AVTA's future. Stakeholders included elected and

appointed officials and community and civic leaders in the Antelope Valley. In general, interviewee concerns focused on travel and wait times, the Dial-A-Ride structure, and duplication of Metrolink services. Among the findings of these interviews were suggestions that transit be more channeled toward dependent populations, employment transport, and medical areas and airports. Interviewees also suggested that solutions be investigated to better serve rural areas and incorporate greener solutions.

- AVTA services - Existing AVTA services were analyzed over a 12- year period from 1996 to 2007. This analysis shows that AVTA's operating costs increased at a higher rate than did the amount of service provided or overall transit ridership. For the 12-year period, operating costs have risen by 96 percent in constant dollars while the amount of service provided has increased by 87 percent and ridership has increased by 72 percent. Operating costs per vehicle revenue hour (a measure of service provision) has increased by only five percent over the 12-year period, indicating that added service accounts for the large majority of operating cost increases.
- Comparison to similar agencies - AVTA services were also compared to agencies elsewhere in the U.S. with similar characteristics such as unlinked passenger trips, operating budget, and service area population. This comparison reveals that, when compared to other similar agencies serving suburban areas, AVTA has a smaller fleet and smaller operating budget. AVTA receives a higher proportion of funding from farebox returns and local sources than do other peer agencies, which rely more heavily on state and federal funding sources. One important factor influencing the proportion of local funding is a dedicated funding source in the form of the County's half-cent sales tax dedicated to transit. It is prudent for AVTA to pursue more state and federal funding sources to bolster its operating budget, but identifying the source of the local match for these funding sources has historically been difficult.
- In comparison with agencies that deliver similar services, AVTA operates a slightly smaller fleet, and delivers service with an operating budget that is slightly smaller than those of its peers. At the same time, AVTA enjoys a higher level of farebox recovery than most of its peers, thanks to a longstanding policy by AVTA's Board of Directors to operate the system on a business model. Among agencies with similar operating budgets, AVTA once again operates with a smaller fleet, but again with significantly higher farebox recovery. AVTA performs above average among selected peer agencies in terms of the cost efficiency measures analyzed, but below average in terms of the measures based on ridership.
- Projected demographics - An analysis of projected demographics and growth over the 27-year period from 2008 to 2035 indicates that the population of Antelope Valley will continue to increase in that time. The number of households is projected to increase at a slightly lower rate, but jobs within the Antelope Valley are anticipated to only increase at half the rate of the population growth. This trend suggests that a significant proportion of Antelope Valley residents in the future will need to travel outside of the Antelope Valley for employment purposes, potentially increasing demand for express transit services. In addition to demographic projections, a review of proposed development and land use plans indicated additional opportunities and potential demand for future transit services.

AVTA and the communities it serves stand at a cusp of opportunity for the future growth and vitality of Antelope Valley. The demographic trends reflect a growing need and demand for commuter services. Fostering business and development within the Antelope Valley may also depend on the availability of convenient, economical means of transportation, particularly as congestion on the surface road network is forecast to increase. Public transit services should thus be seen not as an alternative for those who cannot afford to drive, but as a necessary component vital to the region's quality of life and economic health.

On the basis of projected increases in resident population, growing out-of-area employment, anticipated future land uses, and the analysis of current service performance, the following adjustments to the three service types provided by AVTA are recommended to improve service and increase efficiency:

- Increase service frequency on core routes –Core routes are defined as those routes with the highest ridership and productivity in the AVTA network. Routes 1, 2/3, 4, and 11/12 comprise the core routes in the AVTA network.
- Implement a Bus Rapid Transit (BRT) route along the 10th Street West corridor (served by Route 1) or the Sierra Highway corridor, which has no local service. A BRT route with fewer stops and higher speeds would focus on creating a better connection between traffic generators in the region and, if more efficient transfers were introduced at major transit hubs, the BRT route could in essence act as a trunk line for the Antelope Valley's transit system. The BRT route could also connect the transit network to a future High Speed Rail Station serving the Antelope Valley.
- Implement transit preferential service in the 10th Street West or Sierra Highway corridor – In the event that BRT is not implemented, another possibility to accommodate large population growth and demand for transit service in the future would be to enhance service along the 10th Street West corridor by giving signal priority to buses, particularly in the commercial area near the Antelope Valley Mall.
- Commuter service adjustments - AVTA's commuter services currently have a very high farebox recovery ratio, but commuter services are costly to operate because of the one-way nature of the demand in a given time period. AVTA would like to find ways to reduce costs for these three routes without abandoning them entirely. Several adjustments are already under consideration to improve the efficiency of commuter services, including: adding Route 788 as a new route to serve North Hollywood at the Red Line Station; truncating Route 785 trips to and from downtown Los Angeles to Union Station by shifting service to new Route 788; truncating Route 786 trips to and from West Los Angeles; and truncating Route 787 trips to and from the San Fernando Valley.
- Conduct a Comprehensive Operational Analysis (COA) - The AVTA local service route network may also benefit from a COA of the structure of the network in terms of how the routes are configured and operated, and how this may affect ridership on the system. The current network structure has routes radiating out from three major nodes, effectively a variation of a hub and spoke system. Different service delivery approaches incorporating a BRT corridor or re-thinking AVTA's service provision structure (as noted

below) could be adopted. The ongoing Line-by-Line Analysis is expected to address many of these issues and could serve the purposes of a COA.

- More broadly, explore rationalization of the local fixed-route system that would more closely match service with demand. For example, AVTA might focus and expand big-bus service in urban areas where demand warrants enhanced service and identify innovative means of serving rural/suburban areas with deviated fixed routes or “smart” paratransit service. Emerging technologies can open up new possibilities for innovative service delivery methods. The goals of this rationalization are to maximize the use of scarce resources and to meet current and future needs for mobility in the Antelope Valley.
- Implement mobility management system – A mobility management program could include polices to maintain, manage, and improve the transportation system, expand travel options, improve personal mobility, reduce the number of commute trips during peak congestion periods, and increase the efficiency and reliability of the AVTA transportation system through the use of Intelligent Transportation Systems (ITS) and Transportation Demand Management (TDM).

In addition to evaluating AVTA's current service and developing recommendations for future adjustments, the study team analyzed AVTA's annual operating and capital expenses for the period from 1996 through 2007. The compound annual growth rate for this period (6.3 percent) was carried forward to determine the projected operating costs for the next 20 year period from 2007 to 2027. A second projection was made based on trends in operating cost per vehicle revenue hour, which increased by a compound annual rate of 0.4 percent from 1996 to 2007.

The operating budget was projected to increase from an observed \$12.7 million in 2007 to a projected \$43.4 million in 2027 (in 2007 dollars) under the first method, which implicitly assumes that service will continue to grow at the rate it has grown over the past 12 years. Under the second method, the projected operating budget in 2027 is \$13.9 million with an assumption that service levels will remain constant. The differences in projected 2027 operating budgets are significant, and these two scenarios might best be viewed as upper and lower limits to what will actually take place over the next 20 years: the transit system can be expected to grow to meet demand, but the rate of growth is likely to be lower than during the system start-up period over the past 12 years.

In addition, the capital expenses over this 20-year period were projected by costing the replacement of vehicles, equipment and facilities on the basis of useful life and necessary maintenance. This analysis indicates that AVTA's capital needs over the period 2007 to 2027 are approximately \$61 million in total, or slightly more than \$3 million annually.

These projected capital costs do not reflect the above recommended service adjustments, nor do they reflect proposed AVTA service adjustments and infrastructure additions. While no cost estimates are available for these potential projects, they would represent additional future capital and operating expenses:

- Lancaster City Park Transfer Center Enhancement Project
- Palmdale Transportation Center Expansion

- New Lancaster Metrolink Intermodal Station
- Introduction of High-Speed Train (HST) service and restructuring of transit services to enhance intermodal connectivity
- Replacement of fifteen transit buses with diesel turbine hybrid buses
- Finishing Phase II of Administration, Operations and Maintenance Facility construction
- Implement several photovoltaic shade structures
- Acquire additional land for the expansion of the existing Administration, Operations and Maintenance Facility
- Procure additional four expansion buses, four additional mid-sized vehicles, two expansion Dial-A-Ride vehicles, and two additional commuter coaches.

A comparison with similar transit agencies shows that AVTA has higher farebox revenue and lower state and federal funding than similar agencies. As noted earlier, compared to other agencies in the U.S. with similar operating and service characteristics, AVTA operates with a smaller fleet and smaller operating budget. Even given increasing operating costs and declining passenger use per unit of service, AVTA still receives a greater proportion of its revenue from passenger fares and local sources than do other similar agencies. This may indicate that AVTA is well-leveraged to pursue more state and federal funding to supplement its operating budget, as do comparable properties which rely more heavily on state and federal sources. To meet future anticipated funding needs, AVTA should therefore investigate the following potential funding sources:

Federal

- Congestion Mitigation and Air Quality Improvement Program (CMAQ)
- Federal Transit Administration (FTA) Urbanized Area Formula Grants Program (Section 5307)
- FTA Discretionary Bus and Bus-Related Facility Grants Program (Section 5309)
- FTA Section 5310 (Elderly and Disabled) and FTA Section 5311 (Non-Urbanized Area Formula)
- FTA Federal Access to Job and Reserve Commute (JARC)
- Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU) - AVTA should focus on introducing language in the upcoming federal transportation reauthorization bill to grant AVTA and other small transit agencies greater autonomy in receiving their fair share of transit funds.

State

- State Transportation Funding Program Reauthorization - AVTA should focus on introducing language into transportation bills at the state level that will grant AVTA and other small transit agencies greater autonomy in receiving their fair share of transit funds. The primary focus of AVTA's efforts should be funding for transit projects into the State Transportation Improvement Program (STIP).
- Regional Surface Transportation Program (RSTP)
- Regional Transportation Improvement Program (RTIP)
- Proposition 1B Infrastructure Bond Program funds related to BRT
- Antelope Valley Air Quality Management District funds related to projects that reduce emissions
- State Transit Assistance (STA) Program. The State of California eliminated these funds in its 2009 budget.
- Transportation Development Act (TDA) established a Local Transportation Fund (LTF) funds for transit and paratransit capital projects and operating services, and for bicycle and pedestrian projects.

Local

- Enactment of development fees. One type of development fee is an Indirect Source Review (ISR), which requires developers of new developments that are expected to create a substantial degree of air pollution to reduce particulate and smog-forming emissions generated by their projects. Based on stakeholder interviews held in October 2008, it is unlikely that the enactment of development fees in the Antelope Valley would gain much support at this time given the current hardships faced by the real estate development market. However, stakeholders felt that such fees could be explored once the state of the region's economy improves.
- Local taxation options. Examples include, but are not limited to, the approval of a half-cent transportation sales tax, a local fuel tax, or a special assessment district where a portion of the revenue generated would specifically fund transit in the Antelope Valley. Compared to a county-wide tax, a dedicated local tax would be relatively isolated and have limited spillover effects, thereby allowing the Antelope Valley to realize greater benefits from the tax. Based on the AVTA stakeholder interviews held in October 2008, any new taxes, even if dedicated for entirely local purposes, would not gain much support from the Antelope Valley's constituents. Some stakeholders did note that it was possible for a dedicated local tax to garner support if a strong need for the tax was demonstrated, and that such support would only occur under an improved economy.

It is important to realize that there are also opportunities for transit. Given the current state of the economy, this is an opportune time to focus on obtaining additional funding for transit needs. AVTA should focus its efforts on promoting 10th Street West or Sierra Highway as a transit preferential corridor and capitalize on the availability of infrastructure funding to support such

efforts. The planned California High Speed Train Station in Palmdale provides another opportunity for AVTA to draw upon the building momentum and support for transit. Therefore, it is recommended that AVTA view the current situation as an opportunity to pursue a locally-based approach by advocating for a dedicated local tax. Local funding most effectively demonstrates serious commitment to projects for which funding is sought from state and federal sources.

Given the political and economic climate in Antelope Valley, however, introduction and passage of such a tax would likely require the support of key business and political interests, and should be based on issues broader than mobility and sustainability. In other locations, sponsors analogous to the League of California Cities, the Los Angeles County Economic Development Corporation, and/or the Antelope Valley Chambers of Commerce have helped to foster support for local transit funding as a vital underpinning of a healthy business and development environment. Support such as this, appealing to the business community, elected officials, and individual residents, has proven in other areas to be more effective than appeals directly to the electorate's understanding of the intrinsic merits of public transit.

I. Introduction

The Antelope Valley Transit Authority (AVTA) is a Joint Powers Authority formed under an agreement among the County of Los Angeles and the cities of Lancaster and Palmdale to provide transit services to the Antelope Valley region. AVTA provides public transportation services to the Antelope Valley in northern Los Angeles County. AVTA provides three services, including fixed-route transit, commuter, and Dial-A-Ride. AVTA's total service area covers 1,200 square miles¹ and is bounded by the Kern County line to the north, the San Bernardino County line to the east, the Angeles National Forest to the south, and Interstate 5 to the West. Dial-a-Ride serves this entire area. Most local fixed-route transit service is within the urban service area, approximately 140 square miles, while commuter service extends to Downtown Los Angeles, Century City, and the West San Fernando Valley. These services provide mobility in the cities of Palmdale and Lancaster and unincorporated areas of Los Angeles County.

This report defines and assesses AVTA's current services, and provides a basis for subsequent discussion of AVTA's role in complementing the region's long term transit development and serving its mobility needs. The report is organized as follows:

- **Section II** provides an overview and comparative assessment of the existing services provided by AVTA with a description of current routes, service times, fares, and operating expenses, as well as a summary of stakeholder interviews.
- **Section III** sets out the current and projected demographics over a 20-year period for the Antelope Valley area and describes future planned land uses that may affect transit in the AVTA area, as well as potential options to reduce the AVTA's carbon footprint.
- **Section IV** provides recommended service adjustments to accommodate the projected demographic changes and planned land uses in the AVTA service area.
- **Section V** gives an overview of the current AVTA inventory and describes the capital and operating requirements necessary to implement the suggested service adjustments.
- **Section VI** summarizes the existing AVTA funding sources at the federal, state, and local levels and describes other possible funding sources.

II. Overview and Comparative Assessment of Existing Services

1.0 Summary of Transit Service by Type

The AVTA transit service network encompasses the following three types of services:

¹ AVTA, *2007-2009 Short Range Transit Plan*, 2007, p. 8.

- **Local Transit** service includes local routes and supplemental school service that operate within the Antelope Valley.
- **Commuter** service is an express bus service consisting of three commuter routes that operate between the Antelope Valley and downtown Los Angeles, Century City and the west San Fernando Valley.
- **Dial-A-Ride** is a curb-to-curb van service serving seniors over the age of 65 and disabled residents who reside in the Antelope Valley. General Public Dial-A-Ride services are also available in the Rural Zone.

Table 1: Frequency and Span of Service for Local Transit and Commuter Services

Route	Description	Weekday		Saturday and Sunday	
		Frequency	Service Span	Frequency	Service Span
Local Fixed Routes					
1	Lancaster/ Palmdale	Every 30 min	5:40 a.m. - 11:45 p.m.	60 min	7:15 a.m. - 8:05 p.m.
2	Palmdale Blvd	Every 30 min	6:00 a.m. - 11:35 p.m.	60 min	7:30 a.m. - 7:35 p.m.
3	Avenue R	Every 30 min	5:50 a.m. - 11:30 p.m.	60 min	6:25 a.m. - 8:20 p.m.
4	Eastside Lancaster	Every 60 min	6:00 a.m. - 8:44 p.m.	60 min	7:00 a.m. - 5:44 p.m.
5	Avenue L	Every 60 min	6:13 a.m. - 8:13 p.m.	60 min	7:13 a.m. - 7:13 p.m.
6	Little Rock	Every 90 min	5:30 a.m. - 8:20 p.m.	90 min	7:00 a.m. - 6:50 p.m.
7	Quartz Hill	Every 60 min	5:55 a.m. - 8:53 p.m.	120 min	8:05 a.m. - 7:40 p.m.
9	Eastside Palmdale	Every 50 min	6:30 a.m. - 10:35 p.m.	50 min	6:30 a.m. - 8:05 p.m.
11	Avenue I - 15th Street West	Every 30 min	5:15 a.m. - 11:44 p.m.	60 min	6:45 a.m. - 7:44 p.m.
12	Avenue J	Every 30 min	5:15 a.m. - 11:45 p.m.	60 min	6:45 a.m. - 7:45 p.m.
Lake L.A. Express	Lake L.A. to Palmdale	Every 2 hours (average)	5:45 a.m. - 7:38 p.m.	4 hours	8:50 a.m. - 6:38 p.m.
	Lake L.A. to Lancaster	Every 2 hours (average)	6:39 a.m. - 8:38 p.m.	4 hours	6:39 a.m. - 8:38 p.m.
Supplemental Routes					
97	Special - Highland High School	1 - a.m. trip 1 - p.m. trip	7:00 a.m. - 7:15 a.m. 2:45 p.m. - 3:00 p.m.	--	--
99	Special - Little Rock High School	1 - a.m. trip 1 - p.m. trip	6:30 a.m. - 7:05 a.m. 2:45 p.m. - 3:20 p.m. (except Weds) 1:55 p.m. - 2:30 p.m. (Weds only)	--	--
Commuter Routes					
785	Downtown Los Angeles	7 - a.m. trips 7 - p.m. trips	3:45 a.m. - 8:50 a.m. 3:00 p.m. - 7:40 p.m.	--	--
786	Century City/ West Los Angeles	2 - a.m. trips 2 - p.m. trips	5:00 a.m. - 8:21 a.m. 4:28 p.m. - 7:05 p.m.	--	--
787	West San Fernando Valley	9 - a.m. trips 9 - p.m. trips	4:00 a.m. - 8:43 a.m. 2:30 p.m. - 7:37 p.m.	--	--
Dial-a-Ride Services					
	Dial-a-Ride	As needed	6:00 a.m. - 7:00 p.m.	As needed	8:00 a.m. - 6:00 p.m.

Source: AVTA schedule information obtained from <http://www.avta.com> as of August 2009.

A summary of local transit and commuter service frequency and span of service information is shown in Table 1. This summary reflects service in effect as of August 2009.

1.1 Local Transit Service

As shown on Figure 1, *Local Transit Service Map*, AVTA's local transit service area covers approximately 100 square miles centered on downtown Palmdale and Lancaster. AVTA also offers a fixed-route express bus service to Lake Los Angeles and supplemental routes that serve local schools during peak periods.

AVTA has two main transfer centers, the Palmdale Transportation Center in downtown Palmdale and Lancaster City Park in downtown Lancaster. The Palmdale Transportation Center also enables direct transfers between AVTA Routes 1, 3, 7, 9, Lake L.A. Express, 97, 785, 786, and 787 and Metrolink's Antelope Valley Line. Connection may also be made with Metrolink via AVTA Routes 4 and 11 at the Lancaster Metrolink Station.

AVTA contracts the operation of its local transit, Dial-a-Ride, and commuter bus services to Veolia Transportation. Access Services Inc, (ASI) provides ADA complimentary service countywide. ASI currently contracts with Southland Transit, Inc. to provide these services in the Antelope Valley.



Source: <http://www.avta.com>

Figure 1: Local Transit Service Map

Local transit service consists of eleven local fixed-route transit services and three supplemental routes. Hours of operation and frequencies are shown in Table 1. AVTA has a “leave no passenger behind” policy that requires all final runs to wait for connecting buses at each transfer center.

Table 2 describes the eleven local fixed-route transit services. This information was obtained from the *AVTA Short Range Transit Plan (2007-2009)* and the AVTA website (www.avta.com). These descriptions reflect service in effect in August 2009. For a map of fixed-route local transit services, see Figure 1, *Local Transit Service Map*.

Table 2: Description of Local Fixed-Route Services

Route	Description	Destinations	Serving	Transfers/Connections
Local Fixed Routes				
1	Lancaster/ Palmdale	10 th Street West Rancho Vista Boulevard 47 th Street East/Avenue S The October 5, 2008 service change extended the route north to Avenue I and east to Beech Avenue to provide access to the mental health facility on Sierra Highway	Single/multi-family residences, educational, medical, and recreational facilities, Lancaster Senior Center, the Antelope Valley Mall, and the 10th Street West retail center	Transfer at Lancaster City Park , Lancaster Senior Center, Palmdale Transportation Center, and 47th Street East/ Avenue S
2	Palmdale Blvd	Palmdale Boulevard 10 th Street West 47th Street East/Avenue S	Single/multi-family residences, educational facilities, 47th Street East/Avenue S retail hub, the Antelope Valley Mall, and the 10th Street West retail center	Transfer at 47th Street East/Avenue S and Antelope Valley Mall
3	Avenue R	Avenue R corridor 10 th Street East 10 th Street West 47th Street East/Avenue S	Single/multi-family residences, educational facilities, 47th Street East/Avenue S retail hub, the Antelope Valley Mall, and the 10th Street West retail center	Transfer at Palmdale Transportation Center, 47th Street East/Avenue S, and Antelope Valley Mall
4	Eastside Lancaster	East Lancaster Boulevard, 20th Street East, and Avenue K corridors	Single/multi-family residences, Los Angeles County Department of Social Services office, Los Angeles County Courthouse, AVTA offices, Wal-Mart, Antelope Valley High School, and Lancaster Senior Center	Transfer opportunities at Lancaster City Park and at Lancaster Senior Center

Route	Description	Destinations	Serving	Transfers/Connections
5	Avenue L	Quartz Hill along the Avenue L, Avenue M, and 50th Street West corridors	Shopping centers, Mayflower Gardens and Merrill Gardens senior housing complexes, and Kaiser Permanente Hospital	Transfer opportunities at Lancaster City Park
6	Littlerock	Avenue S and 47th Street East, runs east on SR-138 (Pearblossom Highway), 82nd Street East, Avenue T, 87th Street East, Avenue U, 96th Street East, Avenue S, 110th Street East, Avenue R, 90th Street East, and Palmdale Boulevard	47th Street East/ Avenue S retail hub, Jackie Robinson Park, and Littlerock High School	Transfer opportunities at 47th Street East/Avenue S
7	Quartz Hill	Avenue H, 50th Street West, Avenue I, 60th Street West, Rancho Vista Boulevard, and 10th Street West	Lancaster Senior Center, High Desert Hospital, Quartz Hill High School, the Antelope Valley Mall, and the 10th Street West retail center	Transfer opportunities at Palmdale Transportation Center and Lancaster Senior Center
9	Eastside Palmdale	Avenue Q, 40th Street East, 47th Street East, Avenue S, 60th Street East, Palmdale Boulevard, and 70th Street East	Antelope Valley Medical Center, Sun Village, and Pete Knight High School	Transfer opportunities at Palmdale Transportation Center and at 47th Street East/ Avenue S
11	Avenue I - 15th Street West	Avenue I, Valley Central Way, Lancaster Boulevard, and 15th Street West	Antelope Valley High School, Metrolink Lancaster Station, Lancaster Senior Center, Clear Channel Stadium, Lancaster Marketplace, the Social Security Office, and the Antelope Valley Hospital	Transfer opportunities at Lancaster City Park, Lancaster Senior Center, and 40th Street East/ Avenue I
12	Avenue J	20th Street West, Avenue K, 30th Street West, Valley Central Way, 20th Street West, Avenue J, 30th Street East and East Lancaster Boulevard	Antelope Valley College, Lancaster High School, Lancaster Marketplace, the Social Security Office, and the Antelope Valley Hospital	Transfer opportunities at Lancaster City Park and at 40th Street East/ Avenue I
Lake L.A. Express	Lake L.A. to Lancaster/ to Palmdale	Begins at Lancaster City Park, runs along east on Avenue L, north on 20th Street East, and east on Avenue J to 170th Street East. From 170th Street East, the route travels south through Lake Los Angeles, runs express along Palmdale Boulevard, then travels north on 40th Street East and west on Avenue P before terminating at the Palmdale Transportation Center. From the Palmdale Transportation Center, the express route runs in reverse to Lancaster City Park	Wal-Mart, Town Center Plaza (Lake L.A.), Sun Village, and the Antelope Valley Medical Center	Transfer opportunities at Lancaster City Park and Palmdale Transportation Center

Supplemental Services

The following supplemental routes operate during the peak morning and afternoon hours to alleviate overcrowding due to the use of local transit services by students during the school commute hours.

- **Route 97** (Special) Palmdale Transportation Center to Highland High School.
- **Route 99** (Special) Lake Los Angeles to Littlerock High School.

Fare Structure

AVTA recently implemented the Transit Access Pass (TAP) program. This regional “smart card” is intended to replace all fare media except for cash.

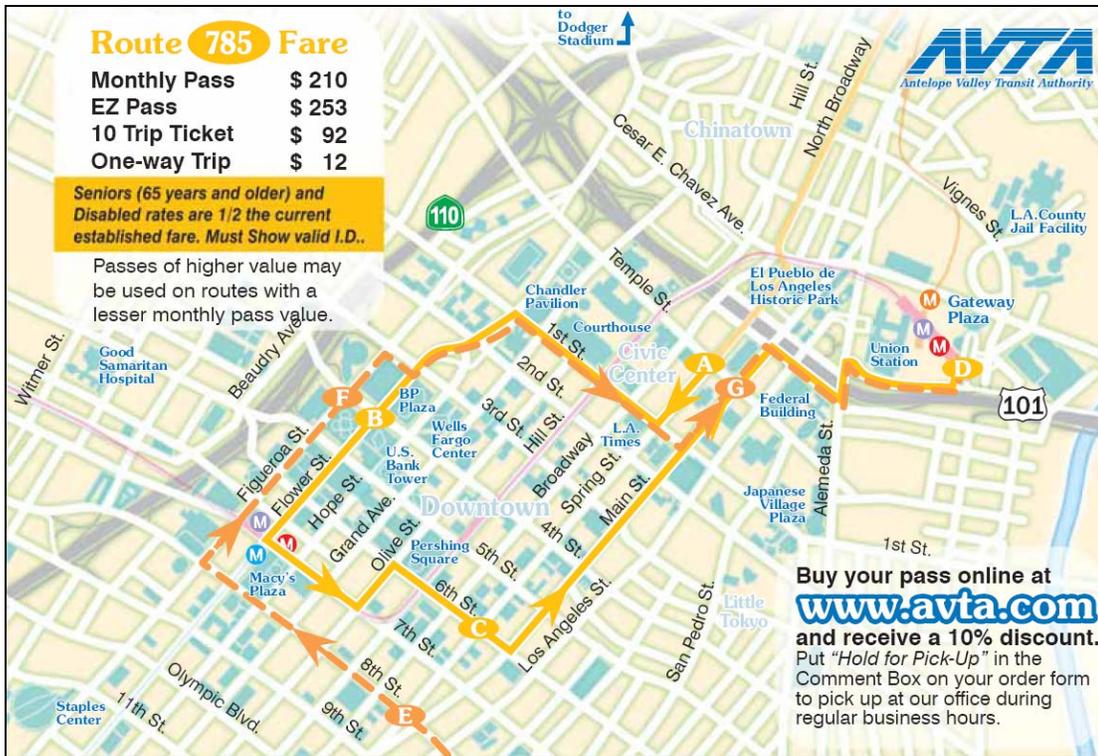
The fare structure for local transit services, including supplemental services, is summarized in Table 3. Up to four children may ride the local transit system at no additional cost when traveling with a paying adult. Seniors and disabled riders ride for free weekdays from 9am to 5pm and all day on the weekends. Active veterans ride for free by showing their current military identification during the same periods.

Table 3: Local Transit Fare Structure

Fare/ Pass Type	TAP Fare	Cash Fare	Senior/Disabled Cash Fare/ Medicare Card Holder
One-Way Fare	\$ 1.25	\$ 1.50	\$ 0.60
4 Hour Pass	\$ 2.00	\$ 2.00	\$ 1.00
All Day Pass	\$ 3.75	\$ 3.75	\$ 2.00
31-Day Pass	\$50.00	\$50.00	\$16.50

1.2 Commuter Service

The service areas for the three commuter express bus services are shown on Figures 2 through 4. Commuter buses provide service between Palmdale Transportation Center and Lancaster City Park and downtown Los Angeles, Century City and the west San Fernando Valley.



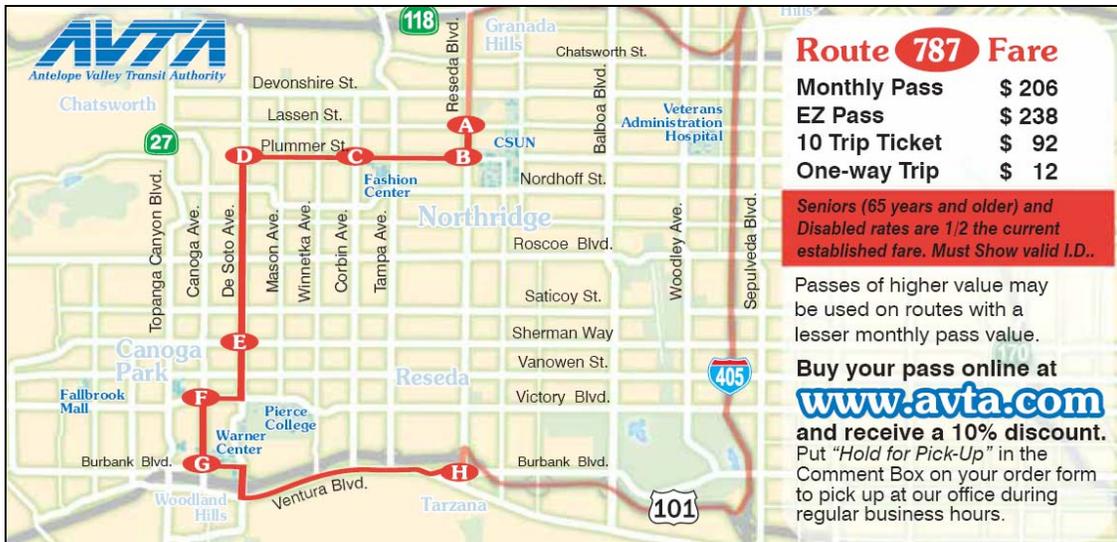
Source: <http://www.avta.com>

Figure 2: Route 785 – Commuter Service Map



Source: <http://www.avta.com>

Figure 3: Route 786 – Commuter Service Map



Source: <http://www.avta.com>

Figure 4: Route 787 – Commuter Service Map

AVTA provides three weekday commuter express bus services from the Antelope Valley to major employment centers and park-and-ride lots in downtown Los Angeles, Century City and the west San Fernando Valley. Lancaster City Park and Palmdale Transportation Center are the designated morning pick-up and evening drop-off locations within the Antelope Valley. Table 1 summarizes the frequency and span of service for commuter services.

Description of Services

The following descriptions of the commuter service network were obtained from the AVTA Short Range Transit Plan (2007-2009) and the AVTA website (www.avta.com). For a map of commuter services, see Figures 2 through 4.

- **Route 785 to Downtown Los Angeles** operates seven commuter buses, transporting passengers between the Antelope Valley (Lancaster City Park and Palmdale Transportation Center) and the business district of Los Angeles, between First Street and 8th Street from Figueroa Street to Main Street. The average trip time is approximately two hours in each direction. There are seven morning departures from the Antelope Valley between 3:45 a.m. and 6:20 a.m. and seven afternoon departures from Los Angeles between 3:00 p.m. and 5:30 p.m.
- **Route 786 to Century City/West Los Angeles** operates four commuter buses that travel between the Antelope Valley (Lancaster City Park and Palmdale Transportation Center) and Century City/West Los Angeles. This route stops in Century City and along Wilshire and Santa Monica Boulevards. There are four morning departures from the Antelope Valley between 4:00 a.m. and 5:40 a.m. and four afternoon departures from Century City between 2:52 p.m. and 4:57 p.m.
- **Route 787 to San Fernando Valley** operates nine commuter coaches transporting passengers between the Antelope Valley (Lancaster City Park

and Palmdale Transportation Center) and the business districts of the west San Fernando Valley along Plummer Street, Desoto Avenue, Victory Boulevard, Canoga Avenue, and Ventura Boulevard. There are nine morning departures from the Antelope Valley between 4:00 a.m. and 6:20 a.m. and nine afternoon departures from the San Fernando Valley between 2:30 p.m. and 5:35 p.m.

Fare Structure

AVTA recently implemented the Transit Access Pass (TAP) program on the commuter service. This regional “smart card” is intended to replace all fare media except for cash. The one-way TAP fare on commuter routes is half of the one-way cash fare.

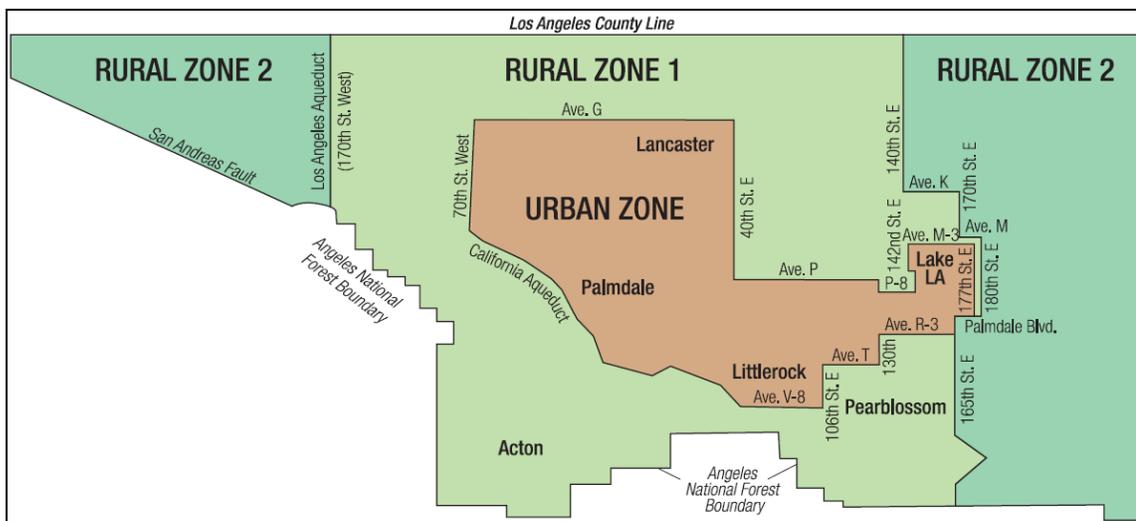
The fare structure for commuter services is summarized in Table 4. Senior and disabled passengers receive a 50 percent discount on commuter fares.

Table 4: Commuter Service Fare Structure

Fare Type	Route 785	Route 786	Route 787
Monthly Pass*	\$265.00	\$310.00	\$249.00
EZ transit Pass	\$286.00	\$322.00	\$268.00
10 Trip Ticket*	\$76.00	\$88.50	\$71.00
One-way Trip	\$14.00	\$16.00	\$14.00
TAP	\$7.00	\$8.00	\$7.00

1.3 Dial-A-Ride

The Dial-A-Ride (DAR) service area is bounded by the Kern County line to the north, the San Bernardino County line to the east, and the National Forest boundary to the south and west. This service area is divided into three main zones: Urban Zone, Rural Zone 1 and Rural Zone 2, which are shown on Figure 5: *Dial-A-Ride Service Map*.



Source: <http://www.avta.com>

Figure 5: Dial-A-Ride Service Map

DAR is a demand response service that provides curb-to-curb van service within the service area. In the Urban Zone and Rural Zone 1, DAR is only available to seniors over the age of 65 and to disabled residents. In Rural Zone 2, DAR is open to the general public. DAR service is by appointment only and operates from 6:00 a.m. to 7:30 p.m. Monday through Friday and from 8:00 a.m. to 6:00 p.m. on Saturday and Sunday.

DAR trips can be scheduled up to three days in advance; however, AVTA limits annual revenue hours. Therefore, DAR client subscription orders cannot exceed 25 percent of total trips on any operational day.

Fare Structure

The DAR fare structure varies by zone and is summarized in Table 5. For a map of DAR services, see Figure 5: Dial-A-Ride Service Map.

- **Urban Zone:** Trips contained within the Urban Zone boundary
- **Rural Zone 1:** Trips beginning/ending in Rural Zone 1
- **Rural Zone 2:** Trips beginning/ending in Rural Zone 2

Table 5: Dial-A-Ride Fare Structure

Zone	Standard Fare (one-way)	Group Rate* (one-way)
Urban Zone	\$3.00	\$1.25
Rural Zone 1	\$3.50	\$1.75
Rural Zone 2	\$6.00	\$3.00

**Group Rate applies to 3 or more DAR passengers traveling from one origin to one destination. The fare is per person.*

2.0 Comparison of AVTA with Similar Services Nationwide

Comparisons with peer agencies are useful exercises to gauge performance relative to transit agencies with similar characteristics in service levels, service area demographics or ridership. To analyze how AVTA compares to other agencies with similar characteristics, National Transit Database (NTD) 2007 data were collected and analyzed for transit agencies nationwide, and specific criteria were identified that would define the context of AVTA’s performance. Comparable transit agencies were selected on the basis of their similar performance in a specific criterion, such as unlinked passenger trips, and grouped accordingly.

Data for fixed-route services are shown in Table 6, and calculated performance measures are shown in Table 7. Numbers in **BOLD** in Table 6 indicate which data is being used for grouping of the peer agencies.

It should be noted that NTD data does not separate local and commuter bus service; thus it is not possible to tell the extent of commuter bus service, if any, among peers.

In the following pages, seven specific performance measures were analyzed based on the NTD data displayed. Before introducing the measures, some definitions are in order:

- Vehicle revenue miles are the number of miles a vehicle travels when it is in service and available to passengers.
- Vehicle revenue hours are the number of hours that a vehicle is in service and available to passengers). Vehicle revenue hours is the preferred measure of service provision because it is the primary determining factor in operating costs and, unlike vehicle revenue miles, it captures factors such as declining speeds over the years as congestion and the number of traffic signals increase.
- Unlinked passenger trips are the number of boardings; if a passenger gets on one bus and then transfers to another bus, it is counted as two unlinked passenger trips.
- Passenger miles are the total miles traveled on the bus by all passengers – one way to calculate this is to multiply the unlinked passenger trips by the average trip lengths.
- Farebox recovery ratio is the ratio of operating revenue from fares to operating costs.

The performance measures are:

- Cost per vehicle revenue mile,
- Cost per vehicle revenue hour,
- Cost per unlinked passenger trip,
- Cost per passenger mile,
- Farebox recovery ratio,
- Passenger trips per vehicle revenue mile, and
- Passenger trips per vehicle revenue hour.

The analysis of these measures for fixed-route services is summarized in Table 7. Several peer groups are shown in Table 7: peers by ridership levels (Charleston through Vestal), by operating budget (Chattanooga through Laredo), and by service area population (Richmond through Fort Myers. Section 2.1 summarizes AVTA's performance relative to the peer groups.

Table 6: Fixed-Route Service – Operating Data

Agency	Location	State	Unlinked Passenger Trips	Passenger Miles	Vehicle Miles	Vehicle Revenue Hours	Service Area Population	Operating Budget (bus only)	Farebox Returns (bus service only)
Antelope Valley Transit Authority	Lancaster	CA	3,008,016	37,281,107	2,522,708	145,591	446,000	\$11,453,094	\$3,787,204
Average - Ridership Peers			3,106,165	19,532,884	2,211,930	157,344	367,290	\$13,230,515	\$3,027,566
Average - Operating Budget Peers			2,581,476	16,191,544	2,280,156	155,211	292,386	\$11,334,507	\$2,106,644
Average - Service Area Population Peers			9,573,651	34,280,994	3,484,423	332,217	447,046	\$24,738,093	\$5,598,977
Charleston Area RTA	Charleston	SC	2,959,278	15,772,617	2,806,405	213,757	549,033	\$12,263,988	\$2,443,539
Birmingham-Jefferson Co TA	Birmingham	AL	3,124,269	16,152,454	2,866,855	231,342	662,047	\$19,322,604	\$2,245,640
Santa Clarita Transit	Santa Clarita	CA	3,661,079	44,079,391	2,967,629	151,595	151,088	\$13,205,947	\$3,172,660
Gold Coast Transit	Oxnard	CA	3,438,989	8,524,478	1,535,051	138,848	360,623	\$11,697,086	\$2,641,230
Potomac and Rappahannock TC	Woodbridge	VA	2,683,473	46,933,943	2,887,840	148,446	326,238	\$20,359,272	\$6,380,938
City Transit Management Company	Lubbock	TX	2,970,443	8,643,989	1,673,567	124,535	199,564	\$6,895,096	\$2,836,678
Worcester Regional Transit Authority	Worcester	MA	3,041,180	7,511,715	1,556,247	135,587	524,725	\$13,352,596	\$2,229,221
Broome Co Dept of Public Trans	Vestal	NY	2,970,612	8,644,481	1,401,848	114,639	165,000	\$8,747,532	\$2,270,619
Chattanooga Area RTA	Chattanooga	TN	2,524,263	11,425,910	1,978,051	156,408	155,554	\$11,492,474	\$1,673,242
Gwinnett Co Board of Commissioners	Lawrenceville	GA	2,130,872	44,998,844	2,507,285	137,236	583,048	\$11,508,440	\$2,980,491
Rock Island Co Metropolitan MTD	Moline	IL	2,379,835	7,926,745	2,218,732	149,345	119,657	\$10,938,351	\$827,553
Metropolitan Tulsa Transit Authority	Tulsa	OK	2,327,616	12,574,158	2,804,930	176,762	486,665	\$11,584,359	\$1,820,112
Capital Area Transit	Harrisburg	PA	2,332,856	7,838,396	1,699,166	134,976	292,904	\$11,656,280	\$2,563,464
Madison County Transit District	Granite City	IL	2,050,494	15,265,686	3,037,061	170,191	232,298	\$11,662,315	\$ -
Laredo Transit Management, Inc.	Laredo	TX	4,324,395	13,311,072	1,715,870	161,557	176,576	\$10,827,138	\$2,775,002
Greater Richmond Transit Company	Richmond	VA	14,723,234	41,236,487	4,792,805	660,579	449,572	\$34,028,915	\$10,071,447
Jefferson Parish Dept of Transit Adm	Gretna	LA	1,943,315	9,603,863	1,164,580	78,406	438,765	\$8,221,932	\$2,311,343
Golden Empire Transit District	Bakersfield	CA	6,336,753	26,876,846	3,430,777	276,139	437,236	\$18,354,656	\$4,106,382
Santa Monica's Big Blue Bus	Santa Monica	CA	21,827,761	77,955,108	5,014,144	459,635	458,506	\$47,834,931	\$9,724,436
Lee County Transit	Fort Myers	FL	3,037,194	15,732,665	3,019,809	186,325	451,153	\$15,250,033	\$1,781,277

Source: Federal Transit Administration, National Transit Database (2007).

Table 7: Fixed-Route Service – Performance Measures

Agency	Location	State	Cost per Vehicle Revenue Mile	Cost per Vehicle Revenue Hour	Cost per Unlinked Passenger Trip	Cost per Passenger Mile	Farebox Recovery Ratio	Passenger Trips per Vehicle Mile	Passenger Trips per Revenue Hour
Antelope Valley Transit Authority	Lancaster	CA	\$4.54	\$78.67	\$3.81	\$0.31	33%	1.19	20.7
Average - Ridership Peers			\$5.98	\$84.09	\$4.26	\$0.68	23%	1.40	19.7
Average - Operating Budget Peers			\$4.97	\$73.03	\$4.39	\$0.70	19%	1.13	16.6
Average - Service Area Population Peers			\$7.10	\$74.46	\$2.58	\$0.72	23%	2.75	28.8
Charleston Area Regional Transportation Authority	Charleston	SC	\$4.37	\$57.37	\$4.14	\$0.78	20%	1.05	13.8
Birmingham-Jefferson County Transit Authority	Birmingham	AL	\$6.74	\$83.52	\$6.18	\$1.20	12%	1.09	13.5
Santa Clarita Transit	Santa Clarita	CA	\$4.45	\$87.11	\$3.61	\$0.30	24%	1.23	24.2
Gold Coast Transit	Oxnard	CA	\$7.62	\$84.24	\$3.40	\$1.37	23%	2.24	24.8
Potomac and Rappahannock TC	Woodbridge	VA	\$7.05	\$137.15	\$7.59	\$0.43	31%	0.93	18.1
City Transit Management Company, Inc.	Lubbock	TX	\$4.12	\$55.37	\$2.32	\$0.80	41%	1.77	23.9
Worcester Regional Transit Authority	Worcester	MA	\$8.58	\$98.48	\$4.39	\$1.78	17%	1.95	22.4
Broome County Department of Public Transportation	Vestal	NY	\$6.24	\$76.31	\$2.94	\$1.01	26%	2.12	25.9
Chattanooga Area Regional Transportation Authority	Chattanooga	TN	\$5.81	\$73.48	\$4.55	\$1.01	15%	1.28	16.1
Gwinnett County Board of Commissioners	Lawrenceville	GA	\$4.59	\$83.86	\$5.40	\$0.26	26%	0.85	15.5
Rock Island County Metropolitan Mass Transit District	Moline	IL	\$4.93	\$73.24	\$4.60	\$1.38	8%	1.07	15.9
Metropolitan Tulsa Transit Authority	Tulsa	OK	\$4.13	\$65.54	\$4.98	\$0.92	16%	0.83	13.2
Capital Area Transit	Harrisburg	PA	\$6.86	\$86.36	\$5.00	\$1.49	22%	1.37	17.3
Madison County Transit District	Granite City	IL	\$3.84	\$68.52	\$5.69	\$0.76		0.68	12.0
Laredo Transit Management, Inc.	Laredo	TX	\$6.31	\$67.02	\$2.50	\$0.81	26%	2.52	26.8
Greater Richmond Transit Company	Richmond	VA	\$7.10	\$51.51	\$2.31	\$0.83	30%	3.07	22.3
Jefferson Parish Department of Transit Administration	Gretna	LA	\$7.06	\$104.86	\$4.23	\$0.86	28%	1.67	24.8
Golden Empire Transit District	Bakersfield	CA	\$5.35	\$66.47	\$2.90	\$0.68	22%	1.85	22.9
Santa Monica's Big Blue Bus	Santa Monica	CA	\$9.54	\$104.07	\$2.19	\$0.61	20%	4.35	47.5
Lee County Transit	Fort Myers	FL	\$5.05	\$81.85	\$5.02	\$0.97	12%	1.01	16.3

2.1 Fixed-Route Bus Service Peer Comparison

In comparison with peer agencies that deliver a similar number of unlinked passenger trips, AVTA operates a slightly smaller fleet of vehicles than average, and delivers service with an operating budget that is slightly smaller than average. AVTA enjoys a relatively high level of farebox recovery compared to these peer agencies. Similar trends are evident when AVTA is compared to agencies with similar operating budgets. AVTA performs generally above average among the selected peer agencies in terms of the cost efficiency measures being analyzed, but below average in terms of the measures based on ridership. These results can be seen in Figures 6 through 12. In all figures, AVTA's performance is indicated by the yellow bar.

- Cost per Vehicle Revenue Mile – AVTA is efficient when compared to other agencies being analyzed. AVTA has an average cost per revenue mile of \$4.54. The price range for the analyzed peer agencies is between \$3 and \$10. AVTA's cost per vehicle revenue mile is below the average of each peer group.
- Cost per Vehicle Revenue Hour – AVTA is more efficient compared to its ridership peers slightly less efficient when compared to its operating budget and service area population peers. AVTA has an average cost per vehicle revenue hour of \$78.67 while the peer agencies range from \$51 to \$138.
- Cost per Unlinked Trip – AVTA is about average in terms of efficiency when compared to the peer agencies. AVTA has an average cost per unlinked trip of \$3.81 while the peer agencies range from \$2 to \$8. AVTA's cost per unlinked trip is lower than the average for its ridership and operating budget peers and higher than the average for its service area population peers.
- Cost per Passenger Mile – AVTA is very efficient when compared to the peer agencies. AVTA has an average cost per passenger mile of \$0.31 while the peer agencies range from \$0.25 to \$1.80. AVTA's cost per passenger mile is below the average of each peer group.
- Passenger Trips per Revenue Hour – AVTA is slightly below average in terms of efficiency when compared to the peer agencies. AVTA has an average of 20.7 trips per revenue hour while the peer agencies range from 12 to 48. This is attributable to longer trip lengths. AVTA's passenger trips per revenue hour is higher than the average for its ridership and operating budget peers and lower than the average for its service area population peers.
- Passenger Trips per Revenue Mile – AVTA is below average in terms of effectiveness when compared to the peer agencies. AVTA has an average of 1.19 trips per revenue mile while the peer agencies range from 0.7 to 4.4. This is a result of the lower population density in the Antelope Valley when compared to peer agencies. AVTA's passenger trips per revenue mile is higher than the average for its operating budget peers, but lower than the average for other peer groups.
- Farebox Recovery Ratio – AVTA is very efficient when compared to the peer agencies. AVTA has a farebox recovery ratio of 33 percent while the peer

agencies range from 8 percent to 41 percent. This reflects a longstanding policy of the AVTA Board of Directors. AVTA's farebox recovery ratio is higher than the average for all other peer groups. NTD data does not separate local and commuter bus service; AVTA's farebox recovery ratio for local service was 21 percent in FY 2009.

Figure 6: Fixed-Route – Cost Per Vehicle Revenue Mile

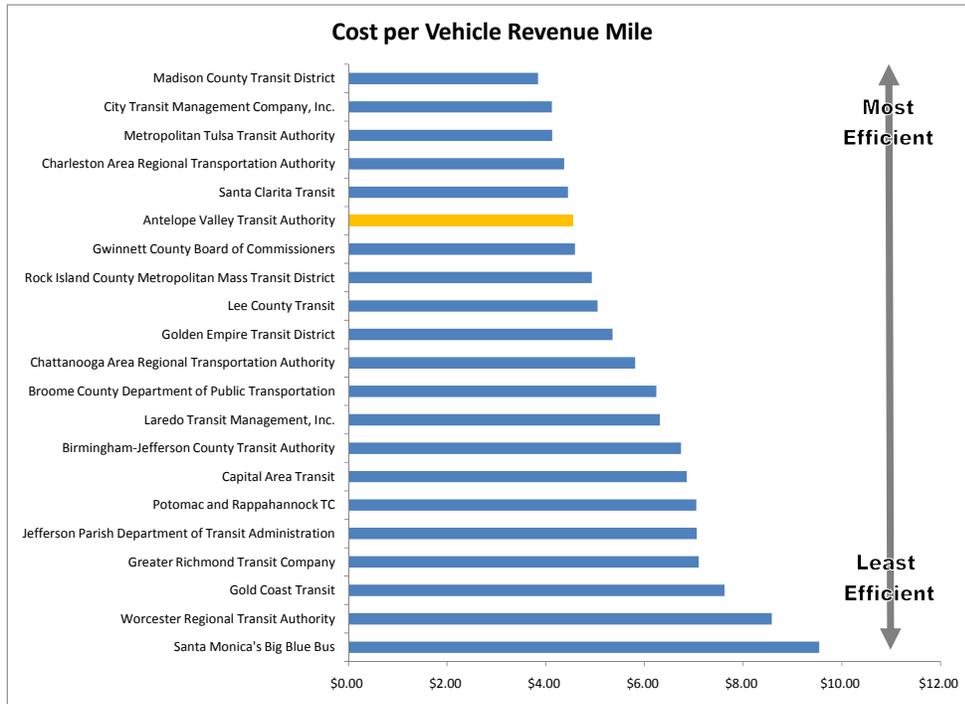


Figure 7: Fixed-Route - Cost Per Vehicle Revenue Hour

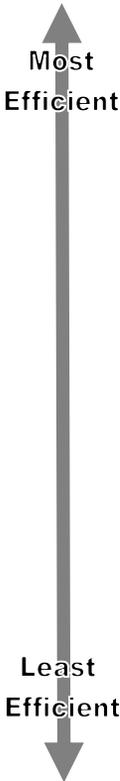
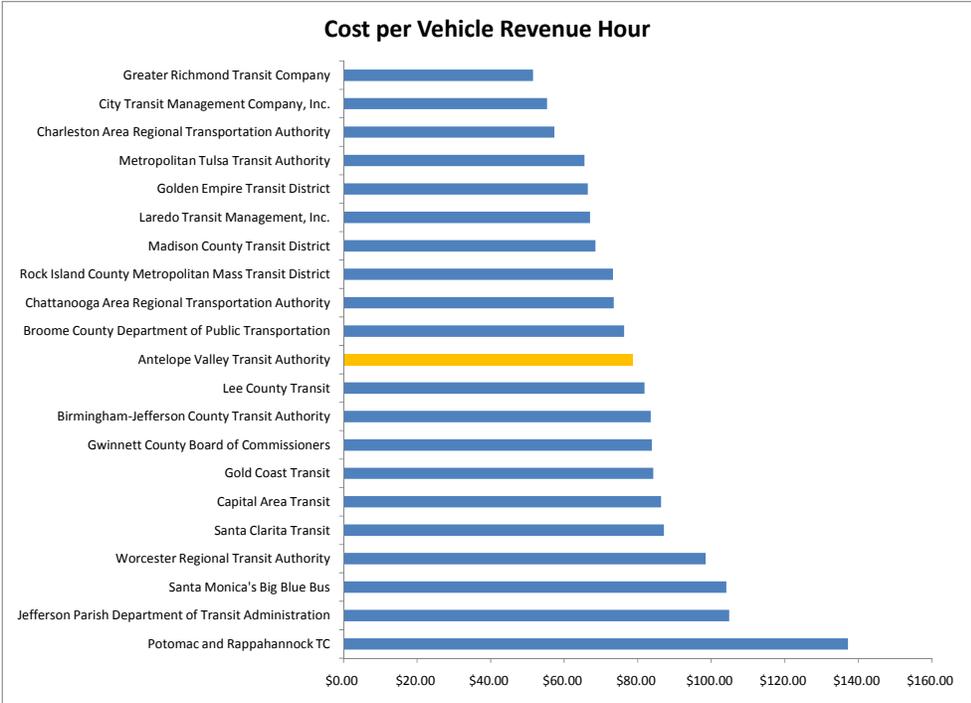


Figure 8: Fixed-Route - Cost Per Unlinked Passenger Trip

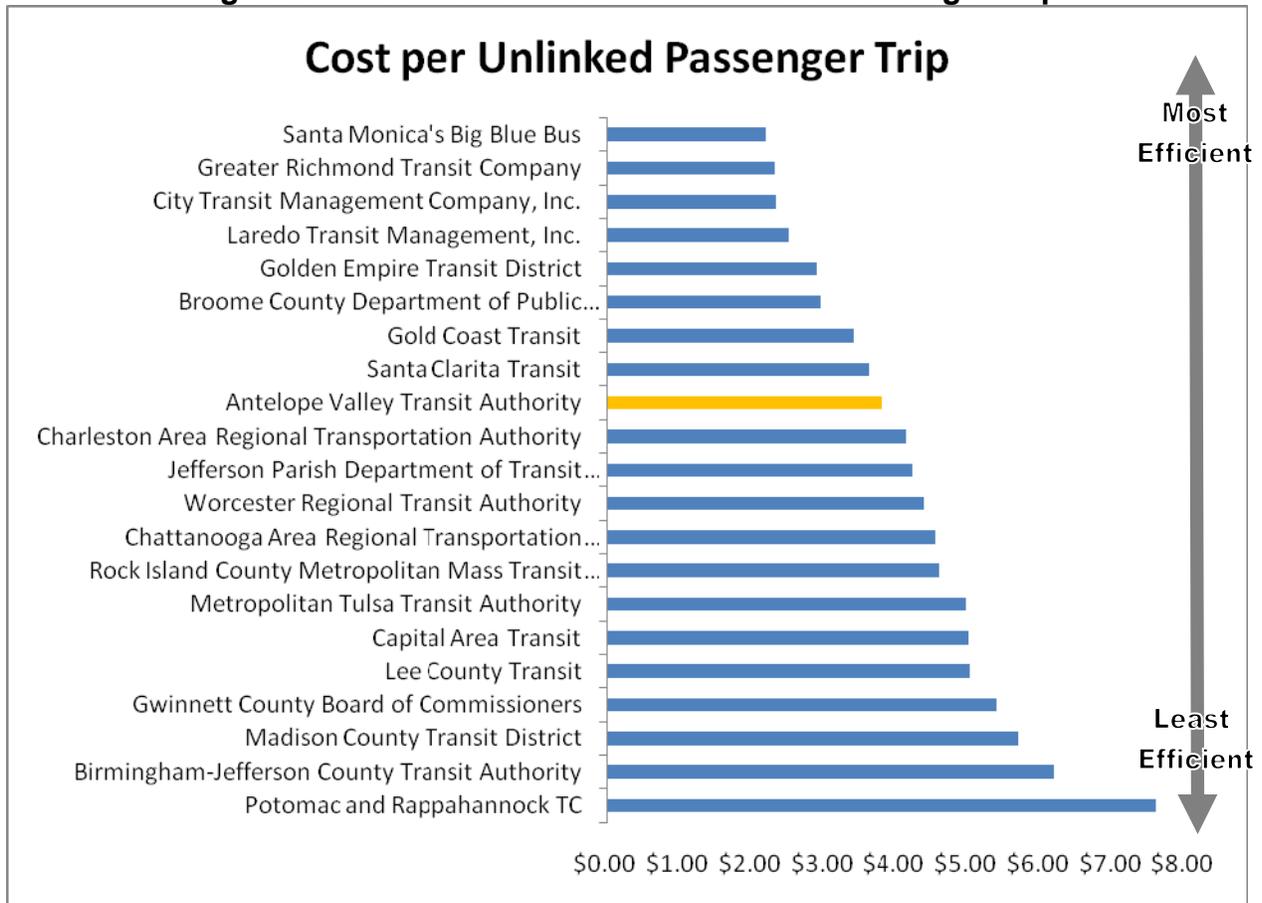


Figure 9: Fixed-Route - Cost Per Passenger Mile

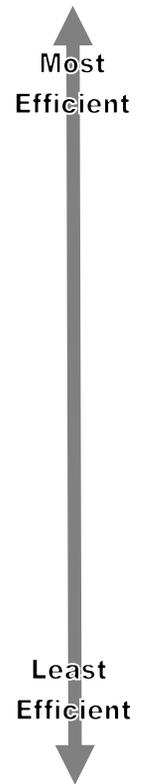
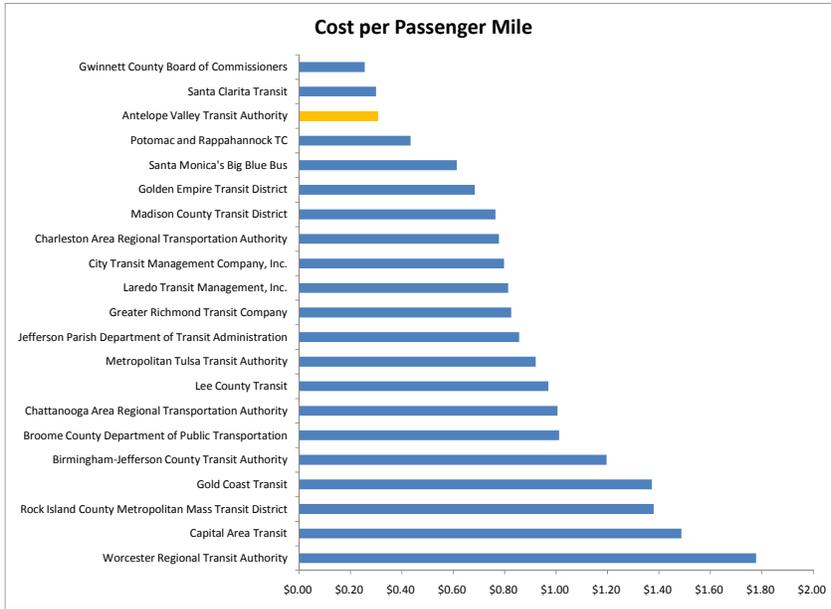


Figure 10: Fixed-Route - Passenger Trips per Vehicle Revenue Mile

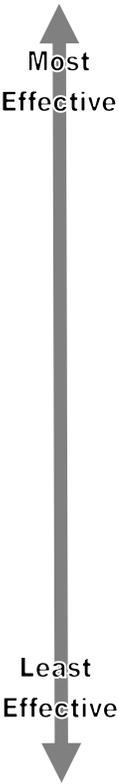
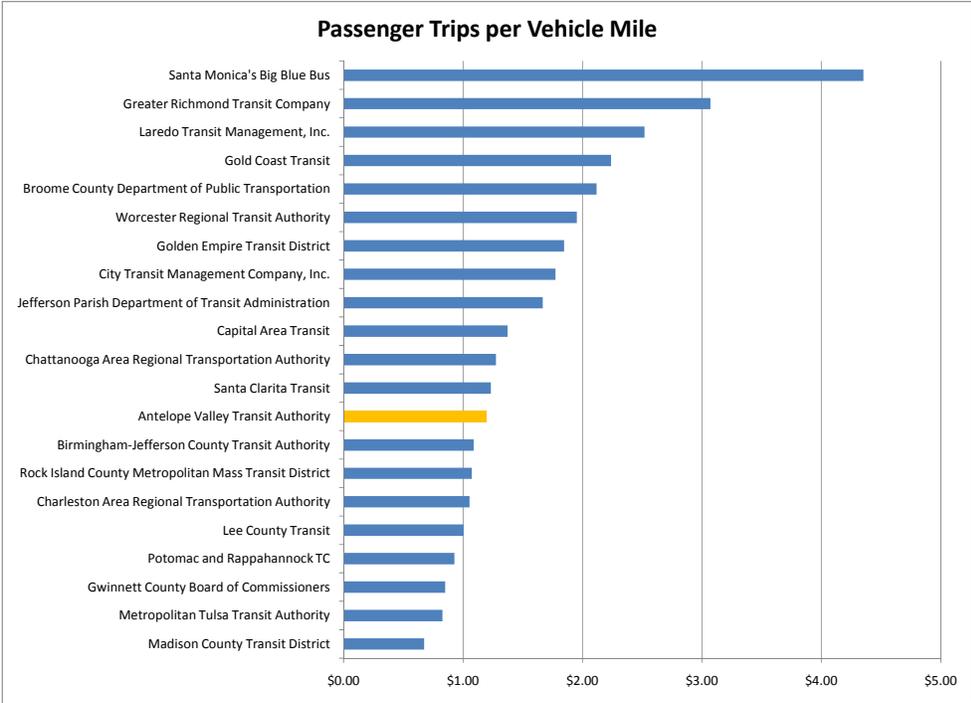


Figure 11: Fixed-Route - Passenger Trips per Vehicle Revenue Hour

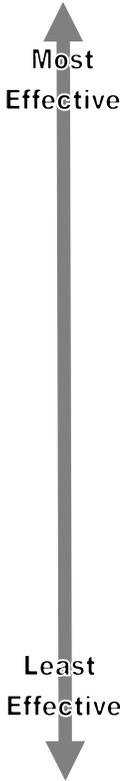
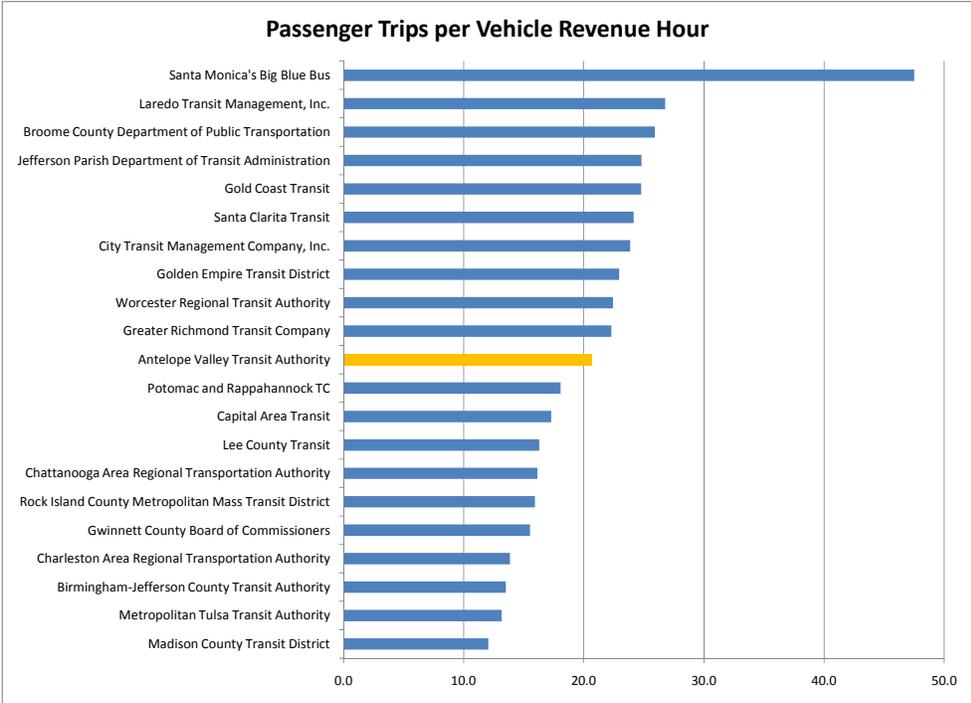
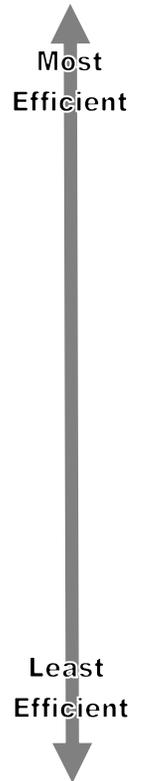
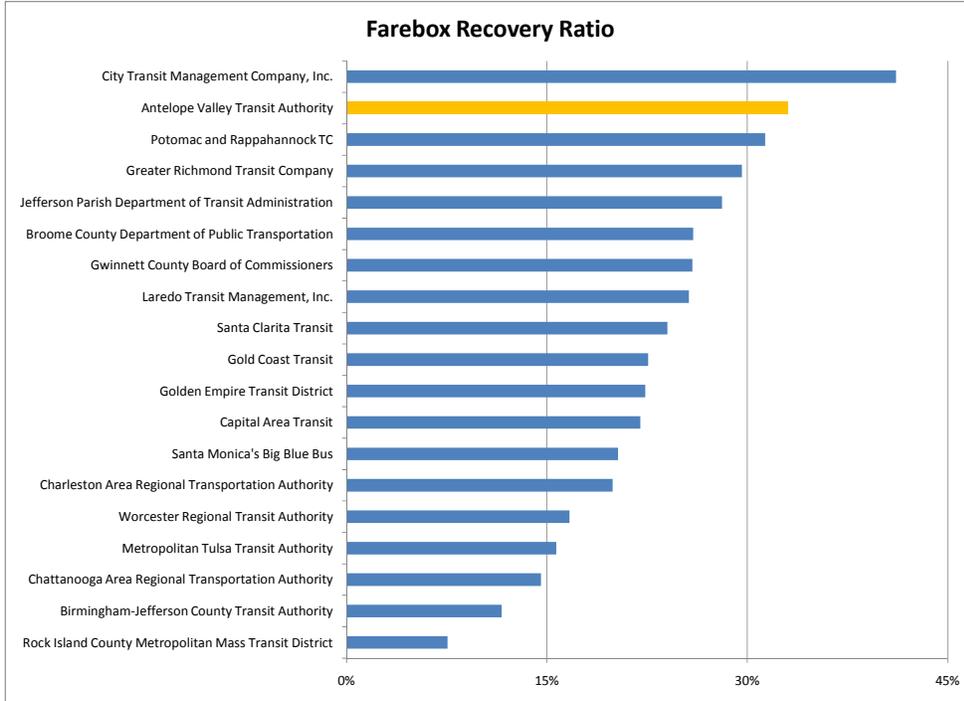


Figure 12: Fixed-Route - Farebox Recovery Ratio



3.0 Existing Service Analysis

Trends in AVTA service, ridership, and operating budget were analyzed using system-level data available from the National Transit Database (NTD). Unlike the previous peer section, which included only fixed-route data, this analysis includes both fixed-route and demand-response services operated by AVTA. By analyzing system-level trends in productivity and performance measures, conclusions can be drawn about the overall effectiveness of an agency's service and trends in the agency's performance. The following paragraphs summarize AVTA's service and trends according to a number of standard transit performance measures.

In the twelve-year period from 1996 to 2007, AVTA's operating expense has risen 96 percent in constant 2007 dollars, as shown below in Table 8.

Table 8: AVTA Operating Budget

Year	\$2007 Operating Expense	Change from prior year
1996	\$6,493,756	
1997	\$6,900,325	6%
1998	\$6,818,705	-1%
1999	\$6,757,967	-1%
2000	\$7,295,811	8%
2001	\$8,143,609	12%
2002	\$9,500,015	17%
2003	\$10,419,695	10%
2004	\$11,681,772	12%
2005	\$12,198,202	4%
2006	\$11,934,935	-2%
2007	\$12,736,982	7%
12-Year Duration		96%

*Source: FTA National Transit Database (1996 through 2007).
Inflated to \$2007 using Consumer Price Index rates compiled by the
Bureau of Labor Statistics.*

In the same twelve-year period from 1996 to 2007, AVTA ridership has increased by 72 percent (measured as unlinked trips). Table 9 presents AVTA ridership from 1996 to 2007.

Table 9: AVTA Ridership

Year	Annual Unlinked Trips	Change from prior year
1996	1,773,610	
1997	1,978,423	12%
1998	2,065,099	4%
1999	2,210,420	7%
2000	2,273,005	3%
2001	2,394,892	5%
2002	2,543,318	6%
2003	2,743,819	8%
2004	2,736,765	0%
2005	3,069,613	12%
2006	3,124,823	2%
2007	3,042,782	-3%
12-Year Duration		72%

Source: FTA National Transit Database (1996 through 2007)

During this same period, service provided has increased by 55 percent if measured as annual vehicle revenue miles, or 87 percent when measured as annual vehicle revenue hours (Table 10). Vehicle revenue hours are the preferred measure of service provision for two reasons: they have a more direct influence on operating cost and they account for changes in congestion levels and average speeds over time.

Table 10: AVTA Service Provided

Year	Annual Vehicle Revenue Miles	Change from prior year	Annual Vehicle Revenue Hours	Change from prior year
1996	1,797,201		86,550	
1997	1,843,542	3%	85,617	-1%
1998	1,968,175	7%	94,641	11%
1999	2,096,647	7%	101,107	7%
2000	2,205,222	5%	107,040	6%
2001	2,364,484	7%	124,582	16%
2002	2,517,628	6%	133,643	7%
2003	2,539,253	1%	136,318	2%
2004	2,875,126	13%	154,208	13%
2005	2,727,838	-5%	165,848	8%
2006	3,226,349	18%	178,676	8%
2007	2,789,445	-14%	161,953	-9%
12-Year Duration		55%		87%

Source: FTA National Transit Database (1996 through 2007)

Taken together, these measures from Tables 8, 9 and 10 indicate a trend in which AVTA's operating costs are rising at a faster rate than either the amount of service being provided or ridership. Over this 12-year period, operating costs have risen by 96 percent (in constant dollars), while the amount of service provided has risen by 87 percent. Ridership over this same period has risen by 72 percent.

Service efficiency and performance measures indicate a mixed trend. AVTA's costs per vehicle revenue hour and costs per vehicle revenue mile in constant 2007 dollars have risen over the last 12 years (Table 11), although the increase for cost per vehicle revenue hour is only five percent during this period. As noted earlier, revenue vehicles hours is the preferred measure for service provision. Measures of passenger productivity and service effectiveness are also mixed, with unlinked trips per vehicle revenue mile increasing by 11 percent and unlinked trips per vehicle revenue hour decreasing by eight percent over the 12-year period (Table 12). These productivity measures indicate a trend of slightly higher operating costs per unit of service provided, while passenger use per unit of service is declining. For instance, in looking at Vehicle revenue hours, the cost to operate a vehicle revenue hour has risen by five percent over the 12-year period (in constant dollars), while ridership per vehicle revenue hour has declined by eight percent. Costs have been normalized to 2007 dollars.

Table 11: AVTA Operating Cost Performance Measures

Year	Operating Expense	Change from prior year	Operating Expense	Change from prior year
	per Vehicle Revenue Mile (2007\$)		per Vehicle Revenue Hour (2007\$)	
1996	\$3.61		\$75.03	
1997	\$3.74	4%	\$80.60	7%
1998	\$3.46	-7%	\$72.05	-11%
1999	\$3.22	-7%	\$66.84	-7%
2000	\$3.31	3%	\$68.16	2%
2001	\$3.44	4%	\$65.37	-4%
2002	\$3.77	10%	\$71.09	9%
2003	\$4.10	9%	\$76.44	8%
2004	\$4.06	-1%	\$75.75	-1%
2005	\$4.47	10%	\$73.55	-3%
2006	\$3.70	-17%	\$66.80	-9%
2007	\$4.57	23%	\$78.65	18%
12-Year Duration		26%		5%

Source: FTA National Transit Database (1996 through 2007). Inflated to \$2007 using Consumer Price Index rates compiled by the Bureau of Labor Statistics.

Table 12: Passenger Productivity Measures

Year	Unlinked Trips per Vehicle Revenue Mile	Change from prior year	Unlinked Trips per Vehicle Revenue Hour	Change from prior year
1996	0.99		20.49	
1997	1.07	9%	23.11	13%
1998	1.05	-2%	21.82	-6%
1999	1.05	0%	21.86	0%
2000	1.03	-2%	21.24	-3%
2001	1.01	-2%	19.22	-9%
2002	1.01	0%	19.03	-1%
2003	1.08	7%	20.13	6%
2004	0.95	-12%	17.75	-12%
2005	1.13	18%	18.51	4%
2006	0.97	-14%	17.49	-6%
2007	1.09	13%	18.79	7%
12-Year Duration		11%		-8%

Source: FTA National Transit Database (1996 through 2007)

In summary, trends over the past twelve years show that operating costs (in constant 2007 dollars) have increased at a somewhat higher rate than ridership and vehicle revenue hours. Operating expense per vehicle revenue hour has been almost constant (five percent increase), while operating expense per vehicle revenue mile has increased by 26 percent. Productivity results are also mixed: ridership per vehicle revenue mile has increased by 11 percent, while ridership per vehicle revenue hour has decreased by eight percent.

A closer look at these trends reveals the reason for increased operating costs. Operating costs have increased by 96 percent in constant dollars. Operating expense per vehicle revenue hour has increased by only five percent in constant dollars. Vehicle revenue hours have increased by 87 percent. Thus, **nearly all of the increase in AVTA operating costs over the past 12 years is accounted for by increases in service.** Future projections of operating costs based on existing trends implicitly assume a further increase in service levels.

4.0 Summary of Stakeholders Interviews

To support the future planning effort, interviews with key stakeholders were conducted in October 2008. These stakeholders included the Lancaster City Manager, the Palmdale Assistant City Manager, city and county planners, and representatives of local homeowner, business, transportation, and environmental groups. A complete summary of these interviews are included as Appendix A.

The interviewees were asked the about the following issues regarding the long range transit plans for AVTA:

Perspectives/Challenges/Visions

- Role of public transit in Antelope Valley
- Ways that AVTA serves/interacts with your organization.
- Strengths/limitations of AVTA services
- Current mobility needs that should be addressed by transit
- Trends, issues, and changes over the next 10-20 years that AVTA should address
- Comparable systems/regions/cities that are good models for Antelope Valley/AVTA

Geographic Service Regions/Peak Travel Demands

- Markets for transit in Antelope Valley
- Relative priority of rural/urban services
- Relative priority of geographic coverage or service frequency

Modes of Transportation/Intermodal Connectivity

- Most important services (e.g. fixed-route, paratransit, commuter, high-capacity, etc.)
- Suggested service improvements (e.g. more shelters, shorter wait times, better coverage)
- Opinions on transit vehicle types (e.g. buses, rail, vans, etc)

Sustainability Considerations

- Importance of air quality as a reason for greater transit use and AVTA's role in Antelope Valley sustainability
- 'Smart growth' in Antelope Valley – role of local land use and transit decisions

Financial Considerations

- Understanding of AVTA's funding sources
- Opinion of current level and sources of transit funding in light of Antelope Valley mobility needs
- Ways funding could be increased
- Opinion of increases in local funds and/or higher fares
- Opinion of Antelope Valley's share of federal and regional funds

- Opinion of transit funding independent of local government or as part of city and county budgets

Support for Transit Investment

- Priorities/criteria for judging how public transit should be funded
- Factors that determine the community's willingness to fund public transit
- Specific types of mobility improvements that receive the greatest public support
- Factors that affect public support for transit improvements in the future
- In the context of an economic downturn, is there more or less need for transit investment?
- Is transit challenged more by the limited availability of resources, or by community attitudes?

Advancing the Discussion

- Any scenario in which local residents would accept public transit over personal vehicles? Other people/organizations we should talk with about AVTA?
- Who would you see as practical partners to AVTA?

In general, the interviewees expressed concerns regarding general transit travel and wait times and the Dial-A-Ride structure. They also requested that transit be more focused on serving transit-dependent populations (i.e., captive, not choice, riders such as school children, persons with medical needs, the elderly, and persons with disabilities), and that employment transport and routes to medical areas and airports be more available. The interviewees also suggested that solutions be considered for better serving rural areas and for alternative fuels and green solutions. Interviewees noted that redundancy in services with Metrolink should be avoided. Financial suggestions included looking to the private sector for some services and increased public education regarding transit. A complete summary of the interviews is included as Appendix A.

III. Plans for AVTA's Future

1.0 *Analysis of Demographics and Projected Growth over the Next 20 Years*

This section provides an assessment of the changing demographics and travel patterns between current conditions (2008) and the 20-year planning horizon year (2035), on the basis of regional travel and demographic forecasts, including both travel behavior and socio-economic data such as households, jobs, and special generators. Furthermore, the section reviews highway travel demand forecasts to determine how regional and local congestion is projected to change over time.

1.1 Socio-Economic and Travel Pattern Data Analysis and Projection

This section summarizes socio-economic trends, travel patterns, transit services, transit ridership, and auto congestion.

Socio-economic data was provided by the Southern California Association of Governments (SCAG), as used in the 2008 Regional Transportation Plan (RTP). See Table 13. Data was analyzed at the local (Antelope Valley) and regional (entire six county SCAG region) levels. See Figure 13 for Antelope Valley sub-areas defined for this study.

It must be noted that SCAG forecasts have been highly contested by cities in the Antelope Valley as unrealistically high. The problem appears to arise from the sub-area names used by SCAG. These sub-areas go beyond the City boundaries; for example, the East Palmdale region plus the West Palmdale region does not equal the City of Palmdale. Table 14 presents population forecasts developed by SCAG² and the Greater Antelope Valley Economic Alliance (GAVEA).³ The GAVEA population forecasts for 2030 are within seven percent of the SCAG forecasts for the City of Lancaster and within 2.5 percent for the City of Palmdale. GAVEA does not forecast employment, so SCAG forecasts are used in this report, with the understanding that the subareas do not match City boundaries.

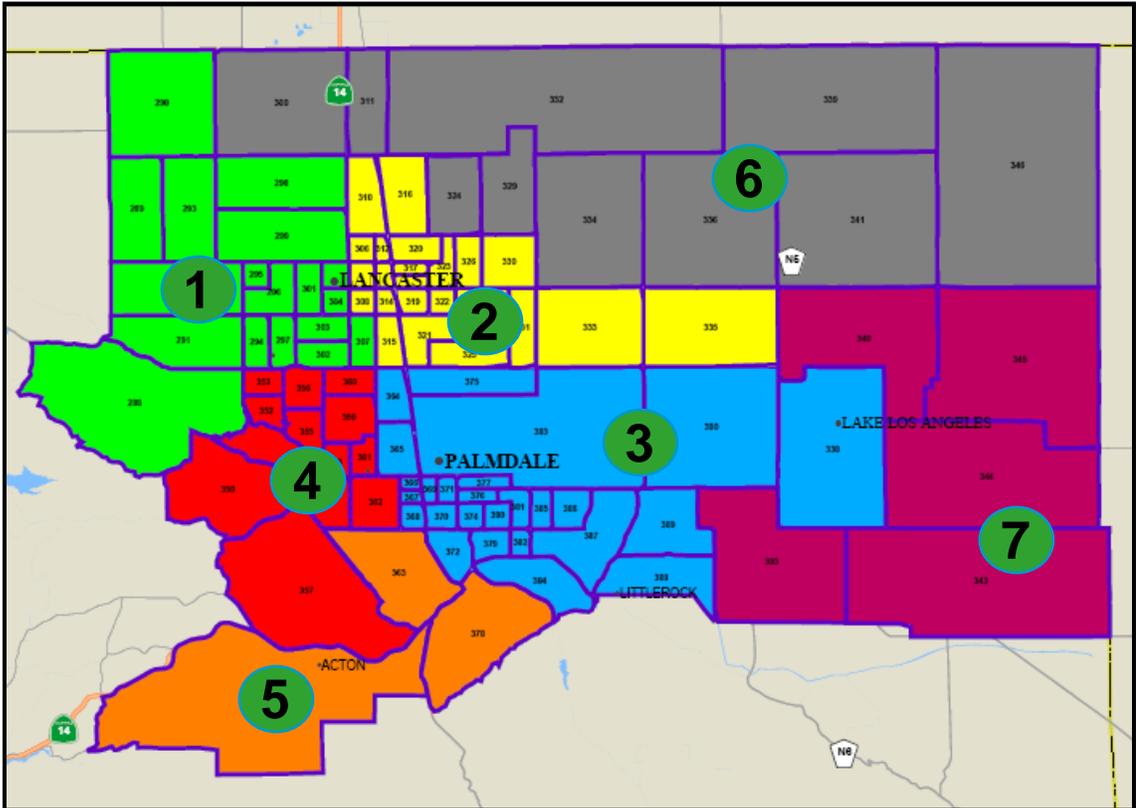
The Antelope Valley is projected to continue its rapid growth through 2035. Overall population is projected to nearly double between 2008 and 2035, with the slowest growing sub-area forecast for 70 percent population growth.

The number of households is projected to increase at a slightly slower rate than population; household sizes are therefore projected to increase slightly.

Jobs are forecast to increase at half the rate of population. Since the Antelope Valley already has an employment deficit, many of the new workers will have to travel outside of the Antelope Valley for work. These workers will have to – by necessity – travel longer distances to work, potentially increasing the demand for express transit services. See Table 13.

² See <http://www.scag.ca.gov/forecast/index.htm> for SCAG city forecasts for Lancaster and Palmdale. Click on “Adopted 2008 RTP Growth Forecast, by City.”

³ See [http://www.aveconomy.org/index.cfm?page=Population Detail](http://www.aveconomy.org/index.cfm?page=Population%20Detail) for GAVEA forecasts by city and unincorporated County area for 2010, 2020, and 2030.



Sub Areas: 1 = West Lancaster; 2 = East Lancaster; 3 = East Palmdale; 4 = West Palmdale; 5 = Acton; 6 = Northeast areas; 7 = Lake Los Angeles.

Figure 13: Antelope Valley Sub-Areas

Table 13: Antelope Valley Demographic Projections

Area Description	#	Total Population	Total Households	Total Workers*	Total Employment	Workers: Jobs
Year 2008						
West Lancaster	1	70,400	21,400	26,100	16,400	1.6
East Lancaster	2	100,800	31,800	34,500	37,400	0.9
East Palmdale	3	151,700	41,800	49,800	28,400	1.8
West Palmdale	4	53,500	15,600	19,400	6,700	2.9
Acton	5	9,700	3,200	4,100	1,500	2.7
North-East	6	2,900	900	800	600	1.2
Lake LA	7	2,100	700	700	200	3.4
		391,100	115,400	135,400	91,200	1.5
Year 2035						
West Lancaster	1	136,900	41,500	48,900	28,600	1.7
East Lancaster	2	171,600	51,800	55,200	54,900	1.0
East Palmdale	3	309,900	80,200	99,300	36,300	2.7
West Palmdale	4	122,800	34,400	38,000	12,500	3.1
Acton	5	22,000	7,800	9,000	2,000	4.3
North-East	6	6,700	2,100	1,800	1,400	1.3
Lake LA	7	3,900	1,300	1,500	400	3.3
		773,700	219,100	253,800	136,200	1.9
Numerical Change						
West Lancaster	1	66,500	20,100	22,800	12,100	1.9
East Lancaster	2	70,800	20,000	20,700	17,500	1.2
East Palmdale	3	158,100	38,400	49,500	7,900	6.2
West Palmdale	4	69,300	18,800	18,700	5,800	3.2
Acton	5	12,200	4,500	4,900	600	8.3
North-East	6	3,800	1,200	1,100	800	1.4
Lake LA	7	1,800	700	700	200	3.2
		382,600	103,700	118,400	44,900	2.6
Percent Change						
West Lancaster	1	94%	94%	87%	74%	
East Lancaster	2	70%	63%	60%	47%	
East Palmdale	3	104%	92%	99%	28%	
West Palmdale	4	130%	121%	96%	87%	
Acton	5	126%	140%	118%	39%	
North-East	6	133%	128%	144%	117%	
Lake LA	7	87%	95%	104%	108%	
		98%	90%	87%	49%	

Source: SCAG 2008 RTP.

*Workers are not directly forecasted by SCAG; derived by assuming households with 3+ workers average 3.5 workers.

Table 14: Population Projections: SCAG vs. GAVEA

Area	2010 Population	2020 Population	2030 Population	2035 Population
GAVEA Forecast				
City of Lancaster	168,032	215,468	259,696	--
City of Palmdale	176,506	259,712	337,314	--
Unincorporated LA County	95,965	133,725	167,319	--
Antelope Valley Total	440,503	608,905	764,329	--
SCAG Sub-area Forecast				
Lancaster East + West Subarea	--	--	--	308,500
Palmdale East + West Subarea	--	--	--	432,700
Unincorporated County Subarea	--	--	--	32,600
Antelope Valley Total	--	--	--	773,800
SCAG City Forecast				
City of Lancaster	160,650	202,406	242,523	261,501
City of Palmdale	182,663	257,545	329,321	363,252

Source: SCAG 2008 RTP; <http://www.scag.ca.gov/forecast/index.htm> (click on "Adopted 2008 RTP Growth Forecast, by City"); [http://www.aveconomy.org/index.cfm?page=Population Detail](http://www.aveconomy.org/index.cfm?page=Population%20Detail)

Table 15 compares growth in households and jobs by three wage rate groups (lower, medium and higher incomes). Antelope Valley will continue to have more workers than jobs in all income categories. A further consideration is whether there will be a match in the kinds of new households and jobs added. If Antelope Valley adds low-paying jobs, but builds high-end housing, then even more longer-distance commuting will ensue.

In percentage terms, Antelope Valley is projected to add more of the higher income households and higher income jobs. Nonetheless, there are projected to be sizeable disparities in households and jobs for all income levels. This indicates that even lower income workers will be forced to travel long distances. Lower and medium income workers traveling long distances could be a desirable market for express transit services.

Table 15: Antelope Valley Households and Jobs by Wage Rate Groups

Area Description	#	Lower Income Households	Lower Income Jobs	Medium Income Households	Medium Income Jobs	Higher Income Households	Higher Income Jobs
Year 2008							
West Lancaster	1	10,100	8,100	7,500	4,700	3,900	3,622
East Lancaster	2	21,100	20,100	8,300	10,300	2,400	7,007
East Palmdale	3	25,200	14,000	13,000	7,700	3,700	6,714
West Palmdale	4	5,300	3,900	6,400	1,600	3,900	1,219
Acton	5	1,300	800	1,100	400	900	263
North-East	6	600	400	200	200	100	107
Lake LA	7	400	100	200	100	50	23
		63,900	47,400	36,600	24,900	14,900	18,955
Year 2035							
West Lancaster	1	18,600	14,100	13,000	7,500	9,900	6,900
East Lancaster	2	33,700	29,300	12,600	14,100	5,500	11,600
East Palmdale	3	49,000	18,100	22,000	9,100	9,100	9,100
West Palmdale	4	10,700	6,800	12,600	2,900	11,100	2,800
Acton	5	2,700	1,100	2,400	500	2,700	400
North-East	6	1,300	700	500	400	300	300
Lake LA	7	800	200	400	100	200	100
		116,800	70,300	63,500	34,600	38,800	31,200
Numerical Change							
West Lancaster	1	8,500	6,000	5,500	2,800	6,000	3,300
East Lancaster	2	12,600	9,200	4,300	3,700	3,000	4,500
East Palmdale	3	23,800	4,200	9,000	1,400	5,500	2,300
West Palmdale	4	5,500	2,900	6,200	1,400	7,200	1,600
Acton	5	1,500	300	1,300	100	1,800	200
North-East	6	700	300	300	200	200	200
Lake LA	7	400	100	200	50	200	100
		52,900	23,000	26,900	9,700	23,900	12,200
Percent Change							
West Lancaster	1	84%	74%	75%	60%	154%	92%
East Lancaster	2	60%	46%	53%	36%	124%	65%
East Palmdale	3	95%	30%	70%	19%	150%	35%
West Palmdale	4	104%	75%	96%	88%	187%	127%
Acton	5	117%	35%	117%	28%	202%	70%
North-East	6	107%	93%	118%	116%	367%	203%
Lake LA	7	78%	92%	76%	73%	324%	296%
		83%	49%	73%	39%	161%	65%

Source: SCAG 2008 RTP.

Lower income HHs and jobs = wages less than \$25,000 (\$1999); Medium income = between \$25,000 and \$50,000; Higher income = greater than \$50,000. Cost of living in California has increased by 35% between 1999 and 2008 (Source: California Department of Industrial Relations; <http://www.dir.ca.gov/dlsr/CPI/EntireCCPI.PDF>).

The six-county SCAG region is divided into ten sub-regions as shown on Figure 14. Two sub-regions are defined for their potential to be served by transit (Santa Clarita –

due to its proximity – and Greater Downtown Los Angeles). Other areas are defined by proximity (Victor Valley and the rural area to the west called Tejon), while other areas were defined as logical sub-regions within the SCAG Region. Since Kern County is not part of the SCAG Region, data for this adjacent county is not available.

Many of the adjacent sub-regions show greater growth in workers than in jobs available. These areas include Victor Valley, Santa Clarita, and Tejon, a rural area that is projected to rapidly urbanize.

One area where the number of jobs is projected to increase more rapidly than the number of workers is the Inland Empire, approximately 60 miles from the Antelope Valley. The closest major city in the Inland Empire – San Bernardino – is approximately the same distance from Antelope Valley as is Downtown Los Angeles. However, transit from Antelope Valley is probably not competitive with the automobile to the Inland Empire, as there are not concentrated activity centers that focus the travel of large numbers of commuters. See Table 16 for a socio-economic breakdown of each SCAG sub-region.

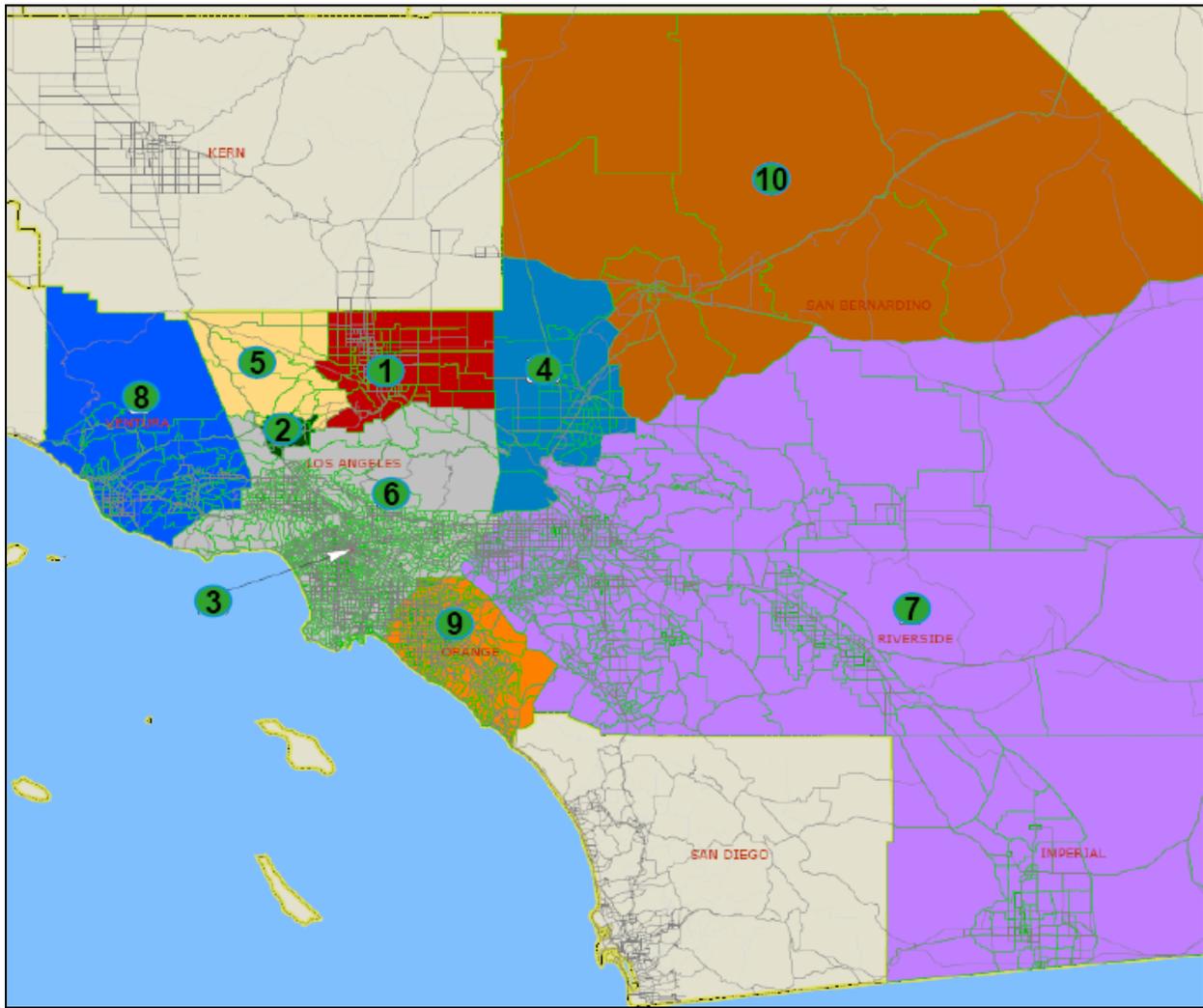


Figure 14: SCAG Sub-Regions

Table 16: Socio-Economic Data for SCAG Sub-Regions

Sub-Region	#	Total Population	Total Households	Workers	Total Employment
Year 2008					
Antelope Valley	1	391,100	115,400	135,400	91,200
Santa Clarita	2	196,800	63,000	94,100	62,900
Greater Downtown LA	3	1,212,900	345,600	395,100	649,300
Greater Victor Valley	4	351,400	105,200	115,500	89,800
Tejon	5	22,400	7,100	10,500	8,100
Rest of LA County	6	8,638,800	2,774,300	3,562,200	3,677,800
Inland Empire	7	3,961,100	1,206,300	1,492,300	1,441,300
Ventura County	8	842,000	269,100	385,800	362,200
Orange County	9	3,217,200	1,017,100	1,477,900	1,700,500
East San Bernardino	10	71,000	22,500	26,900	32,100
SCAG Region		18,904,700	5,925,600	7,695,600	8,115,200
Year 2035					
Antelope Valley	1	773,700	219,100	253,800	136,200
Santa Clarita	2	290,300	93,000	135,000	93,000
Greater Downtown LA	3	1,342,900	422,900	436,300	709,600
Greater Victor Valley	4	706,100	226,400	228,200	188,900
Tejon	5	128,200	39,200	50,100	40,800
Rest of LA County	6	9,811,800	3,235,900	4,024,300	4,063,000
Inland Empire	7	6,189,300	1,976,100	2,332,300	2,552,500
Ventura County	8	1,013,800	330,200	449,600	463,200
Orange County	9	3,659,400	1,120,100	1,740,400	1,983,000
East San Bernardino	10	134,300	46,100	53,700	53,900
SCAG Region		24,049,700	7,708,900	9,703,600	10,283,900
Numerical Change					
Antelope Valley	1	382,600	103,700	118,400	44,900
Santa Clarita	2	93,500	30,000	40,900	30,100
Greater Downtown LA	3	130,000	77,300	41,100	60,300
Greater Victor Valley	4	354,700	121,200	112,800	99,200
Tejon	5	105,700	32,100	39,600	32,600
Rest of LA County	6	1,173,000	461,600	462,100	385,200
Inland Empire	7	2,228,200	769,800	840,100	1,111,200
Ventura County	8	171,800	61,100	63,900	101,000
Orange County	9	442,200	103,000	262,400	282,500
East San Bernardino	10	63,200	23,500	26,800	21,800
SCAG Region		5,145,000	1,783,300	2,008,000	2,168,700
Percent Change					
Antelope Valley	1	98%	90%	87%	49%
Santa Clarita	2	48%	48%	43%	48%
Greater Downtown LA	3	11%	22%	10%	9%
Greater Victor Valley	4	101%	115%	98%	110%
Tejon	5	471%	452%	376%	401%
Rest of LA County	6	14%	17%	13%	10%
Inland Empire	7	56%	64%	56%	77%
Ventura County	8	20%	23%	17%	28%
Orange County	9	14%	10%	18%	17%
East San Bernardino	10	89%	104%	99%	68%
SCAG Region		27%	30%	26%	27%

Antelope Valley trip tables are summarized into three groups – local trips, other trips within the Antelope Valley, and other trips that leave Antelope Valley (Table 17). Trip purposes are divided by home-based work trips and all other trip purposes.

Table 17: Antelope Valley Travel Patterns (Average Weekday Daily Trips)

From	To	2008 Trip Purpose			2035 Trip Purpose		
		Work	Other	% Work	Work	Other	% Work
Local Trips							
W. Lancaster	Within Same Sub-Area	10,500	93,200	10%	18,700	174,000	10%
E. Lancaster		26,900	191,600	12%	37,500	298,500	11%
E. Palmdale		25,500	246,300	9%	34,600	404,800	8%
W. Palmdale		2,800	50,900	5%	5,100	102,100	5%
Acton		300	5,600	5%	400	12,100	3%
North-East		100	1,900	3%	200	4,300	4%
Lake LA		0	300	4%	0	700	0%
Total			66,000	590,000	10%	96,600	996,600
Other Antelope Valley Locations							
W. Lancaster	Other Antelope Valley Areas	15,700	54,600	22%	21,400	86,700	20%
E. Lancaster		13,100	58,700	18%	16,800	83,400	17%
E. Palmdale		13,800	54,500	20%	25,000	96,600	21%
W. Palmdale		12,200	48,800	20%	18,100	88,400	17%
Acton		1,000	6,200	14%	1,700	12,900	12%
North-East		500	2,700	15%	1,000	5,400	16%
Lake LA		200	1,400	15%	300	2,300	12%
Total			56,500	227,000	20%	84,400	375,700
Rest of Los Angeles Region							
W. Lancaster	Other Locations within LA Region	19,100	23,300	45%	42,400	46,900	47%
E. Lancaster		19,300	18,100	52%	38,500	28,300	58%
E. Palmdale		45,400	69,500	40%	105,200	146,300	42%
W. Palmdale		18,300	26,200	41%	40,200	67,000	38%
Acton		5,300	10,300	34%	11,900	22,300	35%
North-East		600	2,400	21%	1,800	5,000	26%
Lake LA		1,000	2,900	25%	2,100	5,400	28%
Total			109,000	152,700	42%	242,100	321,200
Summary							
Total All Trips		231,487	969,626	19%	423,064	1,693,460	20%
Percent Local Trips		29%	61%		23%	59%	
Percent to Other Ant. Valley		24%	23%		20%	22%	
Percent to Other LA Region		47%	16%		57%	19%	
		100%	100%		100%	100%	

Source: SCAG 2008 Regional Transportation Plan

Trips are in production/attraction format (place of residence is always the trip production; place of work/other activities is always the trip attraction).

Local trips are those that start and end within each of the seven Antelope Valley sub-areas (see Figure 13 earlier in this section). An example would be a trip that begins or ends within the East Lancaster sub-area. Local trips account for over 60 percent of

2008 other trips. The percentage of other trips declines slightly over time to 2035, but still constitutes the large majority. On the other hand, work trips are much less likely to be local travel. Local trips account for less than one-third of work trips in 2008, and less than one-quarter of work trips in 2035.

Short local trips, especially non-work trips, are generally less competitive for transit. Given the size of the sub-areas, not all local trips can be defined as “short,” and transit is a suitable option for many of these trips. A factor that works against transit in these cases is the preference for personal automobile use over public transit, particularly for non-work travel.

Other trips within Antelope Valley travel from one Antelope Valley sub-area to another. These trips account for one-fifth to almost one-quarter of work and other trips – both in 2008 and in 2035. These trips are also about twice as likely to have a work purpose versus local trips. Work trips can be a good potential market for transit ridership since these trips tend to occur at predictable times – typically during the most congested times of the day.

Trips to other parts of the Los Angeles Region are, almost by definition, long distance. Travel out of the Antelope Valley requires traveling on State Routes 14 or 138. Despite the long distances (Palmdale to Downtown Los Angeles is over 60 miles), many Antelope Valley commuters and travelers regularly make long trips. Forty-seven percent of 2008 work trips are to locations outside the Antelope Valley – a figure that is projected to rise to 57 percent by 2035. Smaller but still significant shares of other trips are made outside Antelope Valley, as shown in Table 17.

Given the huge population and employment, the “Rest of Los Angeles” sub-region (all of Los Angeles County, excluding Antelope Valley, Santa Clarita, Greater Downtown Los Angeles, and Tejon) accounts for the majority of 2008 long-distance trips (62 percent of work and 51 percent of other trips – see Table 18). The “Rest of Los Angeles” sub-region is a large area ranging from Chatsworth to Long Beach to Pomona. Short of service to specific activity centers, such as Warner Center in the west San Fernando Valley, this sprawling sub-region is challenging to serve with a one-seat transit ride.

Santa Clarita and Greater Downtown Los Angeles each account for 8 to 9 percent of work trips and other trips. The number of trips to these areas is projected to nearly double between 2008 and 2035.

The Tejon area is expected to dramatically increase in population by 2035, and these new residents may desire services provided in the Antelope Valley. As such, there may be an increasing demand for transit to serve this area.

Table 18 also shows that the number of work trips between the Antelope Valley and Victor Valley is projected to more than triple between 2008 and 2035, from 3,400 to 13,600. This is a market that AVTA may consider serving with intercity bus services between Palmdale/Lancaster and Victorville.

Table 18: Long-Distance Travel Out of Antelope Valley

From	To	2008 Trip Purpose			2035 Trip Purpose		
		Work	Other	% Work	Work	Other	% Work
Distribution of Trips Leaving Antelope Valley							
Antelope Valley	Santa Clarita	9,300	13,100	42%	19,200	25,400	43%
	E San Bernardino	400	2,100	16%	600	4,200	13%
	Inland Empire	5,200	15,200	25%	19,200	38,800	33%
	Ventura	4,400	8,700	34%	10,600	17,600	38%
	Orange	4,700	4,800	49%	11,100	12,300	47%
	Rest of LA	67,100	78,100	46%	135,000	142,700	49%
	Tejon	4,300	9,600	31%	14,100	30,400	32%
	Downtown LA	10,200	7,400	58%	20,600	12,700	62%
	Victor Valley	3,400	13,600	20%	11,700	37,200	24%
		109,000	152,600		242,100	321,300	
Percent of Total							
Antelope Valley	Santa Clarita	9%	9%		8%	8%	
	E San Bernardino	0%	1%		0%	1%	
	Inland Empire	5%	10%		8%	12%	
	Ventura	4%	6%		4%	5%	
	Orange	4%	3%		5%	4%	
	Rest of LA	62%	51%		56%	44%	
	Tejon	4%	6%		6%	9%	
	Downtown LA	9%	5%		9%	4%	
	Victor Valley	3%	9%		5%	12%	
		100%	100%		100%	100%	

Transit ridership and service data are summarized in Table 19. AVTA operates four kinds of fixed-route services – local routes, school trippers, the Lake Los Angeles Express, and commuter express routes.

Other transit services available to Antelope Valley travelers include Metrolink, Santa Clarita Transit, Acton and Agua Dulce Shuttle, and the County of Los Angeles Beach Bus. Metrolink service is provided via the Antelope Valley commuter rail line. Three stations are operated (Lancaster, Palmdale and Acton) with nearly 900 parking spaces.

Santa Clarita Transit operates Route 797 between Palmdale, Lancaster and Santa Clarita. This route has three daily round trips.

AVTA carries over 3,000,000 riders (July 2008 through June 2009 data) across all lines. Commuter express routes account for 288,000 annual riders, and are reasonably productive, given their length, based on the riders per revenue hour. Among local routes, Routes 11/12, 1 and 2/3 have the most riders, and these routes along with Route 4 have the highest productivity (measured by riders per revenue hour).

Table 19: FY 2009 Antelope Valley Transit Services and Ridership

Route	Headways ¹			Annual Revenue Hours	Annual Boardings ²	Average Boardings Per Revenue Hour
	Weekdays	Off-Peak	Weekends			
Local Routes						
1	30	30	60	22,702	618,016	27.2
2/3	30	30	60	28,564	578,791	20.3
4	60	60	60	9,508	239,834	25.2
5	60	60	60	4,810	100,063	20.8
6	90	90	90	5,007	73,443	14.7
7	60	60	120	8,610	128,849	15.0
9	50	50	50	10,553	88,091	8.3
11/12	30	30	60	34,398	844,520	24.6
School Routes						
97	1 trip	1 trip	--	165	6,187	37.4
99	1 trip	1 trip	--	311	7,118	22.9
Lake Los Angeles						
Lake LA Express	120	120	120	8,550	55,491	6.5
Commuter						
785	25	--	--	8,164	116,318	14.2
786	2 runs	--	--	2,404	28,288	11.8
787	20	--	--	9,768	143,593	14.7
Metrolink						
Antelope Valley Line	30	120	120	--	7,100 ³	--

1 - Headways are approximate.

2 - From AVTA FY 09.

3 - Metrolink ridership data for average weekday in 2005.

Given the rapid projected growth, it should not be surprising that highway congestion is projected to significantly increase over time. Currently, a transit trip from Palmdale to Downtown Los Angeles is fairly competitive with automobile travel. According to the SCAG model, this trip would take approximately 120 minutes by auto, with transit times (for both express bus and Metrolink) at about 140 minutes. The Metrolink trip would require a transfer to the Red Line from Union Station. The bus provides a more direct one-seat ride; however, the bus is subject to the same congestion issues auto drivers face.

Given forecasts of increasing highway travel demand and congestion, automobile trip times on regional highways are forecast to more than double. While this estimate of automobile travel times assumes commuters would spend from four to six hours traveling to work, the value of time would most likely result in a different pattern of travel behavior. However, the forecast of much worse congestion is reasonably assured given the projected regional changes in housing and jobs. The trip may not take six hours to travel 60 plus miles; however, it is reasonably certain the trip will take longer than today, and the length of the congested commute periods will also increase.

While the near-certain increase in auto congestion does present opportunities for AVTA, it also presents problems. Buses will be subject to the same traffic congestion and delays as personal automobiles. Reliability will decrease and the number of buses needed to maintain current service levels will increase. The solution for AVTA will be to find a mix of transit services that can be competitive with automobile travel. AVTA may also seek to differentiate and cater to those travel markets that promise the greatest transit productivity, leaving other markets to HOV/HOT/Express Lanes, Metrolink, or eventually High-Speed Rail.

2.0 Proposed Development and Land Use Plans

This section discusses goals, policies and implementation recommendations related to land use and development within the study area that may affect existing AVTA services.

2.1 County of Los Angeles

The County of Los Angeles outlines the following goals, policies and implementation actions related to public transportation (bus and rail) in the *Los Angeles County Draft General Plan (2008)*⁴:

- **Goal M-1:** An accessible transportation system that ensures the mobility of people and goods throughout the County.
 - **Policy M 1.1:** Expand the availability of transportation options throughout the County.
 - **Policy M 1.2:** Encourage a range of transportation services at both the regional and local levels, especially for transit dependent populations.
 - **Policy M 1.3:** Sustain an affordable countywide transportation system for all users.
 - **Policy M 1.4:** Maintain transportation right-of-way corridors for future transportation uses.
 - **Policy M 1.5:** Support the linking of regional and community level transportation systems.
 - **Policy M 1.7:** Maintain, upgrade, and create new transit facilities.
 - **Implementation Action M 1.1:** Participate with the Department of Public Works in developing Transit Service Standards that incorporate thresholds for service based on the needs of the community (i.e. density, demographics, etc).
- **Goal M-2:** Encourage a range of transportation services at both the regional and local levels, especially for transit dependent populations.
 - **Policy M 2.2:** Expand transportation options throughout the County that reduce automobile dependence.
 - **Policy M 2.1:** Encourage street standards that embrace the complete streets concept, which designs roadways for all users equally including pedestrians, bicyclists, motorists, people with disabilities, seniors, and users of public transit.

⁴ Los Angeles County, Draft General Plan, 2008, p. 93.

- **Policy M 2.8:** Require a maximum level of connectivity in transportation systems and community-level designs.

2.2 City of Lancaster

Transit-related development plans and policies for the City of Lancaster are addressed in the City of Lancaster's *General Plan 2030 – Soaring into the Future* (2009), the *Downtown Lancaster Specific Plan* (2008), and the *Amargosa Creek Specific Plan Final Program EIR* (2007).

City of Lancaster – General Plan 2030

The *City of Lancaster General Plan 2030 – Soaring into the Future* (2009) discusses the following transit-related policies⁵:

- **Policy 14.4.1(c):** Support and encourage the development of an efficient transportation system for the entire community, emphasizing the particular needs of the transit dependent individuals in the City, such as senior citizens, the handicapped, and students through such actions as:
 - Assisting the local transit providers in the coordination, location and scheduling of public transit services and facilities.
 - Working with Palmdale, Los Angeles County, and other agencies to maintain and enhance local transit service routes and schedules into a linked, valley-wide system.
 - Urging the timely extension of public transit between residential areas and industrial employment centers.
 - Examining alternatives to fixed route transit services within rural areas, such as demand response services, volunteer driver programs and taxi voucher programs.
- **Policy 14.4.1(e):** Implement the recommendations of the Transportation Master Plan to the Transit System.
- **Policy 14.4.2(a):** Through the development review process, ensure that new developments make adequate provision for bus stop and turnout areas as necessary for both public transit and school bus service, as well as park-and-ride facilities identified as necessary.
- **Policy 14.4.2(b):** Investigate the potential for the development of a transportation hub within the City, providing for connectivity between local and regional transportation services and destinations.
- **Policy 16.4.1:** Continue to promote the creation of a transit village development district around the Metrolink commuter rail station to provide opportunities for transit-oriented development, including mixed-use housing, shopping, public services, employment opportunities and cultural/recreational activities within a safe, pedestrian-friendly environment.

⁵ City of Lancaster, *General Plan 2030 - Soaring into the Future*, July 14, 2009, p. V-20 to V-25.

The 2030 plan supports policies such as infill development and sustainable development with mixed land uses. Although the impacts of these policies on transit are not specifically mentioned in the plan, such policies are transit-supportive.

Downtown Lancaster Specific Plan (2008)

The *City of Lancaster Downtown Lancaster Specific Plan* (2008) provides policy, regulatory and design guidance on land development based on the community's vision for the future of its downtown. The plan includes the following recommendations on transit-related planning and design elements⁶:

- **III.D:** Enhance Public Transit Stops along Lancaster Boulevard.
- **III.E:** Seek new Transit-Oriented Development along Sierra Highway.

Amargosa Creek Specific Plan Final Program EIR (2007)

The *Amargosa Creek Specific Plan* (2007) focuses on approximately 152 acres, bounded by Avenue K-8 to the north, the 5th Street right-of-way to the east, Avenue L to the south, and 10th Street West to the west. This plan provides long-term guidance on site development related to retail, commercial office, hotel and medical facilities within the City of Lancaster's Commercial District and Medical District.⁷ The project assumes that bus, commuter, and paratransit services within the study area would be provided by AVTA.⁸

The plan identifies the following transit-related project mitigation recommendation:

- **Mitigation 5.6-13:** The project developer(s) shall work with the AVTA to establish a transit route along Avenue L, south of the Specific Plan, so that the Medical District can be directly served by transit.⁹

2.3 City of Palmdale

The City of Palmdale has expressed its commitment to promoting the expansion of transit services as they relate to new development in the *City of Palmdale General Plan* (1993) and in the *Draft Palmdale Transit Village Specific Plan* (undated).

City of Palmdale – General Plan (1993)

The City of Palmdale's General Plan includes the following objectives and policies related to circulation and transit services¹⁰:

- **Objective C2.2:** Increase the public transit opportunities available to Palmdale residents in order to reduce traffic impacts on streets and highways and provide travel alternatives.

⁶ City of Lancaster, Downtown Lancaster Specific Plan, 2008, p. D-14.

⁷ City of Lancaster, Amargosa Creek Specific Plan – Final Program EIR, July 2007, p. 1.0-1.

⁸ City of Lancaster, Amargosa Creek Specific Plan – Final Program EIR, July 2007, p. 3.0-2.

⁹ City of Lancaster, Amargosa Creek Specific Plan – Final Program EIR, July 2007, p. 1.0-23.

¹⁰ City of Palmdale, City of Palmdale General Plan, 1993, p. C-10.

- **Policy C2.2.1:** Promote public transit operations within the Planning Area, and work with transit operators to coordinate schedules, services, service routes and fares.
- **Policy C2.2.2:** Promote the use of public transit by facilitating dedication of access routes and construction of safe and convenient stops with sufficient parking.
- **Policy C.2.2.5:** Require provision of bus turnouts for new development, where deemed to be appropriate in consultation with the transit authority.

Draft Palmdale Transit Village Specific Plan (undated)

According to the *Draft Palmdale Transit Village Specific Plan*¹¹ (undated), the proposed Palmdale Transit Village is a 100-acre site bounded by Technology Boulevard to the north, Sierra Highway to the east, Avenue Q-3 to the south, and 3rd Street East to the west. The Palmdale Transportation Center, which enables direct transfer between AVTA and Metrolink services, is located in the northern portion of the site. The transit village is designed to complement the Palmdale Transportation Center by supporting a mix of new residential, commercial and employment opportunities based on Transit-Oriented Development (TOD) principles.

City of Palmdale – Commercial, Industrial, and Institutional Development Summary (April 2008)

The City of Palmdale Planning Department compiled a *Commercial, Industrial and Institutional Development Summary*¹² (April 2008) that lists all current commercial and industrial development project applicants. Proposed projects from the summary that may potentially affect the future provision of transit services in Palmdale include, but are not limited to, the following:

- Pre-application request
 - Development of a school on an 18-acre parcel (located on the northwest corner of Avenue N-8 and 50th Street West)
- Application in process
 - Development of 2.16 acres into a senior center facility totaling 15,000 square feet and to develop 2.24 acres into park use (located between 9th and 10th Street East and Avenues Q-9 and Q-11).
- Approved application with construction started
 - Development of a general hospital, medical office buildings, and a senior housing/assisted living complex on 40 acres (located on the northeast corner of Avenue Q-7 and Tierra Subida Avenue).
 - Development of a 5.5 acre parcel into a medical office complex totaling 52,072 square feet (located on the northeast corner of 10th Street West and Auto Center Drive).

City of Palmdale – Residential Development Summary (July 2008)

The City of Palmdale Planning Department compiled a *Residential Development Summary*¹³ (July 2008) that listed all residential, development-related applicants.

¹¹ City of Palmdale, Draft Palmdale Transit Village Specific Plan, undated, accessed on October 8, 2008.

¹² City of Palmdale Planning Department, *Commercial, Industrial, and Institutional Development Summary*, April 2008.

¹³ City of Palmdale Planning Department, *Residential Development Summary*, July 2008.

Proposed projects from the summary that may potentially affect the future provision of transit services in Palmdale include, but are not limited to, the following:

- Pre-application request
 - Development of an independent living, assisted living, Alzheimer's and skilled nursing facility totaling 260,390 square feet on 9.24 acres (to be located on the north side of Rancho Vista Boulevard approximately 660 feet east of 20th Street West).
 - Proposal to develop a 19 acre school (to be located on the north side of Avenue P-8 between 22nd and 23rd Streets West)
 - Development of an assisted living facility totaling 174,400 square feet on 10.783 acres (to be located at the southwest corner of Rancho Vista Boulevard and Avenida Vista Verde)
- Other applications
 - Request to subdivide 22.62 acres into two parcels for condominium purposes and to construct a phased detached condominium development (to be located at the northeast corner of Avenue S and 70th Street East).
 - Request for a conditional use permit to build a 17,024 square foot assisted living facility (to be located 550 feet north of Palmdale Boulevard on the east side of 11th Street East).

2.4 Los Angeles County Metropolitan Transportation Authority (LACMTA)

LACMTA Short Range Plan (2003)

The *LACMTA Short Range Plan* (2003) identified the Antelope Valley Freeway (SR-14) as a congested freeway corridor in the county. Stakeholder recommendations for short-term transit improvements to alleviate congestion¹⁴ in this corridor include the following:

- Increase/enhance express and feeder bus service and Metrolink commuter rail service.
- Implement technology improvements in the provision of transit services and traffic management systems.

LACMTA Draft Long-Range Plan Technical Document (2008)

The *LACMTA Draft Long-Range Plan Technical Document* (2008)¹⁵ identified the following unfunded transit-related projects for the North County sub-region cities:

- Corridor-wide priorities along I-5 for Burbank, Glendale, Los Angeles, Lancaster, Palmdale, Santa Clarita, and San Fernando:
 - Add reverse commute service to AVTA express bus lines.
 - Reduce bus service headways.
 - Improve coordination of service between local bus service and longer-haul service.
 - Increase transit services through the I-5 corridor; various locations to be determined.
- SR-14 Corridor priorities for Los Angeles County, Lancaster, Palmdale, Santa Clarita:

¹⁴ LACMTA, Short Range Transportation Plan for Los Angeles County, 2003, p. 40.

¹⁵ LACMTA, Draft Long Range Transit Plan, 2008, p. 27.

- Improve bus transit services along SR-14.
- SR-138/High Desert Corridor (east-west route) in Palmdale:
 - For express buses: 3 east-west routes, 9 buses per hour.
 - For local buses: 75 percent increase over no build.
 - For park-and-ride lots: 11 new lots totaling 4,000 spaces.

2.5 LA/Palmdale Regional Airport

The Los Angeles World Airports (LAWA) is currently developing a new master plan for the LA/Palmdale Regional Airport that will guide the airport land use and development plans through 2030.¹⁶

2.6 California High Speed Rail (CHSRA)

The California High Speed Rail Authority (CHSRA) has completed the Final Program Environmental Impact Report and Environmental Impact Statement (EIR/EIS) for the high speed train (HST) system linking Northern and Southern California, and is currently preparing Project-Level environmental documents for sections of the entire network. The Project-Level EIR/EIS documents will identify a preferred corridor/general alignment and station locations for the Los Angeles Union Station to the Palmdale segment, and for the segment between Palmdale and Bakersfield. The Project-Level EIR/EIS documents are anticipated to be completed in 2010.¹⁷

3.0 Sustainability

Many transit agencies are starting programs which are designed to reduce their carbon footprint and to foster more sustainable operations. For transit, sustainability applications focus on buildings/structures and the transit fleet.

AVTA has adopted green building technologies for its new administrative offices and for proposed expansion. AVTA is also considering photovoltaic or solar-powered canopies as bus shelters. This technology is beginning to be used more frequently for bus stops because of some of the unique advantages it offers. Photovoltaic bus stops generally have solar panels mounted on their roofs, and the solar energy is stored and used for any power needs of the bus stop, such as night lighting. This power can also be used for other purposes such as to power electronic advertising displays in many of its bus stops. The advantage of a photovoltaic bus stop is the ability to light bus stops at night sustainably and at lower costs than general bus stops. More reliable night-time lighting can deter vandalism at bus shelters, further saving on maintenance costs. Photovoltaic structures also have the advantage of not needing to be connected to a power grid. This becomes increasingly important in rural areas where additional, costly infrastructure

¹⁶ LA/Palmdale Regional Airport, Website. <http://www.lawa.org/pmd/pmdHistory.cfm>, accessed October 20, 2008.

¹⁷ California High Speed Rail Authority, Los Angeles to Palmdale Fact sheet, Website. http://www.cahighspeedrail.ca.gov/images/chsr/20080129121342_UPDATED_Fact_Sheet.pdf, accessed on October 20, 2008.

would be needed to power bus stops. It is estimated that \$80 per bus shelter can be saved on energy costs every year by using these types of structures. The cost per photovoltaic unit is estimated at \$3500. AVTA currently has several solar canopies completed at its administrative facility, which provide 70 percent of AVTA's electrical needs. Phase II of this construction will be completed in 2011.

With regard to its bus fleet, AVTA recently signed contracts for the purchase of fifteen Designline turbine diesel hybrids. Aside from the environmental benefits of turbine diesel hybrids, AVTA anticipates decreased fuel and maintenance costs, due to much greater fuel efficiency (12 miles per gallon, compared to the current four miles per gallon) and fewer moving parts. Thus, the switch to green vehicles will meet AVTA's goal of reducing operating costs.

As bus technology continues to change rapidly, AVTA will monitor developments and decide whether to continue with hybrid technology on future buses or to opt for zero-emission buses. Cost will be a major factor in this decision.

IV. Recommended Service Adjustments

The analysis of current services provided by AVTA indicates that AVTA's operating costs are rising at a slightly faster rate than the rate at which service is being increased or the rate at which ridership is increasing. In other words, the operating costs per unit of service are rising while passenger use per unit of service is constant.

Similarly, over the next 20 years, the population of Antelope Valley is projected to grow, resulting in significantly more out-of-area work-related travel. Based on the current service and expected future changes, this section describes recommended adjustments to the three service types provided by AVTA: fixed-route transit, commuter, and Dial-A-Ride. These recommended adjustments are intended to improve service and increase efficiency in response to current deficiencies and anticipated future demands.

1.0 Fixed-route Transit

Depending on the potential demand for transit services and available funding in the future, there are a number of areas where transit services could be enhanced to better serve the region. One possibility is enhancing service along the 10th Street West or Sierra Highway corridor, and adding Bus Rapid Transit (BRT) service to that area. AVTA may also be able to make some adjustments to its services with lower ridership, such as the Lake Los Angeles Express, which may allow for a more efficient use of AVTA resources.

The current network structure has routes radiating out from three major nodes:

- Palmdale Transportation Center
- Lancaster City Park
- Lancaster City Hall/Los Angeles County Senior Center

In general, the network is designed for maximum coverage within the service area, and thus service is dispersed into multiple, often parallel corridors. Slightly over half of the routes have headways of one hour or longer.

One strategy to improve transit is to introduce premium service in the most heavily utilized corridors. Implementation of a BRT route along the same corridors as Route 1, with fewer stops and higher speeds, would create a better and faster connection between traffic generators in the region. This would entice more people to use transit because of the faster possible speeds to final destinations. Additionally, if more efficient transfers were introduced at major transit hubs, such as the Palmdale Transportation Center and Lancaster City Park, the BRT could in essence act as a trunk line for the Antelope Valley's transit system. Riders would be able to take this faster BRT service to and from major traffic generators and then could transfer to another route to get home. The BRT trunk line could also connect the transit network to a future High Speed Rail Station serving the Antelope Valley.

AVTA is currently looking at developing a multi-modal facility at the Metrolink station in Lancaster and connecting this to the Palmdale Transportation Center via a fixed-guideway system of some kind along Sierra Highway, where there are fewer right of way issues than on 10th Street West. Sierra Highway could prove to be a better corridor in which to establish BRT service between Lancaster and Palmdale.

Another area for possible service modification is the Lake Los Angeles Express Route. The Lake Los Angeles Express is the only transit line that currently serves the area, and the few riders it has depend on it. Possibilities for this route could include a deviated fixed-route service in which certain major stops would always be served but the transit vehicle could deviate for pick-up or drop-off between these stops. Flexible services like these are ideal for rural areas with low densities and low ridership.

The AVTA local service route network may also benefit from a Comprehensive Operational Analysis (COA) of the structure of the network in terms of how the routes are configured and operated, and how this may affect ridership on the system. A Line-by-Line Analysis, similar to a COA in nature, is nearing completion and will offer specific route-level recommendations for near-term system enhancements.

There is not a "one size fits all" answer for AVTA in terms of its route network configuration. AVTA is developing performance standards that reflect the different roles that various routes play in the overall transit. Local Routes 1, 2, 3, 4, 11, and 12 have the highest ridership in the area, and together comprise the "core" routes in the AVTA system. "Core" routes serve areas of high demand within the urban service area (defined as the developed areas of Lancaster and Palmdale) and operate with relatively higher frequency. It is appropriate to streamline these routes along major corridors to reduce travel times to major destinations and to enhance frequency on core routes to every 15 minutes. "Feeder" routes serve areas of low to moderate demand and operate with relatively lower frequency. Routes 5, 7, and 9 are examples of feeder routes, which also have lower ridership. These routes typically provide coverage in low-density neighborhoods and thus can be circuitous in nature. Their importance lies in providing mobility in these neighborhoods and connecting riders to the core routes. Service levels of every 30 to 60 minutes are appropriate for feeder routes, with timed transfers at transit centers. Routes outside the urban service area, such as Route 6 and the Lake Los Angeles Express, travel long distances through areas of little transit demand.

As the standards are developed and as new technologies are successfully implemented, it will become possible to re-think service delivery within the Antelope Valley. In rural or suburban feeder areas, deviated fixed route service, “smart” paratransit, or even the use of volunteer drivers might provide a more appropriate level of service while maximizing passenger convenience. This would permit the concentration of big-bus service in the more urbanized areas where demand warrants enhanced fixed-route service. This is the most promising direction for AVTA as it moves into the future.

2.0 Commuter

The current Commuter Express lines, Routes 785, 786, and 787, which travel to different parts of Los Angeles, have high ridership but also have high costs. Commuter fares are set at the direction of the Board to achieve a very high farebox recovery ratio; therefore, AVTA continues to seek opportunities to enhance efficiency and lower costs on these routes.

A majority of work trips leaving the Antelope Valley are ultimately destined for the greater Los Angeles region, which is defined as Los Angeles County excluding the Antelope Valley and Tejon areas. As noted earlier in Table 17, the number of work-related trips to the greater Los Angeles region is estimated to double to 155,600 trips in 2035. According to current regional models, automobile trips to Los Angeles currently take about 120 minutes, while transit trips (for both express bus and Metrolink) take approximately 140 minutes. Given the rapid projected growth in population and travel demand, highway congestion is projected to significantly worsen, making travel via public transit from the Antelope Valley to Downtown Los Angeles increasingly competitive with auto travel.

The challenge for AVTA is to find a mix of transit services that can be competitive with auto travel. The Antelope Valley Transit Authority Short Range Commuter Service Plan (2009) includes several proposed changes to commuter routes and schedules over the next three to five years. The goal of these commuter changes is to make commuter services essentially self-supporting. A “fewer stops” concept is being used to take advantage of regional investments made in Metro and Metrolink services and avoid duplication of routes and services. The proposed changes are as follows:

Route 785 and Route 788 – Route 785 serves downtown Los Angeles. Though Route 785 currently has lower fares and shorter travel times than Metrolink, Metrolink travel times are more consistent. Proposed fare adjustments will result in more comparable fares. Metrolink is also expected to construct a siding between Palmdale and Santa Clarita within the next few years to improve speeds and reduce travel times, thus making Metrolink more attractive to commuters than Route 785.

As a first step, all Route 785 trips to and from downtown Los Angeles are proposed to be truncated at Union Station. The second step is the addition of Route 788 which would be a new route to serve North Hollywood at the Red Line Station. Travel time via North Hollywood and the Metro Red Line is shorter than Route 785 travel time to Downtown. Travel times via the North Hollywood route are also anticipated to be more reliable than the current Route 785. AVTA is planning to shift service gradually from Route 785 to Route 788.

Route 786 – Route 786 is the least productive commuter express route. The proposed changes are intended to improve service to UCLA and include adding a stop at UCLA, truncating all trips in Century City, adding southbound and northbound trips to the daily schedule, and shifting the time of one existing trip. These changes have been partially implemented.

Route 787 – Proposed changes to Route 787 include truncating all Route 787 trips to and from the San Fernando Valley at the Chatsworth Metrolink Station, adding two southbound and three northbound trips to the daily schedule, shifting trip times to achieve a 15-minute headway, and splitting the route into two separate routes serving CSUN and Warner Center, respectively. The added trips are meant to offset the inconvenience of transferring by providing more frequent commuter service. North Hollywood and Burbank Airport are also under consideration as alternate commuter route destinations.

There are provisions in the current labor agreement that would not permit all potential savings from these changes to be realized. AVTA will work with its union as the system evolves to address these provisions.

As Metrolink, like all transit systems, experiences fiscal shortfalls, there may be opportunities for AVTA to work with the commuter rail system to see if there are areas where AVTA can support Metrolink. One possibility is “substitute” bus service replacing selected trains using AVTA commuter buses during the midday period and/or on weekends. The buses are available at these times, and Metrolink would pay the full cost of operation that could well be less than the agency now pays to run these trains.

3.0 Dial-A-Ride

Another cost saving measure that could be enacted by the AVTA is a restructuring of demand-response service. AVTA oversees a “Dial-A-Ride” demand-response service which offers curb to curb van service to seniors over the age of 65 and disabled residents of Antelope Valley. Veolia currently operates AVTA’s Dial-a-Ride and fixed-route services, while Access Paratransit runs a similar service for ADA-eligible riders in the Antelope Valley. AVTA’s current DAR service is meant to bridge the gap between local fixed-route services and Access paratransit services.¹⁸ AVTA is currently exploring alternatives for this demand service to reduce costs, such as potentially capping the services provided by DAR through Veolia and using a taxi program to deliver trips which cannot be provided efficiently through DAR.

4.0 Implement Mobility Management System

This section discusses the potential implementation of a mobility management program which would include policies to maintain, manage, and improve the transportation system, expand travel options, improve personal mobility, reduce the number of commute trips during peak congestion periods, and increase the efficiency and reliability

¹⁸ “About the Dial-A-Ride service” AVTA website. http://www.avta.com/dar/dar_service.htm Accessed September 1, 2009.

of our transportation system through the use of Intelligent Transportation Systems (ITS) and Transportation Demand Management (TDM).

Criteria that AVTA should emphasize in considering future investments to increase the number of travel options available to Antelope Valley residents include: increasing personal mobility; reducing the number of commute trips during the peak congestion periods; and increasing individual flexibility in planning and making trips.

AVTA may want to work with its municipal partners to create a transit preferential corridor along 10th Street West. This corridor is already considered a “main street” that experiences a certain degree of congestion. Based on discussions with stakeholders,¹⁹ this corridor is anticipated to support a growing number of businesses that have expressed interest in locating there. Such transit preferential treatments could include dedicated transit lanes, signal prioritization for buses, and bus bulbs.

As noted earlier, AVTA is currently considering development of a multi-modal facility at the Metrolink station in Lancaster and connecting this to the Palmdale Transportation Center via a fixed-guideway system of some kind along Sierra Highway. Whereas 10th Street West has been cited as a potential route for Bus Rapid Transit or some other transit-preferential solution, the parallel Sierra Highway offers the advantages of less dense development, lower-value land uses, and the opportunity to directly connect the major transportation hubs of Lancaster and Palmdale. Sierra Highway may therefore be a feasible route for a future local fixed-guideway transit system.

V. Capital and Infrastructure Needs

1.0 Inventory of AVTA Vehicles and Facilities

Vehicles

AVTA’s revenue vehicle fleet consists of three main types of vehicles – commuter coaches, transit buses, and vans for demand-responsive services. Each type of vehicle performs a specific function within the system design. Table 20 presents a fleet plan based on the size and composition of AVTA’s fleet as of 2009, and the anticipated replacement cycles based on the purchases included in the AVTA budget for FY 2008/09 and FY2009/10.²⁰ This Fleet Plan assumes a stable fleet size over a period of 20 years. Modest increases in service provided will be handled through increased efficiencies in the route structure. Appendix B contains a complete vehicle inventory for AVTA as of 2009.²¹

The commuter coach fleet consists of long-distance commuter vehicles. These vehicles are used on the commuter services to Los Angeles and the San Fernando Valley, and seat between 53 and 68 passengers per vehicle, depending on the configuration. All of these commuter coaches are wheelchair-lift-equipped and feature high-back reclining seats with individual reading lights and ventilation. On-board restrooms are also available on each coach. AVTA also formerly operated double-deck commuter buses,

¹⁹ Antelope Valley Transit Authority, Visioning Outreach - Stakeholder Interviews, held on October 21-22, 2008.

²⁰ AVTA Budget Request FY09/10 Executive Summary

²¹ AVTA Vehicle Inventory (2007/2008), updated by AVTA staff with 2009 purchases

which are now retired and are part of the contingency fleet. AVTA maintains 25 commuter coaches - 20 are in use daily for peak service.

The local fixed-route transit bus fleet consists of three models of transit vehicles from two manufacturers, with the majority of vehicles being a low-floor design. The transit vehicles seat between 38 and 40 passengers, and have 2 wheelchair securement positions. The front steps can be lowered for passengers who have difficulty boarding. These buses use "clean diesel" fuel and are environmentally friendly. AVTA currently maintains a fleet of 42 local transit buses. New diesel-electric hybrid vehicles are on order to replace the older vehicles.

AVTA also owns and operates a fleet of smaller vans for operating the Dial-A-Ride service throughout the service area. These vans are two models from two manufacturers, and can accommodate up to 18 passengers and four wheelchairs per vehicle. As of 2009, AVTA maintains 14 DAR vehicles - 11 are in use daily.

Support vehicles play an important part in the operations of AVTA. A variety of trucks and vans are used by road supervisors, management, and maintenance staff. AVTA maintains 5 maintenance vehicles and 16 support vehicles.

AVTA maintains a small contingency fleet of 7 vehicles. This plan assumes that as similar buses are retired from the active fleet, the most reliable recently-retired buses are rotated into the contingency fleet and the older buses in the contingency fleet are sold or otherwise disposed of.

Facilities

AVTA has one facility, located at 42210 6th Street West in Lancaster, that functions as the joint administrative, operations and maintenance facility.

1.1 Capital Needs

AVTA's long-term capital needs fall into five main categories:

- Vehicles (revenue and non-revenue),
- Equipment,
- Bus equipment and refurbishment,
- Facilities and
- Real estate.

Table 21 illustrates AVTA's capital replacement needs over a period of 20 years between 2009 and 2028, were AVTA to simply replace the capital assets that exist today on the cycle allowed by FTA's useful life guidelines. Under the assumptions of this hypothetical capital plan, AVTA's estimated capital replacement needs over 20 years would be approximately \$107.2 million, or an average need of approximately \$5.4 million per year. Of this total, approximately \$67.2 million is for fleet replacement, both for revenue and non-revenue vehicles, or approximately \$3.4 million annually. Over the 10-year period from 1998 to 2007, AVTA reported to FTA's National Transit Database that capital expenditures were approximately \$57 million or \$5.7 million annually (\$46 million for fixed-route plus \$11 million for demand-response). This total includes the construction of a new operating and maintenance facility, but illustrates that this scale of funding need for regular replacement is within the ability of the agency to identify the necessary funds.

Vehicles

AVTA's revenue fleet consists of three main types of vehicles – commuter coaches, transit buses, and vans for demand-responsive services. The first two categories of vehicles have minimum 12-year service lives set by FTA, though end-of-life rebuilding projects can extend the useful life of these vehicles for an additional 6 to 12 years. Vehicles for demand-responsive services have a FTA-specified minimum of 5 years in service. The Fleet Plan is included as Table 20, and assumes that vehicles in the active revenue fleet are replaced as FTA regulations allow. AVTA could choose to prolong vehicle life in order to use funding for other projects, rather than replace vehicles on the minimum cycle allowed by FTA. In the past, AVTA has kept many of its buses and paratransit vans in operation beyond the FTA minimum. This capital plan, however, assumes replacement as soon as FTA regulations allow.

Over the 20-year period of the Capital Plan, vehicle replacement is the single largest component of the plan, as would be anticipated for any medium-sized bus operating agency. The vehicle replacement needs total approximately \$67.2 million over the 20 years:

• Commuter Coaches	\$ 14.7 million
• Transit Buses	\$ 44.0 million
• Demand-Responsive Buses	\$ 4.7 million
• <u>Non-Revenue Vehicles</u>	<u>\$ 3.8 million</u>
TOTAL	\$ 67.2 million

One recent development that has led to increased costs for vehicle replacement is the purchase of hybrid vehicles instead of standard buses to meet air quality and noise requirements. Hybrids tend to be more expensive than standard vehicles: approximately \$550,000 per vehicle as opposed to \$300,000 for a standard bus.

Equipment

AVTA's Equipment Program consists of replacement and upgrades to a variety of equipment throughout the system, both office equipment and shop equipment. This program contains an estimated \$4.5 million worth of projects over the 20-year life of the Capital Plan.

Bus Equipment and Refurbishment

AVTA's Bus Equipment Program consists of the purchase and installation of replacement components on the system's vehicles, including interior and exterior refurbishment. This program contains an estimated \$6.7 million worth of projects over the 20-year life of the Capital Plan.

Facilities

AVTA's Facility Program consists of regular maintenance and upgrades to the relatively new operations and maintenance facility, with anticipated projects totaling approximately \$25.5 million over the 20-year life of the plan. A large portion of this total is Phase II of the construction of the facility, which is a \$13 million project. Other projects in this program consist of replacement of major building components, such as re-roofing, HVAC upgrades, and replacement of the fueling system.

Real Estate

AVTA's Real Estate Program consists of the occasional purchase of property for an expansion of the current facility, satellite facilities or other facilities. This program is assumed to be approximately \$3.3 million over the 20-year life of the plan.

2.0 *Identification of Operating, Capital, and Financial Requirements for AVTA's Various Services*

AVTA's annual operating and capital expenses for the 12-year period from 1996 through 2007 are shown in Table 22. Over this period, in constant 2007 dollars, AVTA's operating costs have increased by 96 percent. Capital expenses, on the other hand, have not displayed a steady trend. This is due to the fact that capital expenses are not constant from year to year, but rather are based on project size and timing. Projects such as construction of new maintenance facilities can require a large amount of funds in one year, while other years without large projects requiring fewer funds. Projects such as this occur only every 40-50 years, and so capital needs can display peaks and valleys over time. Capital needs for purposes other than facility construction are more consistent over time. Revenue vehicle replacement and equipment are more constant needs, although replacement of large portions of the vehicle fleet can still introduce funding needs in certain years that may be much larger than prior or subsequent years.

Table 21: 20-Year Capital Needs

All costs in \$2009	New Vehicles Needed over 20-Year Life of Plan	Unit Cost	20-Year TOTAL	Average Annual Need
Vehicle Replacement				
Revenue Vehicles				
Commuter Buses	31	\$ 475,000	\$ 14,725,000	\$ 736,250
Transit Buses (Hybrid)	80	\$ 550,000	\$ 44,000,000	\$ 2,200,000
DAR Buses	47	\$ 100,000	\$ 4,700,000	\$ 235,000
Non-Revenue and Support Vehicles				
Maintenance Truck	10	\$ 57,000	\$ 570,000	\$ 28,500
Pickup Truck/Van/Support Truck	56	\$ 41,000	\$ 2,296,000	\$ 114,800
ATV	9	\$ 15,000	\$ 135,000	\$ 6,750
Staff Car	24	\$ 34,000	\$ 816,000	\$ 40,800
Vehicle Subtotal	257		\$ 67,242,000	\$ 3,362,100
			20-Year TOTAL	Average Annual Need
Equipment			\$ 4,500,000	\$ 225,000
Bus Equipment and Refurbishment			\$ 6,700,000	\$ 335,000
Facilities			\$ 25,500,000	\$ 1,275,000
Real Estate			\$ 3,300,000	\$ 165,000
Subtotal			\$ 40,000,000	\$ 2,000,000
TOTAL			\$ 107,242,000	\$ 5,362,100

Source:

- Revenue vehicle need calculated based on cycles shown in Fleet Plan, Table 20. Cost used was most recent AVTA cost for similar vehicle as reported in fleet listing, escalated at 3.5% per year.
- Non-revenue and support vehicle need calculated based on total number of vehicles in non-revenue fleet as of 2007-08 Fleet List provided by AVTA. Cost used was most recent AVTA cost for similar vehicle as reported in fleet listing, escalated at 3.5% per year.
- Equipment need calculated based on spreadsheet provided by AVTA of 10-year capital costs "Capital Plan rev 9 1 09". 20-year costs assumed to be double 10-year costs.
- Bus equipment and refurbishment need calculated based on spreadsheet provided by AVTA of 10-year capital costs "Capital Plan rev 9 1 09". 20-year costs assumed to be double 10-year costs.
- Facility need calculated based on spreadsheet provided by AVTA of 10-year capital costs "Capital Plan rev 9 1 09". 20-year costs assumed to be double 10-year costs.
- Real Estate need calculated based on spreadsheet provided by AVTA of 10-year capital costs "Capital Plan rev 9 1 09". 20-year costs assumed to be double 10-year costs.

Table 22: Operating and Capital Expenses

Year	\$2007 Operating Expense	Change from prior year	\$2007 Capital Expense	Change from prior year
1996	\$6,493,756		\$3,275,807	
1997	\$6,900,325	6%	\$1,865,907	-43%
1998	\$6,818,705	-1%	\$565,301	-70%
1999	\$6,757,967	-1%	\$442,053	-22%
2000	\$7,295,811	8%	\$2,700,978	511%
2001	\$8,143,609	12%	\$5,843,465	116%
2002	\$9,500,015	17%	\$6,132,325	5%
2003	\$10,419,695	10%	\$8,783,876	43%
2004	\$11,681,772	12%	\$28,012,779	219%
2005	\$12,198,202	4%	\$4,212,255	-85%
2006	\$11,934,935	-2%	\$2,155,715	-49%
2007	\$12,736,982	7%	\$814,825	-62%
12-Year Duration		96%		-75%

Source: FTA National Transit Database (1998 through 2007). Inflated to \$2007 using Consumer Price Index rates compiled by Bureau of Labor Statistics.

2.1 Operating Needs

AVTA's 2007 operating expense was \$12.74 million. At the rate of growth experienced over the last 12 years, AVTA can anticipate a 6.3 percent annual average growth in the operating budget. Table 23 illustrates that over the last 12 years, the average annual increase in the operating budget has been 8 percent in constant 2007 dollars, and the compound rate of increase over this period has been 6.3 percent.

As noted earlier, most of the growth in real operating costs has been driven by service increases. Table 23 also shows operating costs (in 2007 dollars) per vehicle revenue hour over the last 12 years. The average annual increase in the unit cost is 0.45 percent in constant 2007 dollars, and the compound rate of increase over this period is 0.43 percent.

Table 24 shows operating budget projections based on compound growth rates of 6.3 percent and 0.4 percent. The higher rate has an implicit assumption that service will continue to grow at the rate it has grown over the past 12 years, while the lower rate assumes no service increases.

Table 23: Historic Annual Change in Operating Cost and in Unit Operating Cost

Year	Change in operating expense from prior year	Change in unit operating cost from prior year
1996		
1997	6%	7%
1998	-1%	-11%
1999	-1%	-7%
2000	8%	2%
2001	12%	-4%
2002	17%	9%
2003	10%	8%
2004	12%	-1%
2005	4%	-3%
2006	-2%	-9%
2007	7%	18%
12-Year Duration	96%	5%
12-Year Average	8%	0.4%
Compound Rate	6.3%	0.4%

Table 24: Projected Future Operating Expenses

Year	\$2007 Operating	Change from prior year	\$2007 Operating	Change from prior year
	Expense Based on Operating Expense trends		Expense Based on Unit Operating Cost Trends	
2007	\$12,736,982		\$12,736,982	
2008	\$13,541,409	6.3%	\$12,791,624	0.4%
2009	\$14,396,642	6.3%	\$12,846,500	0.4%
2010	\$15,305,888	6.3%	\$12,901,611	0.4%
2011	\$16,272,559	6.3%	\$12,956,959	0.4%
2012	\$17,300,282	6.3%	\$13,012,544	0.4%
2013	\$18,392,912	6.3%	\$13,068,368	0.4%
2014	\$19,554,550	6.3%	\$13,124,432	0.4%
2015	\$20,789,553	6.3%	\$13,180,735	0.4%
2016	\$22,102,555	6.3%	\$13,237,281	0.4%
2017	\$23,498,482	6.3%	\$13,294,069	0.4%
2018	\$24,982,571	6.3%	\$13,351,100	0.4%
2019	\$26,560,390	6.3%	\$13,408,376	0.4%
2020	\$28,237,860	6.3%	\$13,465,898	0.4%
2021	\$30,021,273	6.3%	\$13,523,667	0.4%
2022	\$31,917,321	6.3%	\$13,581,684	0.4%
2023	\$33,933,117	6.3%	\$13,639,949	0.4%
2024	\$36,076,224	6.3%	\$13,698,464	0.4%
2025	\$38,354,683	6.3%	\$13,757,231	0.4%
2026	\$40,777,043	6.3%	\$13,816,249	0.4%
2027	\$43,352,391	6.3%	\$13,875,521	0.4%
20-Year Duration		240%		9%

Note 1 – Source for 2007 operating cost - FTA National Transit Database

The differences in projected 2027 operating budgets are significant, and these two scenarios might best be viewed as upper and lower limits to what will actually take place over the next 20 years: the transit system can be expected to grow to meet demand, but the rate of growth is likely to be lower than during the system start-up period over the past 12 years.

It should be noted that AVTA brought the maintenance function in-house as this report was being finalized. This change is not reflected in any of the projected operating budgets, but AVTA’s analysis indicates that it will save approximately \$1.0 to \$1.25 million annually over the next five years.

2.3 Forthcoming Potential Capital Expenses

The following are potential infrastructure changes anticipated for the AVTA transit system. While no cost estimates are available for these potential projects, they would represent additional future capital expenses.

- Lancaster City Park Transfer Center Enhancement Project - The existing Lancaster City Park Transfer Center is located at 10th Street West and Avenue

K-8 in the City of Lancaster. The Transfer Center is a regionally significant center that offers multiline bus transfers for 5 local fixed routes, 3 commuter routes to Los Angeles, San Fernando Valley and Century City, and the Lake Los Angeles Express route. The Transfer Center currently offers restroom facilities, bus benches and overhead shelters. The proposed project would enhance the Transfer Center by providing changeable message signs, windshields, drinking fountains, and heaters for waiting bus passengers who utilize the Transfer Center. To make the shelters more comfortable for the waiting passengers during cold or high wind weather, wind screens and heaters are proposed to be installed at each shelter. To enhance security at the site, a CCTV system is proposed. One fixed, wide-angle lens camera will be installed at the outside of each restroom and two fixed, wide-angle lens cameras at each canopy facing the bus stop area. Changeable message signs will also be installed at every canopy. To improve the comfort of the commuters, three pedestal-type drinking water fountains will be installed at three locations at the bus stop island.

- Palmdale Transportation Center - The Palmdale Transportation Center will be expanded to include eight additional transit bays and eight additional commuter bays.
- Lancaster Metrolink Intermodal Station - A new multi-modal facility at or near the Lancaster Metrolink Station is undergoing preliminary planning. The current transit center at Lancaster City Park is bus only and the local buses do not run early enough to serve as feeders for commuters. However, allowing commuter buses and trains to leave the same place could encourage usage and local buses could provide distribution on p.m. return trips for those riders dropped off at the station in the morning.
- Replacing sixteen transit buses with diesel turbine hybrid buses.
- Finishing Phase II of Administration, Operations and Maintenance Facility construction.
- Implementing several photovoltaic shade structures.
- Acquiring additional land for the expansion of the new Administration, Operations and Maintenance Facility.
- Procuring an additional four expansion buses, four additional mid-sized vehicles, two expansion Dial-A-Ride vehicles, and two additional commuter coaches.

2.4 Forthcoming Potential Operating Expenses

The following are potential service adjustments anticipated for the AVTA transit system. While no cost estimates are available for these potential projects, they could represent additional future operating expenses. Some of these service adjustments will also have associated capital needs: new buses for service expansion and additional capital needs for BRT.

- Improving frequency on Route 1 between the Lancaster City Park Transfer Station and the Palmdale Transportation Center during peak times.
- Improving frequency on other core routes
- Implementing a BRT service to connect the communities of the Antelope Valley.
- Adding school trippers to Route 9 and then using smaller vehicles on this route.
- Adding service to new growth areas such as West Lancaster.
- Implementing flex service in underserved areas outside the urban service area boundary.

VI. Available Financing Alternatives

This section provides an overview of potential transit funding strategies that could be adopted by AVTA from a federal, state and regional/local stance. To meet the agency's funding needs, it is important for AVTA to continue pursuing all available transit grant programs (capital and operating/maintenance purposes) at the different government allocation levels.

As noted in AVTA's *10-Year Financial Plan*, the agency's current funding comes from a variety of sources that include, but are not limited to:

Operational Revenue

- Passenger fare revenue

Intergovernmental Transfers

- Proposition A – Los Angeles County
- Proposition C – Los Angeles County
- Section 5307 – Preventative Maintenance Grants/ Operating Subsidy

Capital Sources

- Proposition 1B – Public Transportation Modernization, Improvement, and Service Enhancement Account (PTMISEA)
- Proposition C – Los Angeles County Metropolitan Transportation Authority (LACMTA)
- Section 5307 – Lancaster-Palmdale Urban Zone Area
- Section 5307 – Los Angeles Urban Zone Area
- Antelope Valley Air Quality Management District (AVAQMD)

AVTA Joint Powers Authority (JPA) Member Contributions

- County of Los Angeles
- City of Palmdale
- City of Lancaster

To date, AVTA has effectively identified a variety of funding sources that meet the agency's needs. It is important to note that many of the sources mentioned in this section are controlled by LACMTA and are distributed through the Formula Allocation Procedure. Therefore, it is recommended that AVTA continue its efforts to identify potential funding sources by monitoring the status of these programs.

In April 2005, AVTA completed a long range financing study that looked at AVTA's needs over time and investigated exhaustively all of the funding sources likely to be available to AVTA, considering all of the needs in the county and locally. This study concluded that AVTA was accessing all funding available to the agency for both operations and capital. There have been no significant changes in the funding landscape since that time that would change that conclusion. There continue to be ongoing issues within Los Angeles County regarding the split of local sales tax funds between LACMTA and the other operators in the county.

1.0 Federal Funding

Congestion Mitigation and Air Quality Improvement Program (CMAQ)

Jointly administered by the Federal Highway Administration (FHWA) and FTA and reauthorized in 2005 under Safe, Accountable, Flexible, and Efficient Transportation Equity Act – A Legacy for Users (SAFETEA-LU), CMAQ provides funds to State Departments of Transportation, Metropolitan Planning Organizations, and transit agencies for projects that reduce transportation-related emissions in air quality non-attainment and maintenance areas for ozone, carbon monoxide, or particulate matter. The SAFETEA-LU CMAQ program provided \$8.6 billion dollars over a period of five years (2005-2009) to eligible projects nationwide.

Eligible projects include those that pertain to transit system capital expansions and improvements that increase ridership, travel demand management (TDM) programs and ridesharing services, and pedestrian and bicycle facilities projects.

Section 5307 Formula

The FTA Urbanized Area Formula Grants Program (Section 5307) allocates federal grants based on an urbanized area formula to fund transit capital (including preventative maintenance) and operating purposes. Depending on the size of the urbanized area, eligible uses for Section 5307 funds may include the engineering design, evaluation and planning of transit projects and other technical studies related to transportation; capital investments for bus and bus-related activities; the construction and maintenance of transit facilities; and capital investments in fixed-guideway systems.

For large urbanized areas (those with populations greater than 200,000), funding is directly allocated by the FTA regional office and can only be used for transit capital purposes. For small urbanized areas (those with populations between 50,000 and 200,000), FTA apportions funds to the state governor. Small urbanized area funds can be used for both transit capital and operations purposes. The federal share of any

project may not exceed 80 percent of the net cost of the project, with the exception of funds applied to vehicle related equipment purchased to be in compliance with the Americans with Disabilities Act (ADA) and the Clean Air Act (CAA), which may not exceed 90 percent of the net project cost.

AVTA falls into the Large Urbanized Area (UZA) category and therefore the allocated funds are restricted to capital and preventative maintenance expenditures. AVTA staff continues to seek relief through the new transportation bill to permit large UZAs to use a portion of their annual allocation for operating expenses beyond preventative maintenance.

Section 5309 Bus and Bus Facilities

The FTA Discretionary Bus and Bus-Related Facility Grants Program (Section 5309) provides capital assistance to such eligible uses as the acquisition and replacement of bus for fleet and service expansion, the construction of bus facilities, and the purchase of passenger amenities (such as bus stop signs, bus shelters), and other ancillary and miscellaneous equipment related to buses and bus facilities.

FTA 5309 Bus and Bus Facilities grants are fully allocated to projects based on discretionary earmarks. Eligible recipients include public bodies and agencies such as state and local governments, and transit agencies. In addition, private companies and non-profit organizations that provide public transportation services are also eligible for the grants as sub-recipients.

Urbanized versus Rural Programs

AVTA currently provides four distinct services to Antelope Valley residents: (1) fixed-route service within the Palmdale/Lancaster urban core; (2) inter-community fixed-route service linking the urban core with the rural communities of Lake Los Angeles, Sun Village, and Littlerock; (3) demand-responsive (dial-a-ride) service both inside and outside of the urban service boundary; and (4) commuter service from the urban core to Los Angeles via SR-14.

AVTA's urban and rural transit services are presently consolidated under one program. Based on the current structure, the agency receives allocation dollars from the FTA Section 5307 (Urbanized Area Formula) program, which is intended for use in urbanized zones. Given that AVTA has a broad rural service area, it is recommended that AVTA separate its rural services from its urban services program and create a separate rural program that focuses on the pursuit of FTA Section 5310 (Elderly and Disabled) and FTA Section 5311 (Non-Urbanized Area Formula) funds. The aforementioned FTA funding programs are described in greater detail in Table 26.

AVTA has long considered the need to rationalize its urban and rural services in order to provide the most cost-effective services to all residents consistent with levels of demand and available funding. AVTA should reiterate and emphasize its primary mission of providing frequent, accessible fixed-route service within the urban service boundary, using all federal, state, and regional funding available for that purpose. A clear boundary separating urban and non-urban (rural) service areas should be adopted as policy for service levels, route locations, and funding sources. In particular, AVTA should realign its services and routes in order to:

1. Maximize urban route coverage, frequency, and cost effectiveness within a designated urban service boundary;
2. Provide lifeline service to rural communities outside of the urban service boundary, but otherwise reduce costs for long-distance, lightly-used routes;
3. Provide the required level of demand-responsive service, but minimize cross-subsidy from urban service funding; and
4. Set commuter service fares to fully recover operating and capital costs, or otherwise seek to transfer this service to other providers.

Given AVTA's current and likely future local funding structure, it should revisit and reduce its current commitment to extended rural fixed-route service in favor of increased urban service, leaving a rural "lifeline" service in its place. This could occur as part of a re-thinking of the service delivery model, using smart technology to provide DAR service in rural and low-density suburban areas and focusing fixed-route service in urban areas.

At the same time, AVTA should review and adjust its urban and rural DAR services to meet the level actually needed, thus committing more resources to the urban service and less to the rural. This will result in a more cost-effective DAR service overall.

Last, AVTA provides a premium commuter service for residents working in Los Angeles. This service can and should be self-supporting, thereby ensuring that all available external funds can be applied to the other three services.

External funding for AVTA operations and maintenance (other than JPA member contribution) comes primarily from federal and regional/local sources, including FTA Section 5307 formula funds and a number of LA County Prop A and Prop C programs. Some of these programs are restricted to certain locations of service – e.g., Section 5307 funds are for urban service areas, not rural areas – while others are limited by type of service: Prop A/DAR Incentive Funds. More coherent alignment of urban/rural service boundaries should allow AVTA to better rationalize its funding program and deliver maximum value to its urban and rural services.

Table 26: FTA Funding Programs

Funding Program	Description	Eligible Uses
<p>FTA Section 5307 (Urbanized Area Formula)</p>	<p>A formula grant program for urbanized areas providing capital, operating, and planning assistance for mass transportation.</p> <p>85% of the 5307 funds are distributed to the Los Angeles County Metropolitan Transportation Authority (LACTA [Metro]) and to non-Metro operations, while 15% are allocated by Metro on a discretionary basis.²²</p> <p>This funding source requires a 20% local match.</p>	<p>Preventive maintenance and capital uses. The urbanized formula is based on population, population density, and level of transit service considerations.</p>
<p>FTA Section 5310 (Elderly and Disabled)</p>	<p>Funds provide transit capital grants to qualified non-profit social service and qualified public agencies that provide transportation services to the elderly and persons with disabilities where existing transportation service is unavailable, insufficient or inappropriate.</p> <p>The 5310 funds are distributed annually to the states by the federal government with FTA funding 80% of the project capital cost, and the remaining 20% as a local match by the grant recipient.²³ Operating costs require a 50% local match.</p>	<p>Acquisition of accessible vans, buses and communications equipment and projects must be included in a locally developed coordinated public transit-human services transportation coordination plan.</p>
<p>FTA Section 5311 (Non-Urbanized Area Formula)</p>	<p>Funds are distributed to the regions on FTA's non-urbanized area formula for rural and small urban public transportation systems. These funds are used for transit capital and operating purposes in non-urbanized areas.</p> <p>80% of the 5311 funds are distributed based on the non-urbanized population and 20% is through a tier-based land area formula. The federal share is typically 80% for capital costs and 50% for operating costs.²⁴</p>	<p>Capital, operating and project administration costs in areas of less than 50,000 population. For Los Angeles County, this includes the unincorporated areas of the Antelope Valley.</p>

²² LACMTA (Metro), Funding Guide 2006, Website.

http://www.metro.net/about_us/images/Funding_Sources_Guide_06.pdf, accessed April 6, 2009.

²³ LACMTA (Metro), FTA 5310 Program, Website. http://www.metro.net/projects_studies/fta5310/default.htm, accessed April 6, 2009 and LACMTA (Metro), Funding Guide 2006, Website.

http://www.metro.net/about_us/images/Funding_Sources_Guide_06.pdf, accessed April 6, 2009.

²⁴ LACMTA (Metro), Funding Guide 2006, Website.

http://www.metro.net/about_us/images/Funding_Sources_Guide_06.pdf, accessed April 6, 2009.

Funding Program	Description	Eligible Uses
FTA Section 5311(f) Intercity Bus Program	Funds are distributed by Caltrans on a competitive basis statewide. 15% of the state's 5311 allocation goes into this program. Operating projects may be funded up to 55.33% and capital projects may be funded up to 88.53%. ²⁵	Capital and operating costs for intercity bus projects. Operating projects restricted to five year's worth of funding.
Section 5316 Job Access and Reverse Commute Program	Formula program, based on the number of low-income persons, to provide transportation services so that welfare recipients and eligible low-income individuals can access jobs and job-related activities. Funding is subject to annual Congressional appropriation. Eligible sub-recipients include state and local governments, nonprofit organizations, and public transportation operators. Federal share is generally 80% for capital costs and 50% for operating costs. SAFETEA-LIU Section 3018 49 USC 5316	Competitive selection of projects that provide access to employment opportunities, public transportation for low-income workers, transit vouchers for welfare recipients and low-income individuals, employer-provided transportation, reverse commute services, shuttle vans or buses, public transportation to suburban employment opportunities, etc. Projects must be included in a locally developed coordinated public transit-human service transportation coordination plan beginning in FY 2007. Non-DOT federal funds can be used as match.
Section 5317 New Freedom Program	Formula funding based on population of persons with disabilities to provide improved public transportation services, and alternatives to public transportation, for people with disabilities, beyond those required by the Americans with Disabilities Act (ADA) or to continue existing service that exceeds ADA requirements. Federal share is 80% for capital and 50% for operating. SAFETEA-LIU Section 3019 49 USC 5317	Capital and operating costs. Competitive selection of projects that encourage services and facility improvements to address the transportation needs beyond those required by ADA. Projects must be included in a locally developed coordinated public transit-human service transportation coordination plan beginning in FY 2007.

Section 5311(f) Intercity Bus Program

In addition to the Section 5311 (Non-Urbanized Area Formula) funds, Caltrans also distributes Section 5311(f) Intercity Bus funding through a competitive process for both operating and capital funds. Approximately 15 percent of the state's annual Section 5311 funding goes into this program. Approximately \$3.4 million was programmed for this activity in 2009.²⁶ In 2009, American Recovery and Reinvestment Act (ARRA) funds (approximately \$5.2 million) were also used to supplement the program for capital projects only.²⁷ Operating funds are restricted to a start-up period of five years, and maintenance of a 10 percent farebox recovery ratio is required. Matching fund requirements vary by project type.

Federal Transportation Reauthorization Bill

Under the current federal transportation funding program (SAFETEA-LU) for federal fiscal years 2005-2009, AVTA receives its allocation of transit funds as a part of the Los

²⁵ California Department of Transportation, *Draft Final California Statewide Rural Intercity Bus Study*, November 2007, p.4-2.

²⁶ California Department of Transportation, *Draft Final California Statewide Rural Intercity Bus Study*, November 2007, p.4-2.

²⁷ California Department of Transportation, *Section 5311(f) Intercity Bus Program Guidelines*, March 2009, p.3.

Angeles Urban Zone Area (UZA), even though AVTA is located in its own UZA, the Lancaster-Palmdale UZA. AVTA should continue to focus on the ability to use Federal grant funding for operating purposes in the new Federal transportation bill.

Federal Access to Jobs and Reverse Commute Program

The FTA Federal Access to Job and Reverse Commute (JARC) Program provides funds for projects and services intended to transport low-income persons to work and projects that move persons to suburban job centers. The JARC Program is fully funded by the Mass Transit Account of the Highway Trust Fund. Revenue sources come from excise taxes on highway motor fuel and truck-related taxes on tires, sale of trucks and trailers, and heavy vehicle use. Distributions are allocated based on a formula program and dependent on the number of low income persons (60/20/20 distributed to designed recipients in areas with populations over 200,000, to States for areas under 200,000 and to States with non-urbanized areas, respectively). As noted earlier, sizeable disparities in household and jobs for all income levels are projected for the Antelope Valley, which indicates lower income workers will be forced to travel long distances. Therefore, the JARC program may be a viable funding source that AVTA could use to provide express transit services for the lower income worker commuter market.

Federal Stimulus Package

AVTA received \$10.9 million in American Reinvestment and Recovery Act funding, dedicated to projects including vehicle replacement and acquisition, modifications to the AVTA transfer center at Lancaster City Park, and construction of photovoltaic-equipped parking structures.

2.0 State Funding

State Transportation Funding Program Reauthorization

Similar to the federal level, it is recommended that AVTA continue to work with the California Transit Association (CTA) on introducing language into transportation bills at the state level that will grant AVTA and other small transit agencies greater autonomy in receiving their fair share of transit funds. The primary focus of AVTA's efforts should be funding for transit projects into the State Transportation Improvement Program (STIP), a five-year capital improvement program of transportation projects with programming that occurs every two years.²⁸

Regional Surface Transportation Program (RSTP)

The Regional Surface Transportation Program (RSTP) is considered a flexible transportation funding source for counties in California. RSTP provides funding to a variety of transportation projects and modes including: highway projects, bridges, transit capital improvements, surface transportation planning, and transportation enhancement activities.

Eighty percent of the STP apportionment is distributed to the State's urbanized and non-urbanized areas by Metropolitan Planning Organizations (MPOs) and Regional Transportation Planning Agencies (RTPAs). The remaining 20 percent of the STP is

²⁸ California Transportation Commission. State Transportation Improvement Program (STIP) Guidelines, Website. http://www.metro.net/projects_studies/call_projects/images/CTC%20STIP%20GUIDELINES.pdf, accessed April 6, 2009.

directly distributed to counties using a formula that is equal to 110 percent of the Federal Aid Urban/ Federal Aid Secondary funding.

Regional Transportation Improvement Program Funds (RTIP)

The Regional Transportation Improvement Program (RTIP) is a programming document that is similar to and included within the State Transportation Improvement Program (STIP). The STIP is a transportation capital improvement program that is the result of the combination of RTIPs from each regional planning agency across the state and Caltrans' Interregional Transportation Improvement Program (ITIP). RTIP funds are programmed with Regional Improvement Program (RIP) and Transportation Enhancement (TE) funds. Collectively, RTIPs statewide receive 75 percent of the funds available from the STIP.

Proposition 1B State Infrastructure Bonds

Approved by voters in November 2006, the Proposition 1B Infrastructure Bond Program authorized the State to sell \$19.9 billion of general obligation bonds to fund transportation projects and to fund ridership growth on smaller transit systems. Two relevant accounts that could be applied to AVTA include the Public Transportation Modernization, Improvement and Service Enhancement Account (PTMISEA) and the Transit System Safety, Security and Disaster Response Account.

Proposition 42 Sales Tax on Gasoline Funds

Proposition 42, passed in 2002, dedicated the state sales tax on gasoline to transportation purposes. Due to ongoing state budget problems, Proposition 42 has been suspended multiple times since its passage.

Antelope Valley Air Quality Management District Funds

Several funding programs within the Antelope Valley Air Quality Management District are available for projects that reduce emissions, with approximately \$500,000 available annually for its competitive grant program.

State Transit Assistance (STA)

In 1980, the TDA established a second major source, the State Transit Assistance (STA) Program, which is derived from the statewide sales tax on gasoline and diesel from the Transportation Planning and Development Account in the State Transportation Fund. STA provides funding for public transportation, transportation planning, and community transit that is restricted to transit purposes (operating and capital). In contrast to LTF (see below), STA funds cannot be used for streets and roads, pedestrian and bicycle, and administration purposes.

STA funds are allocated by formula by the State Controller and are divided into two sub-categories: Population-Based and Revenue-Based programs. Under the Population-Based sub-program, 50 percent of the funds are allocated by formula based on the region's population in comparison to the State's population. For the Revenue-Based subprogram, funds are returned by formula according to the prior year proportion of regional transit operator revenues in contrast to the statewide transit operator revenues. STA fund allocation and payment follows a process similar to LTF fund distribution.

Transportation Development Act (TDA)/Local Transportation Fund

In 1972, the Transportation Development Act (TDA) established a Local Transportation Fund (LTF) that is financed by a 0.25 percent state retail sales tax that includes taxation

on gasoline and diesel fuel. The sales tax is collected by the state and allocated to Metropolitan Planning Organizations (MPO) and Regional Transportation Planning Agencies (RTPA) for distribution to local agencies.

It must be noted that many of the sources mentioned previously are controlled by Metro and are distributed through the Formula Allocation Procedure.

3.0 Local Funding

AVTA currently receives its regional/local funds from Los Angeles County in the form of funding from Propositions A and C, and from JPA member contributions (Los Angeles County, City of Palmdale, and City of Lancaster).

Proposition A – Local sales tax (since 1980) available for operating or capital projects throughout Los Angeles County. Twenty-five percent of the tax is returned to local entities based on population for use in local transit projects. Thirty-five percent is for rail development and operations, and 40 percent is for bus operations projects at the discretion of the LACMTA Board. In FY 08-09, Proposition A funds are estimated to make up approximately 20 percent of the total operating budget and the percent has ranged between 20 and 25 percent over the last seven years. AVTA's 10-Year Financial Plan projects that 20 to 23 percent of the operating budget will come from this source in future years, which is consistent with past performance.

Proposition C - Local sales tax (since 1990) available for operating or capital projects throughout Los Angeles County. Twenty percent of the tax is returned to local entities based on population for use in local transit projects. Five percent is for rail and bus security, 10 percent is for transit centers and park-and-ride lots, and 25 percent is for transit-related streets and highways. Lastly, 40 percent is for rail or bus projects at the discretion of the LACMTA Board, in conformance with a Consent Decree. In FY 08-09, Proposition C funds are estimated to make up approximately 1 percent of the total operating budget, and the percent has ranged between 2 and 7 percent over the last seven years. AVTA's 10-Year Financial Plan projects that 2 percent of the operating budget will come from this source in future years, which is consistent with past performance.

Fare Revenues – Fare revenues are unrestricted revenues collected directly by the Authority from passengers, and make up close to 1/3 of the revenues used for AVTA operating purposes. Fare revenues have been growing at a compound annual rate of approximately five percent over the last 12 years. AVTA's 10-Year Financial Plan projects that fare revenue will grow at an annual rate of 13 percent in the later years of the plan. Average rates of growth in fare revenues can be misleading, since large increases in years when fares changes occur are mixed with moderate increases or decreases related to ridership changes in other years.

Local Match Requirements

Capital expenses are generally funded by federal and local programs and AVTA is required to provide a 20 percent local match for the federal grants that it receives. In an effort to keep jurisdictional shares low, AVTA's local match comes from Proposition 1B, the Antelope Valley Air Quality Management District (AVAQMD), and the Metro Local Return Program through the Formula Allocation Procedure. AVTA should be prepared

to identify and examine other potential funding sources to meet local match requirements moving forward.

Development Fees

Another source of potential funding could come from the enactment of development fees in the Antelope Valley. One type of development fee is an Indirect Source Review (ISR), which requires developers of new developments that are expected to create a substantial degree of air pollution to reduce particulate and smog-forming emissions generated by their projects. Developers would pay an off-site mitigation fee for those emissions that are not or cannot be reduced on-site. The revenue generated from the fee could be used to implement emission reduction projects such as transit-related projects. An ISR rule was effectively implemented by the San Joaquin Valley Air Pollution Control District (SJVAPCD) in 2006.²⁹

Based on stakeholder interviews held in October 2008,³⁰ it was concluded that given the current hardships faced by the real estate development market, it is unlikely that the enactment of development fees in the Antelope Valley would gain much support at this time. However, it is recommended that such fees be explored once the state of the region's economy improves.

Local Taxation Potential

Given that increases in federal and regional funding are difficult to secure, one option would be to advocate for some form of local taxation specific to the Antelope Valley. Such examples include, but are not limited to, the approval of a half-cent transportation sales tax, a local fuel tax, or a special assessment district where a portion of the revenue generated would specifically fund transit in the Antelope Valley. Compared to a county-wide tax, a dedicated local tax would be relatively isolated and have limited spillover effects, allowing the Antelope Valley to realize greater benefits from the tax.

Based on the AVTA stakeholder interviews held in October 2008,³¹ the majority of interviewees felt that taxation, even if it were dedicated for entirely local purposes, would not gain much support from the Antelope Valley's constituents. There was also a general sense that the Antelope Valley is not receiving its fair share of federal and regional funds. Some stakeholders did note that it was possible for a dedicated local tax to garner support if a strong need for the tax was demonstrated, and that such support would only occur under an improved economy.

It is important to realize that there are also opportunities for transit. Given the current state of the economy, this is an opportune time to focus on obtaining additional funding for transit needs. AVTA should focus its efforts on promoting 10th Street West or Sierra Highway as a transit preferential corridor and capitalize on the availability of infrastructure funding to support such efforts. The planned California High Speed Train Station in Palmdale provides another opportunity for AVTA to draw upon the building momentum and support for transit. Therefore, it is recommended that AVTA view the current situation as an opportunity to pursue partnerships in support of transit. Local

²⁹ San Joaquin Valley Air Pollution Control District, *Indirect Source Review (ISR)*, Website. <http://www.valleyair.org/ISR/ISRHome.htm>, accessed April 7, 2009.

³⁰ Antelope Valley Transit Authority, Visioning Outreach - Stakeholder Interviews, held on October 21-22, 2008.

³¹ AVTA Visioning Outreach - Stakeholder Interviews, held on October 21-22, 2008.

funding most effectively demonstrates serious commitment to projects for which funding is sought from state and federal sources.

Given the political and economic climate in Antelope Valley, however, introduction and passage of such a tax would likely require the support of key business and political interests, and should be based on issues broader than mobility and sustainability. In other locations, sponsors analogous to the League of California Cities, the Los Angeles County Economic Development Corporation, and/or the Antelope Valley Chambers of Commerce have helped to foster support for local transit funding as a vital underpinning of a healthy business and development environment. Support such as this, appealing to the business community, elected officials, and individual residents, has proven in other areas to be more effective than appeals directly to the electorate's understanding of the intrinsic merits of public transit.

VII. Conclusion

AVTA and the communities it serves stand at a cusp of opportunity for the future growth and vitality of Antelope Valley. Projections indicate that the resident population of the Antelope Valley will continue to increase between 2008 and 2035. The number of jobs in the Antelope Valley is projected to increase at a lower rate, indicating that an increasing proportion of Antelope Valley residents will travel well beyond their communities for employment. This trend reflects a growing need and demand for commuter services. Fostering business and development within the Antelope Valley may also depend on the availability of convenient, economical means of transportation, particularly as congestion on the surface road network is forecast to increase. Public transit services should thus be seen not as an alternative for those who cannot afford to drive, but as a necessary component vital to the region's quality of life and economic health.

In comparison with agencies that deliver similar services, AVTA operates a slightly smaller fleet, and delivers service with an operating budget that is slightly smaller than those of its peers. At the same time, AVTA serves a much larger area and enjoys a relatively higher level of farebox recovery than most of its peers. Similar trends are found among agencies with similar operating budgets. AVTA performs generally above average among selected peer agencies in terms of the cost efficiency measures analyzed, but below average in terms of the measures based on ridership.

The following adjustments to AVTA's existing services are recommended to improve service and increase efficiency:

- Increase frequency on core Routes 1, 2, 3, 4, 11, and 12, which have the highest current ridership in the AVTA service area;
- Implement Bus Rapid Transit (BRT) or other transit preferential service in the 10th Street West or Sierra Highway corridor;
- Reduce current Lake Los Angeles Express line service, but increase efficiency and flexibility through a combination of deviated fixed-route, point deviation services, and flag stop services;
- Streamline commuter services to Los Angeles by integrating schedules and routes with those of Los Angeles MTA services;
- Investigate cost effective alternatives to current Dial-A-Ride service structure and contract operators;
- Implement mobility management systems;
- Investigate means to connect the AVTA service area with High-Speed Rail at Palmdale, as well as to improve connections with Metrolink services; and
- Explore rationalization of the local fixed-route system that would focus and expand big-bus service in urban areas where demand warrants enhanced service and identify innovative means of serving rural/suburban areas with deviated fixed routes or "smart"

paratransit service. Emerging technologies can open up new possibilities for innovative service delivery methods.

While AVTA enjoys higher farebox revenue, it receives a lower proportion of state and federal funding than peer agencies. One important factor influencing the proportion of local funding is a dedicated funding source in the form of the County's half-cent sales tax dedicated to transit. It is prudent for AVTA to continue to investigate potential federal and state funding sources, particularly in light of current and future federal stimulus programs and the California High-Speed Rail project.

Given the region's forecasts of increases in population and travel demand, and AVTA's historically efficient performance, public transit should be a centerpiece of Antelope Valley's land use, environmental and transportation planning. Keeping pace with population growth will require an estimated \$23.1 million in capital expenditures and an increase in operating cost of \$9.5 million between now and 2035. An "improved service" scenario would require an added \$53.9 million in capital expenditures and an increase in annual operating costs of \$22.1 million between now and 2035.

Connection with the most populous areas of California via high-speed train service should further increase the need for local transit coverage, connectivity and coordination. Appreciation of the opportunities and needs for public transit, however, were not reflected by the views of stakeholders interviewed for this study, nor have they been in previous discussions of local funding for transit. Clearly, public transit will have a vital role in the ongoing development of the Antelope Valley. Enabling AVTA to fulfill that role will require a concerted effort in coordination with private-sector partners, educational and environmental advocates, and social service agencies, to influence decision makers toward policies and plans that emphasize transit as a viable travel option.

The opportunities and advantages of public transit as a means of economic development should be emphasized, particularly during the current difficult period. For instance, during economic downturns, there is an increased incentive for people to consider transit as an alternative to driving due to cost savings. Given the current state of the economy, this is an opportune time to focus on obtaining additional funding for transit needs. In addition, the planned California High Speed Train Station in Palmdale provides an opportunity for AVTA to draw upon the building momentum and support for transit. Therefore, it is recommended that AVTA view the current situation as an opportunity to pursue a locally-based approach by building partnerships with key stakeholders to advocate for a dedicated local tax. Local funding most effectively demonstrates a serious commitment to projects for which funding is sought from state and federal sources. The absence of a local match has precluded AVTA from pursuing past funding opportunities.

Given the political and economic climate in Antelope Valley, however, introduction and passage of a transportation sales tax would likely require the support of key business and political interests, and should be based on broader issues than mobility and sustainability. In other locations, sponsors analogous to the League of California Cities, the Los Angeles County Economic Development Corporation, and/or the Antelope Valley Chambers of Commerce have helped to foster support for local transit funding as a vital underpinning of a healthy business and development environment. This broader approach, appealing to the business community, elected officials, and individual residents, has proven to be effective elsewhere in making the case for transit as part of an overall community strategy.

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IX. Appendices

Appendix A - Stakeholder Interview Summary Notes from October 21-22, 2008

Appendix B – AVTA Vehicle Inventory

Appendix A

**AVTA Comprehensive Long Range Transit Plan
Stakeholder Interview Summary**

**Lea Butterfield
Former Executive Director, Healthy Homes (AV Hospital)**

Tuesday, October 21, 2008 9:00:00 AM

<p>Perspectives / Challenges/ Visions <i>Role of public transit in AV</i> <i>Ways that AVTA serves / interacts with your organization.</i> <i>Strengths / limitations of AVTA services</i> <i>Current mobility needs that should be addressed by transit</i> <i>Trends, issues, and changes over 10-20 years that AVTA should address</i> <i>Comparable systems / regions / cities that are good models for AV / AVTA</i></p>	<ul style="list-style-type: none"> • AVTA services are focused on transit-dependent populations. • AVTA is one of a range of ways clients travel to access social/ health services. • Problems with proof of disability to ride Dial-A-Ride (DAR). Note single mothers may bring entire family with them. • Problem with round trip service. Return trip can require very long wait. • Disadvantaged groups often not aware of AVTA services. May have cars on weekends. • Need to allow pregnant women access to DAR. • Note that Antelope Valley is a healthcare professional shortage area. There is no county hospital to serve low-income population.
<p>Geographic Service Regions/ Peak Travel Demands <i>Markets for transit in AV</i> <i>Relative priority of rural / urban services</i> <i>Relative priority of geographic coverage or service frequency</i></p>	<ul style="list-style-type: none"> • Provides access to the "hub." Greater north-south coverage than east-west. • Public officials have little interest in the rural areas. • Potential for non-governmental transit services (such as church-based, hospital-based transit services).
<p>Modes of Transportation/ Intermodal Connectivity <i>Most important services (e.g. fixed-route, paratransit, commuter, high-capacity, etc)</i> <i>Suggested service improvements (e.g. more shelters, shorter wait times, better coverage)</i> <i>Opinions on transit vehicle types (e.g. buses, rail, vans, etc)</i></p>	
<p>Sustainability Considerations <i>Importance of air quality as a reason for greater transit use</i> <i>AVTA's role in AV sustainability</i> <i>'Smart growth' in AV – role of local land use and transit decisions</i></p>	
<p>Financial Considerations <i>Understanding of AVTA's funding sources</i> <i>Opinion of current level and sources of transit funding in light of AV mobility needs</i> <i>Ways funding could be increased</i> <i>Opinion of increases in local funds and/or higher fares</i> <i>Opinion of AV's share of federal and regional funds</i> <i>Opinion of transit funding independent of local government or as part of city and county budgets</i></p>	<ul style="list-style-type: none"> • Fund new service through the users - e.g., gas vouchers.
<p>Support for Transit Investment <i>Priorities / criteria for judging how public transit should be funded</i> <i>Factors that determine the community's willingness to fund public transit</i> <i>Specific types of mobility improvements that receive the greatest public support</i> <i>Factors that affect public support for transit improvements in the future</i> <i>In the context of an economic downturn is there more or less need for transit investment?</i> <i>Is transit challenged more by the limited availability of resources, or by community attitudes?</i></p>	<ul style="list-style-type: none"> • Look at rural needs. Look at non-AVTA assets (e.g., churches, NGOs). • Service to medical facilities: Community Clinic (10th/l), Antelope Valley Partners for Health. • Need services tailored to specific needs; e.g., health, job training, welfare benefits, child care. • Note: AVTA used to run a medical shuttle. 6 month pilot program. Result: little used/dropped. Steering committee lost interest (5 of 90 showed up at the end). • Still need destination-based shuttles. Niche markets. More public transit generally. • More service for schools. Note that schools now are more than places of education; they are social service dispensers.
<p>Advancing the Discussion <i>Any scenario in which local residents would accept public transit over personal vehicles?</i> <i>Other people / organizations we should talk with about AVTA</i> <i>Who would you see as practical partners to AVTA?</i></p>	<ul style="list-style-type: none"> • Need more grass roots involvement in AVTA. More ad hoc services. • AVTA should think of "mobility," not just "transit." • Provide transit as a "greener" option. • Think: "What can we do differently?"
<p>Other Comments</p>	

**AVTA Comprehensive Long Range Transit Plan
Stakeholder Interview Summary**

**Gretchen Gutierrez
Executive Director, Building Industry Association - AV Chapter**

Tuesday, October 21, 2008 10:00:00 AM

<p>Perspectives / Challenges/ Visions <i>Role of public transit in AV</i> <i>Ways that AVTA serves / interacts with your organization.</i> <i>Strengths / limitations of AVTA services</i> <i>Current mobility needs that should be addressed by transit</i> <i>Trends, issues, and changes over 10-20 years that AVTA should address</i> <i>Comparable systems / regions / cities that are good models for AV / AVTA</i></p>	<ul style="list-style-type: none"> • Antelope Valley leads LA County in foreclosures. Severe water shortage. State Water Project allocation cut, 60%. Ground water is being depleted. Affected by Delta litigation. Local ground water litigation active. • AVTA problems are total travel time and number of transfers required. Service intervals are too long. • Why no route on Ave K? Need more service for schools. School bus service is a big part of transit use. (Pam: Supplemental routes provided during the school commute hours; however, students destroy the buses.) • Compare Antelope Valley with Glendale for "role model." • People who need transit most are least effectively served. Better route structure needed. Improve bus service to outlying areas.
<p>Geographic Service Regions/ Peak Travel Demands <i>Markets for transit in AV</i> <i>Relative priority of rural / urban services</i> <i>Relative priority of geographic coverage or service frequency</i></p>	
<p>Modes of Transportation/ Intermodal Connectivity <i>Most important services (e.g. fixed-route, paratransit, commuter, high-capacity, etc)</i> <i>Suggested service improvements (e.g. more shelters, shorter wait times, better coverage)</i> <i>Opinions on transit vehicle types (e.g. buses, rail, vans, etc)</i></p>	
<p>Sustainability Considerations <i>Importance of air quality as a reason for greater transit use</i> <i>AVTA's role in AV sustainability</i> <i>'Smart growth' in AV – role of local land use and transit decisions</i></p>	<ul style="list-style-type: none"> • Downtown senior housing is big/growing. Small amount of infill happening. Height restrictions being eased slowly. • AB32 and SB375 will eventually lead to higher density. • Transit is not now in the list of top 10 factors guiding development decisions. (see Harvey Holloway comment on "near bus stop" request from office tenants.) • Public is getting the "go green" mentality. Ultimately depends on how the plan to "go green" is determined/ implemented and how much it costs.
<p>Financial Considerations <i>Understanding of AVTA's funding sources</i> <i>Opinion of current level and sources of transit funding in light of AV mobility needs</i> <i>Ways funding could be increased</i> <i>Opinion of increases in local funds and/or higher fares</i> <i>Opinion of AV's share of federal and regional funds</i> <i>Opinion of transit funding independent of local government or as part of city and county budgets</i></p>	<ul style="list-style-type: none"> • Impact fee of \$1,000 would price 10K people out of the housing market. • Current median prices: Lancaster - \$140K, Palmdale - \$180K. • Developer "cost of carry" usually not considered when setting a "fair" impact fee. Valley is very conservative. Difficult to pass local sales tax increase/ pass bonds for transit. A half-cent • permanent sales tax for transportation in the Valley is more likely to pass than a bond as long as it stays locally. Valley-wide bonds are especially difficult to pass.
<p>Support for Transit Investment <i>Priorities / criteria for judging how public transit should be funded</i> <i>Factors that determine the community's willingness to fund public transit</i> <i>Specific types of mobility improvements that receive the greatest public support</i> <i>Factors that affect public support for transit improvements in the future</i> <i>In the context of an economic downturn is there more or less need for transit investment?</i> <i>Is transit challenged more by the limited availability of resources, or by community attitudes?</i></p>	<ul style="list-style-type: none"> • Cities building more senior housing. Tie in with AVTA. Private developments provide own shuttles.
<p>Advancing the Discussion <i>Any scenario in which local residents would accept public transit over personal vehicles?</i> <i>Other people / organizations we should talk with about AVTA</i> <i>Who would you see as practical partners to AVTA?</i></p>	
<p>Other Comments</p>	

**AVTA Comprehensive Long Range Transit Plan
Stakeholder Interview Summary**

**Mark Bozigan
City Manager, City of Lancaster**

Tuesday, October 21, 2008 11:00:00 AM

<p>Perspectives / Challenges/ Visions <i>Role of public transit in AV</i> <i>Ways that AVTA serves / interacts with your organization.</i> <i>Strengths / limitations of AVTA services</i> <i>Current mobility needs that should be addressed by transit</i> <i>Trends, issues, and changes over 10-20 years that AVTA should address</i> <i>Comparable systems / regions / cities that are good models for AV / AVTA</i></p>	<ul style="list-style-type: none"> • Growth is stopped for now. Will slow over the long term due to water issues and other stuff. • Need tighter Dial-a-Ride (DAR) management. • Overall AVTA well-run. Joint Powers Authority (JPA) approach is good. AVTA should focus on ease of schedule, making customer service better. • Only hear about elderly and disabled during Article 8 hearings. • Lancaster subsidize a portion of AVTA services. Services critical for employment transport and serving junior college and high school riders. Feel people on system are choice riders.
<p>Geographic Service Regions/ Peak Travel Demands <i>Markets for transit in AV</i> <i>Relative priority of rural / urban services</i> <i>Relative priority of geographic coverage or service frequency</i></p>	<ul style="list-style-type: none"> • Focus on captives, not choice riders. There is no congestion in the Antelope Valley. • Think of captive who do not currently use AVTA. • Greatest needs: job access, Antelope Valley College, K-12 schools. • Activity centers/ secondary nodes: (1) Avenue J and 15th (hospital/medical center cluster), (2) Avenue K and 30th (college/activity center), (3) Lancaster Baptist Church (40th Street East and Lancaster Blvd), 5K members • and growing private university with potential to be future transit destination node, (4) Avenue G and Sierra Highway Corridor - growing business park with Fox Field Airport and solar energy research -- might require transit service to serve employees (H and G, 50th West and Sierra Hwy).
<p>Modes of Transportation/ Intermodal Connectivity <i>Most important services (e.g. fixed-route, paratransit, commuter, high-capacity, etc)</i> <i>Suggested service improvements (e.g. more shelters, shorter wait times, better coverage)</i> <i>Opinions on transit vehicle types (e.g. buses, rail, vans, etc)</i></p>	<ul style="list-style-type: none"> • Focus more on commuter inter-service connectivity. • Look at shuttles, circulators, special needs (e.g., a "trolley"). Short hops between medical facilities, CBD to hospitals, etc. • Add more bus shelters! Improve website. • AVTA should not foster redundancy with Metrolink, which goes to same places served by AVTA. If HSR becomes a reality, then AVTA priorities would change and become more of an end-of-trip service. At this point, MTA is responsible for funding the end-of-trip and this should not be AVTA's focus since it does not receive an adequate local return.
<p>Sustainability Considerations <i>Importance of air quality as a reason for greater transit use</i> <i>AVTA's role in AV sustainability</i> <i>'Smart growth' in AV – role of local land use and transit decisions</i></p>	<ul style="list-style-type: none"> • Lancaster not growing now. Will adopt new general plan –June 2009. Want more density downtown. Adopted "form-based" code. Have (will have?) downtown specific plan. • Adding "artists' lofts" downtown. "Arbor Court" - Senior Care campus with all services onsite. Private financing. All included for \$800/month. Make CBD a "transit village." • Make cost decisions that implement technology improvements that result in cost savings (i.e. fuel system that saves money).
<p>Financial Considerations <i>Understanding of AVTA's funding sources</i> <i>Opinion of current level and sources of transit funding in light of AV mobility needs</i> <i>Ways funding could be increased</i> <i>Opinion of increases in local funds and/or higher fares</i> <i>Opinion of AV's share of federal and regional funds</i> <i>Opinion of transit funding independent of local government or as part of city and county budgets</i></p>	<ul style="list-style-type: none"> • Set standard for farebox recovery. "Maintain the faith" with all Antelope Valley residents. • Do targeted outreach, not broad advertising. • Long-distance service not cost-effective.
<p>Support for Transit Investment <i>Priorities / criteria for judging how public transit should be funded</i> <i>Factors that determine the community's willingness to fund public transit</i> <i>Specific types of mobility improvements that receive the greatest public support</i> <i>Factors that affect public support for transit improvements in the future</i> <i>In the context of an economic downturn is there more or less need for transit investment?</i> <i>Is transit challenged more by the limited availability of resources, or by community attitudes?</i></p>	<ul style="list-style-type: none"> • No growth in city contribution. Many other service needs. • Use Prop C funds to make improvements to roads used by transit. • "No one will pay for more service."
<p>Advancing the Discussion <i>Any scenario in which local residents would accept public transit over personal vehicles?</i> <i>Other people / organizations we should talk with about AVTA</i> <i>Who would you see as practical partners to AVTA?</i></p>	<ul style="list-style-type: none"> • Should do a rider survey. • Contact Brian Ludicke, City of Lancaster Planning Director - has information on growth plans. • Talk to Antelope Valley College, Antelope Valley Hospital.
<p>Other Comments</p>	

**AVTA Comprehensive Long Range Transit Plan
Stakeholder Interview Summary**

**Drew Mercy
Deputy Chief of Staff, CA Senator George Runner**

Tuesday, October 21, 2008 1:00:00 PM

<p>Perspectives / Challenges/ Visions <i>Role of public transit in AV</i> <i>Ways that AVTA serves / interacts with your organization.</i> <i>Strengths / limitations of AVTA services</i> <i>Current mobility needs that should be addressed by transit</i> <i>Trends, issues, and changes over 10-20 years that AVTA should address</i> <i>Comparable systems / regions / cities that are good models for AV / AVTA</i></p>	<ul style="list-style-type: none"> • AVTA does a good job in the cities. Rural areas hard to serve. Complaint come from rural areas. • For transit-dependent, the priorities should be serving the low income, elderly, disabled populations. Factors include health/age/mobility. • Commuter service works well, duplicates Metrolink. • Trend - the Antelope Valley will continue to be automobile-centric.
<p>Geographic Service Regions/ Peak Travel Demands <i>Markets for transit in AV</i> <i>Relative priority of rural / urban services</i> <i>Relative priority of geographic coverage or service frequency</i></p>	<ul style="list-style-type: none"> • Biggest challenge in the Antelope Valley is serving the rural areas.
<p>Modes of Transportation/ Intermodal Connectivity <i>Most important services (e.g. fixed-route, paratransit, commuter, high-capacity, etc)</i> <i>Suggested service improvements (e.g. more shelters, shorter wait times, better coverage)</i> <i>Opinions on transit vehicle types (e.g. buses, rail, vans, etc)</i></p>	<ul style="list-style-type: none"> • Increase commuter service to meet demand. Important to keep access to jobs. • Commuter services picks up as gas prices rise, commuter services should be the priority to meet demand. Few complaints on paratransit services and should continue paratransit service. • Need better effort to move airport forward, link to transportation center.
<p>Sustainability Considerations <i>Importance of air quality as a reason for greater transit use</i> <i>AVTA's role in AV sustainability</i> <i>'Smart growth' in AV – role of local land use and transit decisions</i></p>	<ul style="list-style-type: none"> • Development is consumer driven, not by mandates. • Smart growth involves utilizing transit and housing together and encouraging it through tax incentives and mandates. Major changes in smart growth requirements through legislation are being pushed (i.e. SB375). Need consumer driven policies.
<p>Financial Considerations <i>Understanding of AVTA's funding sources</i> <i>Opinion of current level and sources of transit funding in light of AV mobility needs</i> <i>Ways funding could be increased</i> <i>Opinion of increases in local funds and/or higher fares</i> <i>Opinion of AV's share of federal and regional funds</i> <i>Opinion of transit funding independent of local government or as part of city and county budgets</i></p>	<ul style="list-style-type: none"> • Need to balance need and cost. • Legislature would approve special tax district if asked. Voters probably wouldn't. • Become more fare-based (with a concentration on commuter services) to have less reliance on subsidies from government.
<p>Support for Transit Investment <i>Priorities / criteria for judging how public transit should be funded</i> <i>Factors that determine the community's willingness to fund public transit</i> <i>Specific types of mobility improvements that receive the greatest public support</i> <i>Factors that affect public support for transit improvements in the future</i> <i>In the context of an economic downturn is there more or less need for transit investment?</i> <i>Is transit challenged more by the limited availability of resources, or by community attitudes?</i></p>	<ul style="list-style-type: none"> • Desire to create a cultural downtown, museum, and artists lofts have wide-support, may spur support for more urban amenities. • A difficulty is that the underserved populations that use public transit do not have the time/ have not fully engaged in the community.
<p>Advancing the Discussion <i>Any scenario in which local residents would accept public transit over personal vehicles?</i> <i>Other people / organizations we should talk with about AVTA</i> <i>Who would you see as practical partners to AVTA?</i></p>	<ul style="list-style-type: none"> • Mel Layne (GAVEA) / Antelope Valley Board of Trade.
<p>Other Comments</p>	

**AVTA Comprehensive Long Range Transit Plan
Stakeholder Interview Summary**

Laurie Lile; Mike Mischell; Brian Kuhn

Asst City Mgr; Dir. Public Works; Sr. Planning Engineer, City of Palmdale

Tuesday, October 21, 2008

2:30:00 PM

<p>Perspectives / Challenges/ Visions <i>Role of public transit in AV</i> <i>Ways that AVTA serves / interacts with your organization.</i> <i>Strengths / limitations of AVTA services</i> <i>Current mobility needs that should be addressed by transit</i> <i>Trends, issues, and changes over 10-20 years that AVTA should address</i> <i>Comparable systems / regions / cities that are good models for AV / AVTA</i></p>	<ul style="list-style-type: none"> • AVTA provide a valuable service. Doing a good job. • Many issues. Need to shorten headways. • Get some Dial-A-Ride (DAR) complaints. • Commuter service is good. Should not be subsidized. • Route structure is good in Palmdale. • Need balanced service: fixed route/ dial-a-ride/commuter, not just a service for transit-dependent population. To provide an option that gets people out of their vehicles. • Models include Santa Clarita, Simi Valley, Rancho Cucamonga.
<p>Geographic Service Regions/ Peak Travel Demands <i>Markets for transit in AV</i> <i>Relative priority of rural / urban services</i> <i>Relative priority of geographic coverage or service frequency</i></p>	
<p>Modes of Transportation/ Intermodal Connectivity <i>Most important services (e.g. fixed-route, paratransit, commuter, high-capacity, etc)</i> <i>Suggested service improvements (e.g. more shelters, shorter wait times, better coverage)</i> <i>Opinions on transit vehicle types (e.g. buses, rail, vans, etc)</i></p>	<ul style="list-style-type: none"> • Demographic is aging. More people will need on demand services, some routes have higher demand. • 90 new shelters/benches/trash receptacles. No maps, information pods on these shelters, but could potentially be installed in Palmdale.
<p>Sustainability Considerations <i>Importance of air quality as a reason for greater transit use</i> <i>AVTA's role in AV sustainability</i> <i>'Smart growth' in AV – role of local land use and transit decisions</i></p>	<ul style="list-style-type: none"> • Need closer coordination of transit and land uses. But, does not plan on much additional density. • Approved "Transit Village" plan near Transportation Center (would consider increasing densities along AVTA fixed routes), 100+ acres, initial build-out for condo ownership/rental 30 units per acre, with mixed-use office/retail in later phases. Will get \$10M from the state. • Currently few inducements to ride transit, insufficient congestion/cost. AVTA should encourage commuter transit to reduce carbon footprint. • City of Palmdale has sustainable development practices geared towards new development and residential development. Site design focus. however, the city has not engaged AVTA in specific sustainable transit practices. Focus is on the city's land use plan and to focus on more jobs locally to reduce the number of long distance commuters.
<p>Financial Considerations <i>Understanding of AVTA's funding sources</i> <i>Opinion of current level and sources of transit funding in light of AV mobility needs</i> <i>Ways funding could be increased</i> <i>Opinion of increases in local funds and/or higher fares</i> <i>Opinion of AV's share of federal and regional funds</i> <i>Opinion of transit funding independent of local government or as part of city and county budgets</i></p>	<ul style="list-style-type: none"> • City will provide more funding as region grows. Don't expect larger proportion from the cities. • "Transit is not up there as a priority." Not mentioned by anyone during the Strategic Plan process. Cost-effectiveness is key.
<p>Support for Transit Investment <i>Priorities / criteria for judging how public transit should be funded</i> <i>Factors that determine the community's willingness to fund public transit</i> <i>Specific types of mobility improvements that receive the greatest public support</i> <i>Factors that affect public support for transit improvements in the future</i> <i>In the context of an economic downturn is there more or less need for transit investment?</i> <i>Is transit challenged more by the limited availability of resources, or by community attitudes?</i></p>	<ul style="list-style-type: none"> • Transit will be same mode share 15 years from now. • Local (Antelope Valley) sales tax election "very difficult." • Public has negative views of higher density development (seen as undesirable) i.e. multi-family residential.
<p>Advancing the Discussion <i>Any scenario in which local residents would accept public transit over personal vehicles?</i> <i>Other people / organizations we should talk with about AVTA</i> <i>Who would you see as practical partners to AVTA?</i></p>	
<p>Other Comments</p>	

**AVTA Comprehensive Long Range Transit Plan
Stakeholder Interview Summary**

Bret Banks

Operations Manager, Antelope Valley Air Quality Management District

Wednesday, October 22, 2008 9:00:00 AM

<p>Perspectives / Challenges/ Visions <i>Role of public transit in AV</i> <i>Ways that AVTA serves / interacts with your organization.</i> <i>Strengths / limitations of AVTA services</i> <i>Current mobility needs that should be addressed by transit</i> <i>Trends, issues, and changes over 10-20 years that AVTA should address</i> <i>Comparable systems / regions / cities that are good models for AV / AVTA</i></p>	<ul style="list-style-type: none"> • AVTA well run. Difficult task to serve a big area that is dispersed. Need to explore alternative fuels. • Both agencies need to reach out to employers and build consensus on AB 32. • Antelope Valley Air Quality Management District regulates stationary sources only. Has 7 employees. • Antelope Valley is non-attainment for ozone: "Severe-17." • Difficulties for passengers in the time spent traveling from Point A-to-B, waiting for bus.
<p>Geographic Service Regions/ Peak Travel Demands <i>Markets for transit in AV</i> <i>Relative priority of rural / urban services</i> <i>Relative priority of geographic coverage or service frequency</i></p>	<ul style="list-style-type: none"> • A lot of routes currently hit most major employment centers. • Interest in seeing AVTA go toward alternative fuels.
<p>Modes of Transportation/ Intermodal Connectivity <i>Most important services (e.g. fixed-route, paratransit, commuter, high-capacity, etc)</i> <i>Suggested service improvements (e.g. more shelters, shorter wait times, better coverage)</i> <i>Opinions on transit vehicle types (e.g. buses, rail, vans, etc)</i></p>	<ul style="list-style-type: none"> • Should focus on re-establishing service to Edwards Air Force Base.
<p>Sustainability Considerations <i>Importance of air quality as a reason for greater transit use</i> <i>AVTA's role in AV sustainability</i> <i>'Smart growth' in AV – role of local land use and transit decisions</i></p>	<ul style="list-style-type: none"> • Air Quality is important to the aerospace business here (visibility). Not a big concern to general population. Growing awareness of greenhouse gases; non-attainment for ozone.
<p>Financial Considerations <i>Understanding of AVTA's funding sources</i> <i>Opinion of current level and sources of transit funding in light of AV mobility needs</i> <i>Ways funding could be increased</i> <i>Opinion of increases in local funds and/or higher fares</i> <i>Opinion of AV's share of federal and regional funds</i> <i>Opinion of transit funding independent of local government or as part of city and county budgets</i></p>	<ul style="list-style-type: none"> • San Joaquin Valley Air Pollution Control District has an "indirect source" fee. Could consider same for Antelope Valley. AQMD does not have an indirect source fees. • Local sales tax election very tough. • AQMD's primary funding comes from 1) fee-based on AQMD permits (annual) from stationary sources 2) vehicle registration (AB2766). AQMD's Plan does not define or suggest potential funding sources for transit.
<p>Support for Transit Investment <i>Priorities / criteria for judging how public transit should be funded</i> <i>Factors that determine the community's willingness to fund public transit</i> <i>Specific types of mobility improvements that receive the greatest public support</i> <i>Factors that affect public support for transit improvements in the future</i> <i>In the context of an economic downturn is there more or less need for transit investment?</i> <i>Is transit challenged more by the limited availability of resources, or by community attitudes?</i></p>	
<p>Advancing the Discussion <i>Any scenario in which local residents would accept public transit over personal vehicles?</i> <i>Other people / organizations we should talk with about AVTA</i> <i>Who would you see as practical partners to AVTA?</i></p>	
<p>Other Comments</p>	

**AVTA Comprehensive Long Range Transit Plan
Stakeholder Interview Summary**

Wednesday, October 22, 2008 10:00:00 AM

**Larry Grooms
District Director, CA Assemblywoman Sharon Runner**

<p>Perspectives / Challenges/ Visions <i>Role of public transit in AV</i> <i>Ways that AVTA serves / interacts with your organization.</i> <i>Strengths / limitations of AVTA services</i> <i>Current mobility needs that should be addressed by transit</i> <i>Trends, issues, and changes over 10-20 years that AVTA should address</i> <i>Comparable systems / regions / cities that are good models for AV / AVTA</i></p>	<ul style="list-style-type: none"> • Transit is "problematic." • Antelope Valley has changed dramatically in the last 15 years. • Prison brought new different growth. People want live near the relatives that inside the prison. • Average household income is declining in Lancaster. • Southern California Association of Governments/ Los Angeles County provide very limited support. • Weather is big issue for riders (hot and cold). • District office receives few calls related to transit. Many calls about Caltrans.
<p>Geographic Service Regions/ Peak Travel Demands <i>Markets for transit in AV</i> <i>Relative priority of rural / urban services</i> <i>Relative priority of geographic coverage or service frequency</i></p>	<ul style="list-style-type: none"> • Focus on frequency, not coverage. Focus on the core. Yet, neediest people live furthest out. • Focus on ways to get social services consolidated in one place. Easier to serve by transit. Easier for users.
<p>Modes of Transportation/ Intermodal Connectivity <i>Most important services (e.g. fixed-route, paratransit, commuter, high-capacity, etc)</i> <i>Suggested service improvements (e.g. more shelters, shorter wait times, better coverage)</i> <i>Opinions on transit vehicle types (e.g. buses, rail, vans, etc)</i></p>	<ul style="list-style-type: none"> • Metrolink is running full.
<p>Sustainability Considerations <i>Importance of air quality as a reason for greater transit use</i> <i>AVTA's role in AV sustainability</i> <i>'Smart growth' in AV – role of local land use and transit decisions</i></p>	<ul style="list-style-type: none"> • Biggest draw - affordable housing. • Greater Antelope Valley Economic Alliance seeks new employers. Some aerospace subcontractors, auto aftermarket, research and development ("thermal"). Honda test track. Countrywide mortgage. • Bosses live in Valencia and commute in. • LAWA support - "Forget it!"
<p>Financial Considerations <i>Understanding of AVTA's funding sources</i> <i>Opinion of current level and sources of transit funding in light of AV mobility needs</i> <i>Ways funding could be increased</i> <i>Opinion of increases in local funds and/or higher fares</i> <i>Opinion of AV's share of federal and regional funds</i> <i>Opinion of transit funding independent of local government or as part of city and county budgets</i></p>	<ul style="list-style-type: none"> • Use League of California Cities to get legislation for tax district. Tough sell with voters.
<p>Support for Transit Investment <i>Priorities / criteria for judging how public transit should be funded</i> <i>Factors that determine the community's willingness to fund public transit</i> <i>Specific types of mobility improvements that receive the greatest public support</i> <i>Factors that affect public support for transit improvements in the future</i> <i>In the context of an economic downturn is there more or less need for transit investment?</i> <i>Is transit challenged more by the limited availability of resources, or by community attitudes?</i></p>	<ul style="list-style-type: none"> • Should have private nonprofit Dial-A-Ride (DAR) service.
<p>Advancing the Discussion <i>Any scenario in which local residents would accept public transit over personal vehicles?</i> <i>Other people / organizations we should talk with about AVTA</i> <i>Who would you see as practical partners to AVTA?</i></p>	
<p>Other Comments</p>	

**AVTA Comprehensive Long Range Transit Plan
Stakeholder Interview Summary**

**Norm Hickling
Deputy, LA County Supervisor Mike Antonovich**

Wednesday, October 22, 2008 11:00:00 AM

<p>Perspectives / Challenges/ Visions <i>Role of public transit in AV Ways that AVTA serves / interacts with your organization. Strengths / limitations of AVTA services Current mobility needs that should be addressed by transit Trends, issues, and changes over 10-20 years that AVTA should address Comparable systems / regions / cities that are good models for AV / AVTA</i></p>	<ul style="list-style-type: none"> • AVTA doing well with challenging area. Problems are with serving outlying areas e.g., Green Valley. • Frequency inadequate. Not enough riders. Bus stops should be located better to serve seniors and disabled. • Issues include controlling sprawl/development (downtown, airport) and focusing on housing for seniors.
<p>Geographic Service Regions/ Peak Travel Demands <i>Markets for transit in AV Relative priority of rural / urban services Relative priority of geographic coverage or service frequency</i></p>	<ul style="list-style-type: none"> • Focus on niche markets. Destination circulators. Medical services market. Choice ridership is land use driven. • Move bus stops closer to destinations and users. • Examples of comparable transit systems: Foothill, Santa Clarita.
<p>Modes of Transportation/ Intermodal Connectivity <i>Most important services (e.g. fixed-route, paratransit, commuter, high-capacity, etc) Suggested service improvements (e.g. more shelters, shorter wait times, better coverage) Opinions on transit vehicle types (e.g. buses, rail, vans, etc)</i></p>	<ul style="list-style-type: none"> • Current transit operations may not appeal to disabled persons/seniors.
<p>Sustainability Considerations <i>Importance of air quality as a reason for greater transit use AVTA's role in AV sustainability 'Smart growth' in AV – role of local land use and transit decisions</i></p>	<ul style="list-style-type: none"> • Both cities doing better with more "urban" development. Focus now is on seniors. • Note that County is doing a General Plan update. AVTA should be linked in to this process. • Lancaster has taken over the airport and landfill (for revenue). • Also has a "Town and Country Antelope Valley Area Plan Update" (regional plan).
<p>Financial Considerations <i>Understanding of AVTA's funding sources Opinion of current level and sources of transit funding in light of AV mobility needs Ways funding could be increased Opinion of increases in local funds and/or higher fares Opinion of AV's share of federal and regional funds Opinion of transit funding independent of local government or as part of city and county budgets</i></p>	<ul style="list-style-type: none"> • Taxation is a tough sell, even if it's all staying in the Antelope Valley. A geographic equity issue.
<p>Support for Transit Investment <i>Priorities / criteria for judging how public transit should be funded Factors that determine the community's willingness to fund public transit Specific types of mobility improvements that receive the greatest public support Factors that affect public support for transit improvements in the future In the context of an economic downturn is there more or less need for transit investment? Is transit challenged more by the limited availability of resources, or by community attitudes?</i></p>	<ul style="list-style-type: none"> • Falls into two groups: 1) a transit user or 2) person firmly committed to an automobile. • Community attitude toward transit is challenged by geographic inequity, conservative approach, mindset that congestion is not critical (yet).
<p>Advancing the Discussion <i>Any scenario in which local residents would accept public transit over personal vehicles? Other people / organizations we should talk with about AVTA Who would you see as practical partners to AVTA?</i></p>	<ul style="list-style-type: none"> • Contact Mitch Glaser, LA County Department of Regional Planning for more info on "Town and Country Antelope Valley Area Plan Update." • A scenario with buses serving business parks with limited stops may entice people to take public transit.
<p>Other Comments</p>	

**AVTA Comprehensive Long Range Transit Plan
Stakeholder Interview Summary**

Harvey Holloway

Coldwell Banker Real Estate / Former President AV Chamber of Commerce,

Greater Antelope Valley Economic Alliance (GAVEA), Antelope Valley Board of Trade (BOT)

Wednesday, October 22, 2008

2:30:00 PM

<p>Perspectives / Challenges/ Visions <i>Role of public transit in AV</i> <i>Ways that AVTA serves / interacts with your organization.</i> <i>Strengths / limitations of AVTA services</i> <i>Current mobility needs that should be addressed by transit</i> <i>Trends, issues, and changes over 10-20 years that AVTA should address</i> <i>Comparable systems / regions / cities that are good models for AV / AVTA</i></p>	<ul style="list-style-type: none"> • GAVEA focuses on employers. BOT focuses on infrastructure. • Key issues for business: land, educated workforce. Public transit is "not a big priority." • Enterprise zone was useful. Santa Clarita now has one. • AVTA doing an adequate job. Has not heard much about transit service concerns. Bottleneck problems along 10th Street West Corridor. • Comparable systems: Santa Clarita. Antelope Valley as a whole competes with Inland Empire, Central Valley/Bakersfield region, Riverside County, San Bernardino County, Victorville. • Continuing availability of land; limited water supply and storage issue. An affordable area within close proximity to LA Basin that is considered the next frontier in Los Angeles County growth. • 10th Street West Corridor is perceived as the "main street" where businesses want to locate.
<p>Geographic Service Regions/ Peak Travel Demands <i>Markets for transit in AV</i> <i>Relative priority of rural / urban services</i> <i>Relative priority of geographic coverage or service frequency</i></p>	
<p>Modes of Transportation/ Intermodal Connectivity <i>Most important services (e.g. fixed-route, paratransit, commuter, high-capacity, etc)</i> <i>Suggested service improvements (e.g. more shelters, shorter wait times, better coverage)</i> <i>Opinions on transit vehicle types (e.g. buses, rail, vans, etc)</i></p>	<ul style="list-style-type: none"> • Serve medical facilities. Fox Field is a node. • Best AVTA opportunity - commuters. (Pam: Changing service from C/D to point-to-point.)
<p>Sustainability Considerations <i>Importance of air quality as a reason for greater transit use</i> <i>AVTA's role in AV sustainability</i> <i>'Smart growth' in AV – role of local land use and transit decisions</i></p>	<ul style="list-style-type: none"> • Tenants interested in being on a bus route. This comes up frequently.
<p>Financial Considerations <i>Understanding of AVTA's funding sources</i> <i>Opinion of current level and sources of transit funding in light of AV mobility needs</i> <i>Ways funding could be increased</i> <i>Opinion of increases in local funds and/or higher fares</i> <i>Opinion of AV's share of federal and regional funds</i> <i>Opinion of transit funding independent of local government or as part of city and county budgets</i></p>	<ul style="list-style-type: none"> • Sales tax very tough. Tax dedicated to transit in the Antelope Valley is possible in the future, but not now. Very strong need would need to be demonstrated. More likely in a different climate/improved economy. "Maybe 50:50 chance in the future." • Current level of transit funding is not consistent with Antelope Valleys mobility needs.
<p>Support for Transit Investment <i>Priorities / criteria for judging how public transit should be funded</i> <i>Factors that determine the community's willingness to fund public transit</i> <i>Specific types of mobility improvements that receive the greatest public support</i> <i>Factors that affect public support for transit improvements in the future</i> <i>In the context of an economic downturn is there more or less need for transit investment?</i> <i>Is transit challenged more by the limited availability of resources, or by community attitudes?</i></p>	<ul style="list-style-type: none"> • Water issue will be resolved. • Need to educate and inform the public about transit. • Big jobs/ housing imbalance. Lots of residents work elsewhere.
<p>Advancing the Discussion <i>Any scenario in which local residents would accept public transit over personal vehicles?</i> <i>Other people / organizations we should talk with about AVTA</i> <i>Who would you see as practical partners to AVTA?</i></p>	<ul style="list-style-type: none"> • Community college (partners with local businesses to provide employee training programs).
<p>Other Comments</p>	

Appendix B

2007/2008

ANTELOPE VALLEY TRANSIT AUTHORITY
 Vehicle Inventory
 All vehicles located at
 42210 6th Street West
 Lancaster, CA 93534

Inventory #	Make	Model	Year	VIN#	Grant #	% Federal \$	Purchase Cost	Purchase Date	Use & Condition	Vested Title	Disposal Action	Service Life	End of life Date
100	Ford	E350	2000	1FDWE35L2YHB43203				9/1/2001	Active/Good	AVTA	N/A	4yr/100,000	
101	Ford	E350	2000	1FBSS31L71HB10113				9/1/2001	Active/Good	AVTA	N/A	4yr/100,000	
102	Ford	E350	2000	1FBSS31L31HB47496				9/1/2001	Active/Good	AVTA	N/A	4yr/100,000	
103	Ford	E350	2000	1FBSS31L81HB21654				9/1/2001	Active/Good	AVTA	N/A	4yr/100,000	
104	Dodge	2500	2000	2B7JB21Z4YK157158				9/1/2001	Active/Good	AVTA	N/A	4yr/100,000	
105	Dodge	2500	2000	2B7JB21Z6YK157162				9/2/2001	Active/Good	AVTA	N/A	4yr/100,000	
106	Ford	F150 pickup	2004	1FTRF17253NA7225				5/2/2003	Active/Good	AVTA	N/A	4yr/100,000	
107	Ford	E350	2004	1FTSS34L63HC02033				4/1/2004	Active/Good	AVTA	N/A	4yr/100,000	
108	Kubota	ATV	2004	KRTV900A41013227				6/1/2004	Active/Good	AVTA	N/A		
111	Gem	Electric	2002	5ASAG47422F021931					Active/Good	AVTA	N/A	4yr/100,000	
112	Chevy	2500 CNG	2004	1GBGC24U54E371554			\$48,000	12/1/2006	Active/Good	AVTA	N/A	4yr/100,000	
113	Kubota	ATV	2007	KRTV900A61066381					Active/Good	AVTA	N/A		
115	Jeep		1994	1J4FJ68S6RL109746		No	\$18,500	Sep-93	Active/Good	AVTA	N/A	4yr/100,000	
116	Jeep		1998	1J4FJ68S1WL282005	CA-90-X888	80%	\$23,557	Jul-98	Active/Good	AVTA	N/A	4yr/100,000	
117	Ford	Explorer	2002	1FMZU62K83UA15352	CA-90Y-220	80%	\$25,000	3/11/2003	Active/Good	AVTA	N/A	4yr/100,000	
118	Honda	Accord	2005	JHMCN36475C008837	CA-90Y-342	80%	\$32,243		Active/Good	AVTA	N/A	4yr/100,000	
119	Toyota	Camry	2007	4T1BB46K57U010816			\$30,674	3/7/2008	Active/Good	AVTA	N/A	4yr/100,000	
201	Chevy	Amerivan	2008	1GBDU13WZ8D149222	CA-90Y-596	80%	\$39,645	May-2008	Active/New	AVTA	N/A	4yr/100,000	
202	Chevy	Amerivan	2008	1GBDU13WZ8D141119	CA-90Y-596	80%	\$39,645	May-2008	Active/New	AVTA	N/A	4yr/100,000	
203	Chevy	Uplander	2008	1GBDU13W38D141310	CA-90Y-596	80%	\$39,645	May-2008	Active/New	AVTA	N/A	4yr/100,000	
204	Chevy	Amerivan	2008	1GBDU13W88D140654	CA-90Y-596	80%	\$39,645	May-2008	Active/New	AVTA	N/A	4yr/100,000	
311	Gillig	40' Transit	1992	1GBDU13WZ8D149222	CA-90-X503	80%	\$221,456	Jul-92	Contingency/Good	AVTA	N/A	12yr/500,000	
303	Gillig	40' Transit	1992	15GCD0915N1084565	CA-90-X503	80%	\$221,456	Jul-92	Active/Good	AVTA	N/A	12yr/500,000	
304	Gillig	40' Transit	1992	15GCD0917N1084566	CA-90-X503	80%	\$221,456	Jul-92	Active/Good	AVTA	N/A	12yr/500,000	
305	Gillig	40' Transit	1992	15GCD0919N1084567	CA-90-X503	80%	\$221,456	Jul-92	Active/Good	AVTA	N/A	12yr/500,000	
308	Gillig	40' Transit	1992	15GCD0919N1084570	CA-90-X503	80%	\$221,456	Jul-92	Active/Good	AVTA	N/A	12yr/500,000	
309	Gillig	40' Transit	1992	15GCD0910N1084571	CA-90-X503	80%	\$221,456	Jul-92	Active/Good	AVTA	N/A	12yr/500,000	
315	Gillig	40' Transit Low floor	2001	15GDD221011071675	CA-90-X094	80%	\$253,379	3/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
316	Gillig	40' Transit Low floor	2001	15GGD221011071676	CA-90-X094	80%	\$253,379	3/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
317	Gillig	40' Transit Low floor	2001	15GGD221411071677	CA-90-X094	80%	\$253,379	3/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
318	Gillig	40' Transit Low floor	2001	15GGD221611071678	CA-90-X094	80%	\$253,379	3/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
319	Gillig	40' Transit Low floor	2001	15GGD221811071679	CA-90-X094	80%	\$253,379	3/1/2001	Active/Good	AVTA	N/A	12yr/500,000	

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320	Gillig	40' Transit Low floor	2001	15GGD221411071680	CA-90-X094	80%	\$253,379	3/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
321	Gillig	40' Transit Low floor	2001	15GGD221611071681	CA-90-X094	80%	\$253,379	3/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
322	Gillig	40' Transit Low floor	2001	15GGD221811071682	CA-90-X094	80%	\$253,379	3/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
323	Gillig	40' Transit Low floor	2001	15GGD221X11071683	CA-90-X094	80%	\$253,379	3/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
324	Gillig	40' Transit Low floor	2001	15GGD221111071684	CA-90-X094	80%	\$253,379	3/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
325	Gillig	40' Transit Low floor	2001	15GGD221311071685	CA-90-X094	80%	\$253,379	9/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
326	Gillig	40' Transit Low floor	2001	15GDD221011071675	CA-90-X094	80%	\$253,379	9/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
327	Gillig	40' Transit Low floor	2001	15GGD221311071687	CA-90-X094	80%	\$253,379	9/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
328	Gillig	40' Transit Low floor	2001	15GGD221311071688	CA-90-X094	80%	\$255,849	9/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
329	Gillig	40' Transit Low floor	2001	15GDD221411071689	CA-90-X094	80%	\$255,849	9/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
330	Gillig	40' Transit Low floor	2001	15GGD221311071690	CA-90-X094	80%	\$255,849	9/1/2001	Active/Good	AVTA	N/A	12yr/500,000	
3331	Nabbi	40' Transit Low floor	2003	1N940C0303A140612	CA-90-Y220	80%	\$289,936	12/1/2003	Active/Good	AVTA	N/A	12yr/500,000	
3332	Nabbi	40' Transit Low floor	2003	1N940C0323A140613	CA-90-Y220	80%	\$289,936	12/1/2003	Active/Good	AVTA	N/A	12yr/500,000	
3333	Nabbi	40' Transit Low floor	2003	1N940C0343A140614	CA-90-Y220	80%	\$289,936	12/1/2003	Active/Good	AVTA	N/A	12yr/500,000	
3334	Nabbi	40' Transit Low floor	2003	1N940C0363A140615	CA-90-Y220	80%	\$289,936	12/1/2003	Active/Good	AVTA	N/A	12yr/500,000	
3335	Nabbi	40' Transit Low floor	2003	1N940C0383A140616	CA-90-Y220	80%	\$289,936	12/1/2003	Active/Good	AVTA	N/A	12yr/500,000	
3336	Nabbi	40' Transit Low floor	2003	1N940C03X3A140617	CA-90-Y220	80%	\$289,936	12/1/2003	Active/Good	AVTA	N/A	12yr/500,000	
4337	Gillig	40' Transit Low floor	2004	15GGD201841074363	CA-90-Y239	80%	\$299,210	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	

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4338	Gillig	40' Transit Low floor	2004	15GGD201X41074364	CA-90-Y239	80%	\$299,210	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4339	Gillig	40' Transit Low floor	2004	15GGD201141074365	CA-90-Y239	80%	\$299,210	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4340	Gillig	40' Transit Low floor	2004	15GGD201341074366	CA-90-Y239	80%	\$299,210	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4341	Gillig	40' Transit Low floor	2004	15GGD201541074367	CA-90-Y239	80%	\$299,210	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4342	Gillig	40' Transit Low floor	2004	15GGD200741074368	CA-90-Y239	80%	\$299,210	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4343	Gillig	40' Transit Low floor	2004	15GGD201941074369	CA-90-Y239	80%	\$299,210	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4344	Gillig	40' Transit Low floor	2004	15GGD201541074370	CA-90-Y239	80%	\$299,210	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4345	Gillig	40' Transit Low floor	2004	15GGD201741074371	CA-90-Y239	80%	\$299,210	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4346	Gillig	40' Transit Low floor	2004	15GGD201941074372	CA-90-Y239	80%	\$299,210	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4347	Gillig	40' Transit Low floor	2004	15GGD201041074373	CA-90-Y239	80%	\$317,769	6/2/2004	Active/Good	AVTA	N/A	12yr/500,000	
4348	Gillig	40' Transit Low floor	2004	15GGD201241074374	CA-90-Y239	80%	\$317,769	6/2/2004	Active/Good	AVTA	N/A	12yr/500,000	
4349	Gillig	40' Transit Low floor	2004	15GGD201441074375	CA-90-Y239	80%	\$317,769	6/2/2004	Active/Good	AVTA	N/A	12yr/500,000	
4350	Overland	Elf	2004	1FDWE45F73HB77615		No	\$150,000	4/1/2004	Active/Good	AVTA	N/A	7yr/200,000	
4351	Overland	Elf	2004	1FDWE45F13HB77612		No	\$150,000	4/1/2004	Active/Good	AVTA	N/A	7yr/200,000	
3809	Ford	E450	2006	1FDXE45S86HA93101			\$75,748	3/1/2006	Active/Good	AVTA	N/A	5yr/150,000	
3810	Ford	E450	2006	1FDXE45SX6HA93103			\$75,748	3/1/2006	Active/Good	AVTA	N/A	5yr/150,000	
3811	Ford	E450	2006	1FDXE45S16HA93103			\$75,748	3/1/2006	Active/Good	AVTA	N/A	5yr/150,000	
715	Neoplan	40' Commuter	1994	1N9TA19A5RL013107	CA-90-X573	80%	\$301,539	Aug-94	Active/Good	AVTA	N/A	12yr/500,000	Contingency 6/9/09
716	Neoplan	40' Commuter	1994	1N9TA19A7RL013108	CA-90-X573	80%	\$301,539	Aug-94	Active/Good	AVTA	N/A	12yr/500,000	Contingency 6/9/09
717	Neoplan	40' Commuter	1994	1N9TA19A7RL013109	CA-90-X573	80%	\$301,539	Aug-94	Active/Good	AVTA	N/A	12yr/500,000	Contingency 6/9/09
720	Neoplan	40' Double Decker	1996	1N9HK29A7TL013156	CA-90-X573	80%	\$439,619	Aug-96	Active/Good	AVTA	N/A	12yr/500,000	
721	Neoplan	40' Double Decker	1996	1N9HK29A9TL013157	CA-90-X573	80%	\$443,949	Aug-96	Active/Good	AVTA	N/A	12yr/500,000	

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722	Neoplan	40' Double Decker	1996	1N9HK29A0TL013158	CA-90-X573	80%	\$443,949	Aug-96	Active/Good	AVTA	N/A	12yr/500,000	
730	MCI	D4500	1999	1M8PDMPA1XPO52359		80%	\$425,403	Sep-99	Active/Good	AVTA	N/A	12yr/500,000	
731	MCI	D4500	1999	1M8PDMPA8XPO52360		80%	\$425,403	Sep-99	Active/Good	AVTA	N/A	12yr/500,000	
732	MCI	D4500	1999	1M8PDMPAXXPO52361		80%	\$425,403	Sep-99	Active/Good	AVTA	N/A	12yr/500,000	
2733	MCI	D4500	2002	IM8PDMPA63P055574	CA-90-Y220	80%	\$410,067		Active/Good	AVTA	N/A	12yr/500,000	
2734	MCI	D4500	2002	IM8PDMPA83P055575	CA-90-Y220	80%	\$410,067		Active/Good	AVTA	N/A	12yr/500,000	
2735	MCI	D4500	2002	IM8PDMPAX3P055576	CA-90-Y220	80%	\$410,067		Active/Good	AVTA	N/A	12yr/500,000	
4736	MCI	D4500	2004	1M8PDMPA24P056352	CA-90-Y296	80%	\$398,980	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4737	MCI	D4500	2004	1M8PDMPA44P056353	CA-90-Y296	80%	\$398,980	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4738	MCI	D4500	2004	1M8PDMPA64P056354	CA-90-Y296	80%	\$398,980	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4739	MCI	D4500	2004	1M8PDMPA84P056355	CA-90-Y296	80%	\$398,980	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4740	MCI	D4500	2004	1M8PDMPAX4P056356	CA-90-Y296	80%	\$398,980	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4741	MCI	D4500	2004	1M8PDMPA14P056357	CA-90-Y296	80%	\$398,980	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4742	MCI	D4500	2004	1M8PDMPA34P056358	CA-90-Y296	80%	\$398,980	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4743	MCI	D4500	2004	1M8PDMPA54P056359	CA-90-Y296	80%	\$398,980	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4744	MCI	D4500	2004	1M8PDMPA14P056360	CA-90-Y296	80%	\$398,980	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4745	MCI	D4500	2004	1M8PDMPA34P056361	CA-90-Y296	80%	\$398,980	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4746	MCI	D4500	2004	1M8PDMPA54P056362	CA-90-Y296	80%	\$398,980	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4747	MCI	D4500	2004	1M8PDMPA74P056363	CA-90-Y296	80%	\$398,980	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4748	MCI	D4500	2004	1M8PDMPA94P056364	CA-90-Y296	80%	\$398,980	6/1/2004	Active/Good	AVTA	N/A	12yr/500,000	
4749	MCI	D4500	2009	1M8PDMEA89P058830			\$544,895	12/6/2008	Active/Good	AVTA	N/A	12yr/500,000	
4750	MCI	D4500	2009	1M8PDMEA9P058831			\$544,895	12/6/2008	Active/Good	AVTA	N/A	12yr/500,000	
4751	MCI	D4500	2009	1M8PDMEA19P058832			\$544,895	12/6/2008	Active/Good	AVTA	N/A	12yr/500,000	Inservice 6/9/09
4752	MCI	D4500	2009	1M8PDMEA39P058833			\$544,895	12/6/2008	Active/Good	AVTA	N/A	12yr/500,000	Inservice 6/9/09
4753	MCI	D4500	2009	1M8PDMEA59P058834			\$544,895	12/6/2008	Active/Good	AVTA	N/A	12yr/500,000	Inservice 6/9/09
4754	MCI	D4500	2009	1M8PDMEA79P058835			\$544,895	12/6/2008	Active/Good	AVTA	N/A	12yr/500,000	
3800	Ford	E450	2003	1FDWE45F73HB77338	CA-90-Y239	80%	\$65,050	11/1/2003	Active/Good	AVTA	N/A	5yr/150,000	
3801	Ford	E450	2003	1FDWE45F93HB77339	CA-90-Y239	80%	\$65,050	11/1/2003	Active/Good	AVTA	N/A	5yr/150,000	
3802	Ford	E450	2003	1FDWE45F53HB77340	CA-90-Y239	80%	\$65,050	11/1/2003	Active/Good	AVTA	N/A	5yr/150,000	
3803	Ford	E450	2003	1FDWE45F73HB77341	CA-90-Y239	80%	\$65,050	11/1/2003	Active/Good	AVTA	N/A	5yr/150,000	
3804	Ford	E450	2003	1FDWE45F93HB77342	CA-90-Y239	80%	\$65,050	11/1/2003	Active/Good	AVTA	N/A	5yr/150,000	
3805	Ford	E450	2003	1FDWE45F03HB77343	CA-90-Y239	80%	\$65,050	11/1/2003	Active/Good	AVTA	N/A	5yr/150,000	
3806	Ford	E450	2003	1FDWE45F23HB77344	CA-90-Y239	80%	\$65,050	11/1/2003	Active/Good	AVTA	N/A	5yr/150,000	
3807	Ford	E450	2003	1FDWE45F43HB77345	CA-90-Y239	80%	\$65,050	11/1/2003	Active/Good	AVTA	N/A	5yr/150,000	

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3808	Ford	E450	2003	1FDWE45F63HB77346	CA-90-Y239	80%	\$65,050	11/1/2003	Active/Good	AVTA	N/A	5yr/150,000	
3812	Ford	E450	2008	1FD4E45S48DB10005	CA-90-Y596	83%	\$69,348	6/1/2008	Active/New	AVTA	N/A	5yr/150,000	
3813	Ford	E450	2008	1FD4E45S48DB13642	CA-90-Y596	83%	\$69,348	6/1/2008	Active/New	AVTA	N/A	5yr/150,000	
3814	Ford	E450	2008	1FD4E45S48DB13633	CA-90-Y596	83%	\$69,348	6/1/2008	Active/New	AVTA	N/A	5yr/150,000	
3815	Ford	E450	2008	1FD4E45SX8DB10011	CA-90-Y596	83%	\$69,348	6/30/2008	Active/New	AVTA	N/A	5yr/150,000	
3816	Ford	E450	2008	1FD4E45S48DB52044			\$59,693	12/22/2008	Active/New	AVTA	N/A	5yr/150,000	
3817	Ford	E450	2008	1FD4E45S18DB52048			\$59,693	12/22/2008	Active/New	AVTA	N/A	5yr/150,000	
3818	Ford	E450	2008	1FD4E45S98DB46319			\$59,693	12/22/2008	Active/New	AVTA	N/A	5yr/150,000	
3819	Ford	E450	2008	1FD4E45S98DB52029			\$59,693	12/22/2008	Active/New	AVTA	N/A	5yr/150,000	
3820	Ford	E450	2008	1FD4E45S78DB52054			\$59,693	12/22/2008	Active/New	AVTA	N/A	5yr/150,000	
3000001	Ford	E450	2000	1FDXE45S9YHB93078	CA-90Y-239	80%			Active/Good	AVTA	N/A	5yr/150,000	
3000002	Ford	E450	2001	1FDXE45S0YHB93079	CA-90Y-239	80%			Active/Good	AVTA	N/A	5yr/150,000	
3000003	Chevrolet	3500	2001	1GBJB31R11112892	CA-90Y-239	80%			Active/Good	AVTA	N/A	5yr/150,000	
3000004	Chevrolet	3500	2001	1GBJB31R11113303	CA-90Y-239	80%			Active/Good	AVTA	N/A	5yr/150,000	
3000005	Chevrolet	3500	2001	1GBJB31R11112363	CA-90Y-239	80%			Active/Good	AVTA	N/A	5yr/150,000	