

**FY 2009-2011  
Triennial Performance Audit  
of Barstow Area Transit**

**Submitted to San Bernardino  
Associated Governments**

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## **Executive Summary**

The San Bernardino Associated Governments (SANBAG) engaged the PMC consultant team to conduct the Transportation Development Act (TDA) triennial performance audit of the six public transit operators under its jurisdiction. The performance audit serves to ensure accountability in the use of public transportation revenue. This performance audit is conducted for Barstow Area Transit (BAT) covering the most recent triennial period, fiscal years 2008-09 through 2010-11.

The audit includes a review of the following areas:

- Compliance with TDA Requirements
- Status of Prior Audit Recommendations
- Transit System Performance Trends
- Detailed Functional Review

From the review, recommendations were developed to improve the operational efficiency and effectiveness of BAT.

### **Compliance with TDA Requirements**

BAT has complied with most TDA requirements with the some exceptions. The compliance requirement for submittal of the annual fiscal audits was partially implemented. Responsibility for submittal of these financial documents lies with the SANBAG auditor, which operates independently of BAT. The farebox recovery ratio did not meet standards for two of the three audited years and is declining. In addition, the Full-Time Equivalent Employee data reported in the State Controller Report could not be supported by the information sources collected for this audit. The reporting may be based on headcount rather than FTEs.

### **Status of Prior Audit Recommendations**

The prior audit report contained six recommendations. Five were fully implemented. The one not fully implemented addressed the verification of the accuracy of reports, and is carried forward for full implementation.

### **System Performance Trends**

The analysis of trends is conducted using data that is not consistent among various BAT financial and performance reports. However, despite the discrepancies, broad trends in system performance can be concluded during the audit period.

1. Operating costs for Barstow Area Transit decreased between FY2008 and FY2011. During the middle of the audit period, commencing on January 1, 2010, BAT restructured its fixed-route and demand-response services resulting in increased operating expenses.

Prior to the service restructuring, costs were already increasing at a fairly rapid pace in FY2009. A later reduction in funding caused a decrease in services and subsequent reduction in operating expenses in FY2011 by 17.6 percent from the prior fiscal year. In spite of these cost increases in the middle of the audit period, operating expenses at the end of the audit period were about the same as at the beginning, and just slightly down by 1.6 percent.

2. The service restructuring confused riders at first but eventually triggered a significant increase in passengers at the end of FY 2010. However, because of the subsequent reduction in service, the overall change in passengers over the audit period was a decrease of 6.5 percent.
3. Restructuring shifted resources to fixed-route services, as services in the unincorporated areas were changed from demand response to fixed route for about a year, only to revert back to demand response due to confusion among residents and loss of ridership. Operating expenses for fixed route increased 65 percent, while demand response operating expenses fell 46 percent. Similarly, fixed route passengers increased 47 percent and demand response passengers fell 72 percent during the audit period. There was an especially large drop in demand response passengers during FY2011; at the same fixed route passengers rose that year.
4. Restructuring increased service hours but funding reductions caused an even larger decrease. By the end of FY2011, vehicle service hours were down 32 percent compared with the base year statistics. Fixed route service hours fell nearly 30 percent while demand response hours were down over 65 percent.
5. Vehicle service hours per full time equivalent declined over 17 percent. However, this statistic is based on headcount reported in the State Controller Report instead of FTEs which skews this trend.
6. Ridership on the Big River service jumped almost 50 percent from 457 passenger to 683 passengers per year. Operations cost increased almost 30 percent, but cost per rider was down 13 percent.
7. Trona Transit ridership was flat during the audit period. However, operating costs and service hours rose significantly by 62 percent and 20 percent, respectively. This led to large increases in operating cost per passenger and cost per hour.
8. Operating cost per passenger increased 5 percent systemwide, while cost per vehicle service hour rose 45 percent. During the same period passengers per vehicle service hour rose 38 percent. There were significant differences by mode as operating cost per passenger on fixed route rose by 12 percent, while on the demand response service it increased over 94 percent. Fixed route cost per vehicle service hour rose 27 percent, while demand response service saw a 57 percent increase. Passengers per hour rose about 13 percent on the fixed route services but fell almost 20 percent on demand response services.

9. The trend in the fare recovery ratio shows a general decline during the audit period. The farebox ratio for BAT service (excluding Big River and Trona Transit systems) decreased from 10.4 percent in FY 2008 to 6.9 percent in FY 2011 with big drops in both FY2010 and FY2011. Since FY2005 the farebox ratio has declined from about 15 percent to under 7 percent. The TDA minimum ratio of 10 percent adopted by the SANBAG Board in 1994 was not met in two of the three audit years, placing the service out of compliance with a key TDA measure.
10. Big River Transit and Trona Transit data is submitted to city transit staff in raw form for processing as neither agency has the ability to process the information. The farebox recovery for these two transit services has been declining during the audit period, but they are still well above the TDA standard of 10 percent.

## **Functional Review**

1. The BAT system underwent substantial change during the audit period as a result of implementing recommendations in the 2007 Comprehensive Operations. The system converted from about 70 percent demand response and 30 percent fixed route to about 70 percent fixed route and 30 percent demand response. A subsequent funding reduction required further changes in July 2010.
2. Riders within the City of Barstow responded well to the initial changes, but the County riders were unhappy due to the change from demand response to fixed route service with flag down stops. County services reverted back to demand response by 2011.
3. The new map and rider guide is a vast improvement over earlier materials. It is posted on the City web site and provides information on routes, schedules and other important information.
4. The San Bernardino Associated Governments has funded an effort to evaluate the feasibility of consolidating BAT's operations with the Victor Valley Transportation Authority and Needles Transit. That study should be complete in 2013.
5. The consolidation study has required the City of Barstow to suspend some decisions and capital purchases until its completion and adoption. If the process takes too long and purchases of replacement buses are delayed, vehicle maintenance could become an issue.

**Recommendations**

<b>Performance Audit Recommendation</b>	<b>Background</b>	<b>Timeline</b>
<p>#1 Improve operations data collecting and reporting consistency</p>	<p>Producing consistent performance data for both State and Federal reports has been an issue for Barstow Area Transit dating back to a recommendation made in the prior performance. The Transportation Manager reviews TransTrack input by contractor at least once a month and uses invoices as back up documentation. Some earlier problems were thought to arise from the lack of clear lines of responsibilities at the contractor. These have since been resolved, but there are still data consistency issues between the reports that BAT prepares internally that feed into external agency reports.</p> <p>While the differences are not generally wide-ranging, the year end operations data for components such as ridership, service hours and miles, and employees should be fairly the same for internal and external reporting. Given these inconsistencies, it is difficult to ensure accuracy in drawing conclusions about trends particularly with the modal statistics.</p> <p>BAT should reconsider its data collection, review and reporting practices and develop a written “desktop” guide using a flow chart outlining the data reporting process and assigning personnel responsible for each step in the process. Personnel may include city staff from within transit and the finance department, and the operations contractor. Specific staff can be assigned the responsibility of collecting, entering data into TransTrack, and overseeing the accuracy of the data and reports. Additionally, the Transportation Manager should assume the role of managing this process and be responsible for ensuring the overall accuracy of the data.</p>	<p>High Priority</p>

Performance Audit Recommendation	Background	Timeline
#2 Meet farebox recovery	<p>The trend in the farebox recovery is down. For years the fare recovery ratio had been just above or below the 10 percent requirement, however decreasing well below this threshold during the audit period to under 7 percent.</p> <p>As a result, the service is out of compliance with a key TDA measure.</p> <p>BAT should work closely with the contract operator and SANBAG to address this trend, whether through a near-term service analysis under current funding assumptions, and/or a closer review of its operating expenses whether any cost efficiencies or savings can be made to improve the fare recovery ratio.</p>	High Priority
#3 Hold regular communication with City development officials	<p>The Transportation Manager indicated that there is no regular communication between transit administration and the City's Planning and Building Departments to identify and understand land use and development proposals that may impact demand for transit services. While the COA addressed the level of anticipated demand for service and where the demand will originate, as development patterns come to fruition, transit management should maintain an ongoing dialog with City planners to keep updated on residential and non-residential development proposals and be able to add transit friendly amenities on-site and adjust BAT service as necessary to respond to the potential new demand. This could include participating in development meetings with the private applicant, and meeting more regularly with planning staff on such proposals.</p>	High Priority

Performance Audit Recommendation	Background	Timeline
#4 Develop Capital Improvement Plan	<p>Transit operations have capital needs for vehicle replacement, bus stop amenities and other facilities. With understanding of the potential implications from the consolidation study results, BAT should develop a Capital Improvement Plan and schedule for regular updates for fleet replacement and improvements to amenities. This will alert City management to the upcoming call on funds and allow the City time to work with SANBAG to secure funding for its capital needs.</p> <p>The current fleet is aging (majority are reaching 5 years old) and replacement vehicles need to be programmed. This effort is on hold pending the progress of the consolidation study, but the plan will be useful when the City is ready to move forward.</p>	Medium priority
#5 Review BAT General Administration Charges	<p>As an entity within city government, the transit system incurs general administrative costs, both direct and indirect costs. Direct costs include those directly associated with the program, such as the Transportation Manager, while indirect costs include such components as city administrative services cost, among other allocated expenses.</p> <p>According to the annual fiscal audits, general administrative costs, as a percentage of total transit operations expenditures less depreciation, increased from 9 percent in FY 2009 to close to 13 percent in FY 2011. Also, general administrative costs for Trona and Big River Transit comprise close to 50 percent of expenditures for these systems. This additional cost is inclusive of the transition of the Transportation Manager to a City employee in early 2009. However, budgeted indirect City Administrative Costs (City overhead) allocated to transit has</p>	Medium priority

Performance Audit Recommendation	Background	Timeline
	<p>increased by 25 percent over a three year period.</p> <p>This trend in increased administration expenses for BAT should be reviewed in detail by the Transportation Manager to determine whether all related costs are justified in the transit budget. With farebox recovery not being met, there should be further examination of these costs which impact BAT's ability to meet farebox, and adjustments made to the administrative charges as warranted to reflect the level of service afforded to transit by City personnel.</p>	

# Section I

## Introduction

The San Bernardino Associated Governments (SANBAG) engaged the PMC consultant team to conduct the Transportation Development Act (TDA) triennial performance audit of the six public transit operators under its jurisdiction in San Bernardino County. This performance audit is conducted for Barstow Area Transit (BAT) covering the most recent triennial period, fiscal years 2008-09 through 2010-11.

The purpose of the performance audit is to evaluate BAT's effectiveness and efficiency in its use of TDA funds to provide public transit in its service area. This evaluation is required as a condition for continued receipt of these funds for public transportation purposes. In addition, the audit evaluates BAT's compliance with the conditions specified in the California Public Utilities Code. This task involves ascertaining whether BAT is meeting the PUC's reporting requirements and that it is endeavoring to implement prior audit recommendations made to the agency. Moreover, the audit includes calculations of transit service performance indicators and a detailed review of the agency's departments and organizational functioning. From the analysis that has been undertaken, a set of recommendations has been made for the agency which is intended to improve the performance of transit operations.

In summary, this TDA audit affords the agency board and management the opportunity for an independent, constructive and objective evaluation of the organization and its operations that otherwise might not be available. The methodology for the audit included in-person interviews with transit management, collection and review of agency documents, data analysis, and onsite observations. The *Performance Audit Guidebook for Transit Operators and Regional Transportation Planning Entities, September 2008 (third edition)* published by the California Department of Transportation was used to guide in the development and conduct of the audit.

## Overview of the Transit System

The City of Barstow administers public transportation through a Memorandum of Understanding (MOU) with the County of San Bernardino for three transit systems: Barstow Area Transit (BAT), Big River Transit and Trona Transit. BAT provides local fixed route service to those residing within the incorporated City of Barstow and County general public dial-a-ride service to the surrounding unincorporated communities of Hinkley, Lenwood, Grandview, Daggett, Yermo and Newberry Springs. The service area of BAT is approximately 653 square miles. The MOU also provides for specialized transit services for elderly and disabled residents in the unincorporated communities of Trona and Big River.

The City initiated a general dial-a-ride within the city limits in 1976, while the County began offering demand responsive service in 1978 to the surrounding unincorporated areas. Fixed route service began in 1991 and today both fixed route and demand response services are provided under

the MOU. The transit system is currently administered by the City's Transportation Manager and is governed by the Barstow City Council. BAT operations and maintenance are provided by a private contract operator, MV Transportation.

The City of Barstow is located in the Mojave Desert at the junction of Interstates 15 and 40 and State Routes 58 and 247. The City has a total land area of 33.59 square miles. Barstow is a general law city incorporated in 1947 and has a Council-Manager form of government. Based upon the 2010 U.S. Census, the city's population was 22,639, of which 10.7 percent was age 65 or older. The 2000 Census population was 21,119, an increase of 7.2 percent.

System Characteristics

SANBAG has commissioned a study to evaluate the feasibility of consolidating Barstow Area Transit with Victor Valley Transit Authority (VVTA) and Needles Area Transit. The study is part of VVTA's current Comprehensive Operations Analysis and should be completed in early 2013. Meanwhile, some operational and capital decisions at BAT are on hold until the completion of the study.

The following transit services were offered during the audit period:

Fixed Route

*Barstow Area Transit:* The service consists of three fixed routes that are configured to operate from downtown to the eastern, western and central areas of the city. The routes serve major commercial development including the Factory Outlet Center/Tanger Mall and businesses along Main Street, governmental services, residential areas, the Veterans Home and Barstow Community College. Buses run in hourly headways from 7:00 a.m. to 7:00 p.m. on weekdays, from 9:00 a.m. to 5:00 p.m. on Saturdays and from 8:00 am to 4:00 pm on Sundays. Table I-1 shows the details of the BAT fixed route during the audit period.

**Table I-1  
BAT Fixed Route Service**

<b>Route Number</b>	<b>Description</b>	<b>Destinations</b>
<b>1</b>	<b>Barstow College</b>	<ul style="list-style-type: none"> <li>▪ City Hall</li> <li>▪ Vons</li> <li>▪ Wal-Mart</li> <li>▪ Barstow College</li> <li>▪ Veterans Home</li> </ul>
<b>2</b>	<b>Central Barstow</b>	<ul style="list-style-type: none"> <li>▪ City Hall</li> <li>▪ Barstow High School</li> <li>▪ Senior Center</li> <li>▪ Food-4-Less</li> </ul>

Route Number	Description	Destinations
		<ul style="list-style-type: none"> <li>▪ Stater Brothers</li> <li>▪ Rite Aid</li> <li>▪ Home Depot</li> </ul>
3	West Barstow/Grandview/Lenwood	<ul style="list-style-type: none"> <li>▪ City Hall</li> <li>▪ West Main</li> <li>▪ Jasper Park</li> <li>▪ Factory Merchants Outlet Mall</li> <li>▪ Tanger Mall</li> </ul>

Source: BAT

*B-V Link:* The B-V Link is operated by VVTA and operates on Mondays, Wednesdays and Thursdays with three trips in each direction between Barstow, Apple Valley and Victorville.

*Barstow to Fort Irwin:* In September 2008, BAT implemented a demonstration service providing transportation between the City of Barstow and Fort Irwin which continued through the audit period. VVTA initiated service to Fort Irwin on December 15, 2011 (outside of the audit period) which continues to the San Bernardino Valley. BAT service between Ft. Irwin and Barstow for shopping trips runs on Tuesdays, Thursdays and Saturdays, the days the VVTA service does not run.

### Dial-A-Ride

*City Dial-A-Ride:* Door-to-door demand responsive service for elderly and disabled passengers that meets the requirements of the American with Disabilities Act (ADA) for complementary paratransit. Persons with a disability may be required to provide verification, such as a Barstow Area Transit ADA card, if their condition is not readily visible. The service operates throughout the entire city plus adjacent unincorporated residential areas. Hours of operation are the same as the fixed route.

*County Dial-A-Ride:* General public demand responsive zonal service in the surrounding county area. The West County service area covers Hinkley. The East County area covers Daggett, Yermo and Newberry Springs. Most riders are elderly or with disabilities. Some are general public. The efficiency of the service has improved with the return to demand-response. The deviated routes were long and slow. A minimum of 24 hours is required for reservations, but same day requests are taken on a space available basis. Standing orders are accepted. Hours of operation are the same as the fixed route.

Barstow Area Transit services are not available on major holidays: New Year's Day, Martin Luther King Day, President's Day, Memorial Day, Fourth of July, Labor Day, Columbus Day, Veterans' Day, Thanksgiving Day, and Christmas Day.

*Big River Transit:* Demand responsive service operated by volunteers assisting elderly and disabled residents in the Big River area. The County of San Bernardino entered into an agreement with the Bonnie Baker Citizens Club to provide the service, including a volunteer to oversee the service and volunteer drivers. Local trips are provided as well as trips to medical facilities as far away as Loma Linda and to shopping located in Parker, Arizona. Fares are not charged but donations for fuel are requested. The City of Barstow receives TDA funds from the County as a pass-through to administer the service. Through an MOU with the County, Barstow monitors maintenance and tracks performance.

*Trona Transit:* Demand responsive service operated by the Searles Valley Community Service Council (SVCSC) through an agreement with San Bernardino County. The service provides local rides to elderly and disabled persons residing in the community of Trona, as well as trips to medical and shopping centers in Ridgecrest, Lancaster and Loma Linda. A part-time paid employee of SVCSC manages the transit program which uses volunteer drivers. The agreement between SVCSC and the County includes that no fares be charged, but that passengers are requested to reimburse for the cost of fuel. The County pays for insurance and maintenance of the vehicles. The City of Barstow administers the contract through an MOU with the County and monitors maintenance and tracks performance.

Fares

BAT fares are structured according to service type. County dial-a-ride is separated into three zones with zonal charges based on distance. The fare structure is shown in Table I-2.

**Table I-2  
BAT Fare Schedule**

Type of Fare	Type of Rider	City Fixed Route	County Dial-a-Ride
Cash	Regular	\$1.25	\$2.75
	Student	\$1.00	\$2.75
	Reduced (senior or ADA)	\$.65	\$1.25
	Under 5 years	Free	Free
	Transfer	Free	N/A
Day Pass	Regular	\$4.00	\$9.00
	Student	\$3.00	\$9.00
	Reduced (senior or ADA)	\$2.00	\$4.50
Monthly Pass	Regular	\$43.00	\$78.00
	Student	\$38.00	\$78.00
	Reduced (senior or ADA)	\$21.00	\$30.25

Source: BAT

There were 22 active vehicles in the fleet at the end of the audit period according to the FY2011 vehicle inventory report. They include three 33-passenger buses, two 30-passenger buses, two 28 passenger-buses and 15 smaller cutaways for between 15 and 22 passengers. The newer larger vehicles are CNG fueled. BAT vehicles are maintained by the contract operator, MV Transportation, at a leased facility in Barstow. About 17 vehicles are used in peak service.

**Table I-3  
BAT Fleet**

<b>Year</b>	<b>Make/Model</b>	<b>Quantity</b>	<b>Fuel Type</b>	<b>Seating Capacity (seats/wheelchair capacity)</b>
2007	Chevy Aero Elite	3	Gasoline	22/2
2008	Ford Allstar	4	Gasoline	17/2
2009	Ford Allstar	8	Gasoline	15/2
2009	Chevy Glaval	2	CNG	30/2
2011	Ford Glaval	2	CNG	28/2
2012	Goshen Coach	3	CNG	33/2
<b>Total</b>		<b>22</b>		

Source: City of Barstow

## Section II

### Operator Compliance Requirements

This section of the audit report contains the analysis of BAT's ability to comply with state requirements for continued receipt of TDA funds. The evaluation uses the guidebook, *Performance Audit Guidebook for Transit Operators and Regional Transportation Planning Agencies, September 2008 (third edition)*, which was developed by the Department of Transportation (Caltrans) to assess transit operators. The updated guidebook contains a checklist of eleven measures taken from relevant sections of the Public Utilities Code and the California Code of Regulations. Each of these requirements is discussed in the table below, including a description of the system's efforts to comply with the requirements. In addition, the findings from the compliance review are described in the text following the table.

TABLE II-1 Operator Compliance Requirements Matrix		
Operator Compliance Requirements	Reference	Compliance Efforts
The transit operator submitted annual reports to the RTPA based upon the Uniform System of Accounts and Records established by the State Controller. Report is due 90 days after end of fiscal year (Sept. 28) for paper filing, or 110 days (Oct. 18) if filed electronically (Internet).	Public Utilities Code, Section 99243	Completion/submittal dates (Internet filing): FY 2009: October 13, 2009 November 17, 2009 (revised) FY 2010: October 15, 2010 FY 2011: October 17, 2011  <b>Conclusion: Complied.</b>

<b>TABLE II-1 Operator Compliance Requirements Matrix, continued</b>		
<b>Operator Compliance Requirements</b>	<b>Reference</b>	<b>Compliance Efforts</b>
The operator has submitted annual fiscal and compliance audits to the RTPA and to the State Controller within 180 days following the end of the fiscal year (Dec. 27), or has received the appropriate 90 day extension by the RTPA allowed by law.	Public Utilities Code, Section 99245	<p>Completion/submittal dates:</p> <p>FY 2009: February 8, 2010                      FY 2010: March 7, 2011                      FY 2011: August 2, 2012</p> <p><b>Conclusion: Partial compliance. The FY 2009 and 2010 audits were submitted within the extension period. The FY 2011 audit was submitted after the extension.</b></p>
The CHP has, within the 13 months prior to each TDA claim submitted by an operator, certified the operator's compliance with Vehicle Code Section 1808.1 following a CHP inspection of the operator's terminal.	Public Utilities Code, Section 99251	<p>BAT participates in the CHP Driver Pull Notice Compliance Program in which the CHP has conducted inspections within the 13 months prior to each TDA claim submitted by the City. Copies of the terminal safety inspections, driver examination reports, and vehicle inspections were submitted to the auditor for review.</p> <p>The inspection dates applicable to this audit include:</p> <p>April 14, 2009                      March 30, 2010                      March 28, 2011</p> <p>All inspections received satisfactory ratings.</p> <p><b>Conclusion: Complied.</b></p>
The operator's claim for TDA funds is submitted in compliance with rules and regulations adopted by the RTPA for such claims.	Public Utilities Code, Section 99261	<p>As a condition of approval, BAT's annual claims for Local Transportation Funds and State Transit Assistance are submitted in compliance with rules and regulations adopted by SANBAG.</p> <p><b>Conclusion: Complied.</b></p>
If an operator serves urbanized and non-urbanized areas, it has maintained a ratio of fare revenues to operating costs at least equal to the ratio determined by the rules and regulations adopted by the RTPA.	Public Utilities Code, Sections 99270.1	Not applicable. BAT only serves a rural area.

<b>TABLE II-1</b>		
<b>Operator Compliance Requirements Matrix, continued</b>		
<b>Operator Compliance Requirements</b>	<b>Reference</b>	<b>Compliance Efforts</b>
<p>The operator's operating budget has not increased by more than 15% over the preceding year, nor is there a substantial increase or decrease in the scope of operations or capital budget provisions for major new fixed facilities unless the operator has reasonably supported and substantiated the change(s).</p>	<p>Public Utilities Code, Sections 99266</p>	<p>Percentage increase in BAT's operating budget:</p> <p>FY 2009: 13.8%</p> <p>FY 2010: 0.9%</p> <p>FY 2011: -17.6%</p> <p>Source: FYs 2009-2011 State Controller's reports, prior TDA Audit report, TransTrack.</p> <p><b>Conclusion: Complied. Due to reductions in funding, BAT reduced its service starting in FY2010.</b></p>
<p>The operator's definitions of performance measures are consistent with Public Utilities Code Section 99247, including (a) operating cost, (b) operating cost per passenger, (c) operating cost per vehicle service hour, (d) passengers per vehicle service hour, (e) passengers per vehicle service mile, (f) total passengers, (g) transit vehicle, (h) vehicle service hours, (i) vehicle service miles, and (j) vehicle service hours per employee.</p>	<p>Public Utilities Code, Section 99247</p>	<p>A review of internal operations reports and State Controller's Reports indicates some compliance issues. The number of full-time equivalents contained in the Controller's Reports is significantly different from computations based on employee hours, even adjusting for the different definitions of a year and understanding that the contractor's figures do not include City staff time. This would impact the measure of vehicle service hours per employee.</p> <p><b>Conclusion: Partial Compliance.</b></p>

**TABLE II-1  
Operator Compliance Requirements Matrix, continued**

<b>Operator Compliance Requirements</b>	<b>Reference</b>	<b>Compliance Efforts</b>
<p>If the operator serves an urbanized area, it has maintained a ratio of fare revenue to operating cost at least equal to one-fifth (20 percent), unless it is in a county with a population of less than 500,000, in which case it must maintain a ratio of fare revenues to operating cost at least three-twentieths (15 percent), if so determined by the RTPE.</p>	<p>Public Utilities Code, Sections 99268.2, 99268.3, &amp; 99268.1</p>	<p>Not applicable. BAT only serves a rural area.</p>
<p>If the operator serves a rural area, it has maintained a ratio of fare revenues to operating costs at least equal to one-tenth (10 percent)</p>	<p>Public Utilities Code, Section 99268.2, 99268.4 and 99268.5</p>	<p>Transit services are funded by TDA Article 8(c). On July 1, 1993, the SANBAG Board adopted performance criteria for the BAT service that sets the farebox recovery ratio at 10 percent. The system's fare ratios using audited data are as follows (excludes Big River and Trona Transit systems):</p> <p>FY 2009: 10.2%  FY 2010: 8.8%  FY 2011: 6.7%</p> <p><b>Conclusion: Not in compliance for FYs 2010 and 2011.</b></p>
<p>The current cost of the operator's retirement system is fully funded with respect to the officers and employees of its public transportation system, or the operator is implementing a plan approved by the RTPA which will fully fund the retirement system within 40 years.</p>	<p>Public Utilities Code, Section 99271</p>	<p>The City of Barstow's retirement system is fully funded. The annual TDA claims form requires a sign-off from the transit claimant to comply with standard assurances. The agency's retirement system is one such standard assurance.</p> <p><b>Conclusion: Complied.</b></p>

<b>TABLE II-1 Operator Compliance Requirements Matrix, continued</b>		
<b>Operator Compliance Requirements</b>	<b>Reference</b>	<b>Compliance Efforts</b>
<p>If the operator receives state transit assistance funds, the operator makes full use of funds available to it under the Urban Mass Transportation Act of 1964 before TDA claims are granted.</p>	<p>California Code of Regulations, Section 6754(a)(3)</p>	<p>BAT utilizes federal funds that are available to the agency, as reported in the annual State Controller's Reports.</p> <p>FY 2009: Operations (\$564,345) Capital (\$295,423)</p> <p>FY 2010: Operations (\$349,624) Capital (\$338,804)</p> <p>FY 2011: Operations (\$216,433) Capital (\$0)</p> <p><b>Conclusion: Complied.</b></p>

**Findings and Observations from Operator Compliance Requirements Matrix**

1. BAT has complied with most TDA requirements. The compliance requirement for submittal of the annual fiscal audits was partially implemented. Responsibility for submittal of these financial documents lies with the SANBAG auditor, which operates independently of BAT.
2. BAT met the 10 percent farebox recovery standard in FY 2009 but failed to meet the farebox recovery in FYs 2010 and 2011. The trend in farebox recovery during the audit period is declining which has funding implications for repeated failures to meet the standard.
3. BAT received "satisfactory" rating for each CHP terminal inspection during the audit period.
4. FTEs reported to the State Controller were not supported by records of employee hours but are consistent with the method of reporting in prior Controller reports. The reporting may be based on headcount rather than FTEs.

**Table II-2  
Data Consistency**

TDA Statistic	Source	Audit Review Period		
		FY09	FY10	FY11
Total Operating Expense (less depreciation, leases and rentals)	FTA National Transit Database	\$2,298,880	\$2,811,737	\$2,470,753
	State Controller Report	\$2,887,909	\$2,923,251	\$2,539,080
	Audited Financial Statements	\$2,887,910	\$2,923,484	\$2,539,080
	TransTrack	\$2,693,238	\$2,716,485	\$2,239,211
Farebox Revenue	FTA National Transit Database	NA	\$248,077	\$153,932
	State Controller Report	\$302,222	\$269,884	\$185,855
	Audited Financial Statements	\$302,222	\$261,450	\$185,855
	TransTrack	\$288,678	\$247,241	\$153,978
Vehicle Service Hours	FTA National Transit Database	50,637	57,551	35,004
	NTD S-10 from TransTrack	57,921	58,050	36,597
	State Controller Report	53,728	57,547	39,984
	Audited Financial Statements	NA	NA	NA
	TransTrack	53,729	52,615	31,846
Passengers	FTA National Transit Database	239,362	262,423	214,532
	State Controller Report	277,855	262,486	214,532
	Audited Financial Statements	NA	NA	NA
	NTD S-10 from TransTrack	278,705	262,577	201,202
	TransTrack	277,855	261,226	199,876

Data consistency between the reports that BAT prepares for external agencies is an ongoing challenge. Table II-2 compares statistics reported by BAT in its National Transit Database (NTD) reports, State Controller Reports, audited financial statements from fiscal audits, and Trans Track reports. There are both consistencies and differences among the data, with some reports matching but not with others.

Modal data are included in BAT's NTD and State Controller's reports as well as Trans Track, although modal data consistency among these reports has also presented challenges. Given these differences, only broad trends in performance can be concluded during the audit period as the trends from each data source tend to follow one another. These broad trends are made without assurance as to the accuracy of the performance data.

BAT should reconsider its data collection, review and reporting practices and develop a written “desktop” guide using a flow chart outlining the data reporting process and assigning personnel responsible for each step in the process. Personnel may include city staff from within transit and the finance department, and the operations contractor. Specific staff can be assigned the responsibility of collecting, entering, and overseeing the accuracy of the data and reports.

Item	Findings	Recommendations	Response
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## Section III

### Prior Triennial Performance Audit Recommendations

BAT's efforts to implement the recommendations made in the prior triennial audit are examined in this section of the report. For this purpose, each prior recommendation for the agency is described, followed by a discussion of the agency's efforts to implement the recommendation. Conclusions concerning the extent to which the recommendations have been adopted by the agency are then presented.

#### Prior Recommendation 1

Verify TransTrack data regularly.

Actions taken by the City: The Transportation Manager reviews TransTrack input by the contractor at least once a month and uses invoices as back up documentation. The Transportation Manager indicated that the contractor's reports are acceptable and consistent. There are not a lot of anomalies in the data. Early in the audit period there were some problems identified but they were addressed.

In spite of improved reporting, there are still data consistency issues between the reports that BAT prepares internally that feed into external agency reports. While the differences are not generally wide-ranging, the year end operations data for components such as ridership, service hours and miles, and employees should be fairly the same for internal and external reporting. Given these inconsistencies, it is difficult to ensure accuracy in drawing conclusions about trends particularly with the modal statistics. For example, the full-time equivalents reported to the State Controller were not supported by the employee hours shown in TransTrack. In light of these findings, there are still some consistency issues among the data for the various reports.

Conclusion: This recommendation has been partially implemented, and is forwarded for full compliance.

#### Prior Recommendation 2

Consider implementing the liquidated damages provision in operations contract.

Actions taken by the City: Liquidated damages are allowed by the contract but have not been used. The Transportation Manager has not had the need to consider invoking the liquidated damage provisions in the contract. The current operations contract was effective July 1, 2008 and runs through June 30, 2013. However, it is unlikely to be rebid before a decision is made on consolidation.

Conclusion: This recommendation has been fully implemented.

#### Prior Recommendation 3

Conduct independent on-time performance checks.

Actions taken by the City: The Transportation Manager conducts his own, independent checks of on-time performance with spot checks and monitoring complaints. It is easier to keep the buses on time now that the five routes have been restructured into three, better-planned routes. The Transportation Manager also reviews video from the bus cameras from time to time, especially to monitor the safety of operations during loading and unloading passengers.

Conclusion: This recommendation has been fully implemented.

Prior Recommendation 4

Present regular updates to the City Council about BAT.

Actions taken by the City: The Transportation Manager prepared quarterly reports for the City Council during the audit period. Subsequent to the audit period the Council chose to receive reports less frequently. The Council still receives reports as part of the budget process when its approval is needed and whenever it requests a report. The Council will be given updates during the consolidation study.

Conclusion: This recommendation has been fully implemented.

Prior Recommendation 5

Improve visual depiction of bus routes and landmarks on bus map and on web site.

Actions taken by the City: The City engaged a graphic designer to assist the Transportation Manager to prepare a bus map that included information on the new BAT fares and policies. The map is a vast improvement over the prior, plain bus schedules. The map includes streets and landmarks.

Conclusion: This recommendation has been fully implemented.

Prior Recommendation 6

Place revised ADA certification application on-line

Actions taken by the City: The application has been placed on the City's web site under the section describing the Transportation Department and BAT. A link to a PDF formatted file of the 9-page ADA application is available on the left side of the Department's site, along with other links to BAT services and rules. The file can be printed out and mailed to the ADA Coordinator at the contract operator's office (MV Transportation).

Conclusion: This recommendation has been fully implemented.

## Section IV

### TDA Performance Indicators

This section reviews BAT's performance in providing transit service to the community in an efficient and effective manner. TDA requires that at least five specific performance indicators be reported, which are contained in the following tables. Farebox recovery ratio is not one of the five specific indicators but is a requirement for continued TDA funding. Therefore, farebox calculation is also included. Two additional performance indicators, operating cost per mile and average fare per passenger, are included as well. Findings from the analysis are contained in the section following the tables.

Tables IV-1 through IV-3 provide the performance indicators for Barstow Area Transit, including systemwide, fixed route and dial-a-ride. Tables IV-4 and IV-5 provide performance data during the audit period for Big River Transit and Trona Transit. Charts are also provided to depict the trends in the indicators.

**Table IV-1  
BAT TDA Performance Indicators  
Systemwide**

Performance Data and Indicators	Audit Period				% Change FY 2008- 2011
	FY 2008	FY 2009	FY 2010	FY 2011	
Operating Cost	\$2,276,273	\$2,693,238	\$2,716,485	\$2,239,211	-1.6%
Total Passengers	229,338	239,362	262,423	214,532	-6.5%
Vehicle Service Hours	51,664	51,829	57,551	35,004	-32.2%
Vehicle Service Miles	859,548	1,022,480	1,035,004	757,051	-11.9%
Employee FTE's	40	42	42	33	-17.5%
Passenger Fares	\$236,157	\$306,180	\$247,241	\$153,978	-34.8%
Operating Cost per Passenger	\$9.93	\$11.25	\$10.35	\$10.44	5.2%
Operating Cost per Vehicle Service Hour	\$44.06	\$51.96	\$47.20	\$63.97	45.2%
Operating Cost per Vehicle Service Mile	\$2.65	\$2.63	\$2.62	\$2.96	11.7%
Passengers per Vehicle Service Hour	4.4	4.6	4.6	6.1	38.1%
Passengers per Vehicle Service Mile	0.27	0.23	0.25	0.28	6.2%
Vehicle Service Hours per Employee	1,291.6	1,234.0	1,370.3	1,060.7	-17.9%
Average Fare per Passenger	\$1.03	\$1.28	\$0.94	\$0.72	-30.3%
Fare Recovery Ratio	10.4%	11.4%	9.1%	6.9%	-33.7%
Consumer Price Index (CPI-Los Angeles)	3.5%	1.1%	0.5%	1.8%	-49.8%

Source: Vehicle service hours, vehicle service miles and passengers are taken from the NTD reports. For FY2009, 2010 and 2011 the operating expense, fare revenues and FTEs are from Trans Track. The FTEs are computed from employee hours and are about half of what was reported to the State Controller.

**Table IV-2  
BAT TDA Performance Indicators  
Fixed Route**

Performance Data and Indicators	Audit Period				% Change FY 2008- 2011
	FY 2008	FY 2009	FY 2010	FY 2011	
Operating Cost	\$908,091	961,478	\$1,325,727	\$1,497,099	<b>64.9%</b>
Total Passengers	126,136	144,988	170,507	185,751	<b>47.3%</b>
Vehicle Service Hours	17,989	17,989	24,659	23,334	<b>29.7%</b>
Vehicle Service Miles	316,716	306,496	433,433	462,382	<b>46.0%</b>
Employee FTE's	20	26	21	12	<b>-40.0%</b>
Passenger Fares	\$137,100	\$130,788	\$141,681	\$134,825	<b>-1.7%</b>
Operating Cost per Passenger	\$7.20	\$6.63	\$7.78	\$8.06	<b>12.0%</b>
Operating Cost per Vehicle Service Hour	\$50.48	\$53.45	\$53.76	\$64.16	<b>27.1%</b>
Operating Cost per Vehicle Service Mile	\$2.87	\$3.14	\$3.06	\$3.24	<b>12.9%</b>
Passengers per Vehicle Service Hour	7.0	8.1	6.9	8.0	<b>13.5%</b>
Passengers per Vehicle Service Mile	0.40	0.47	0.39	0.40	<b>0.9%</b>
Vehicle Service Hours per Employee	899.5	691.9	1,174.2	1,944.5	<b>116.2%</b>
Average Fare per Passenger	\$1.09	\$0.90	\$0.83	\$0.73	<b>-33.2%</b>
Fare Recovery Ratio	15.1%	13.6%	10.7%	9.0%	<b>-40.3%</b>
Consumer Price Index (CPI-Los Angeles)	3.50%	1.1%	0.5%	1.8%	<b>-49.8%</b>

Source: TransTrack, NTD and State Controller Operator's Reports

**Table IV-3  
BAT TDA Performance Indicators  
Dial-a-Ride**

Performance Data and Indicators	Audit Period				% Change FY 2008- 2011
	FY 2008	FY 2009	FY 2010	FY 2011	
Operating Cost	\$1,368,182	\$1,731,760	\$1,390,758	\$742,112	-45.8%
Total Passengers	103,202	94,374	91,916	28,781	-72.1%
Vehicle Service Hours	33,675	33,840	32,892	11,670	-65.3%
Vehicle Service Miles	542,832	715,984	601,571	294,669	-45.7%
Employee FTE's	20	16	21	21	5.0%
Passenger Fares	\$99,057	\$175,392	\$105,560	\$19,153	-80.7%
Operating Cost per Passenger	\$13.26	\$18.35	\$15.13	\$25.78	94.5%
Operating Cost per Vehicle Service Hour	\$40.63	\$51.17	\$42.28	\$63.59	56.5%
Operating Cost per Vehicle Service Mile	\$2.52	\$2.42	\$2.31	\$2.52	-0.1%
Passengers per Vehicle Service Hour	3.1	2.8	2.8	2.5	-19.5%
Passengers per Vehicle Service Mile	0.19	0.13	0.15	0.10	-48.6%
Vehicle Service Hours per Employee	1,683.8	2,115.0	1,566.3	555.7	-67.0%
Average Fare per Passenger	\$0.96	\$1.86	\$1.15	\$0.67	-30.7%
Fare Recovery Ratio	7.2%	10.1%	7.6%	2.6%	-64.4%
Consumer Price Index (CPI-Los Angeles)	3.50%	1.1%	0.5%	1.8%	-49.8%

Source: TransTrack, NTD and State Controller Operator's Reports

**Table IV-4  
TDA Performance Indicators  
Big River Transit**

Performance Data and Indicators	Audit Period				% Change FY 2008-2011
	FY 2008	FY 2009	FY 2010	FY 2011	
Operating Cost	\$39,901	\$31,190	\$42,796	\$51,841	29.9%
Total Passengers	457	299	708	683	49.5%
Vehicle Service Hours	2,079	1,790	2,542	2,364	13.7%
Vehicle Service Miles	67,954	57,245	66,764	90,851	33.7%
Passenger Fares	\$8,428	\$7,280	\$8,194	\$11,805	40.1%
Operating Cost per Passenger	\$87.31	\$104.31	\$60.45	\$75.90	-13.1%
Operating Cost per Vehicle Service Hour	\$19.19	\$17.42	\$16.84	\$21.93	14.3%
Operating Cost per Vehicle Service Mile	\$0.59	\$0.54	\$0.64	\$0.57	-2.8%
Passengers per Vehicle Service Hour	0.2	0.2	0.3	0.3	31.4%
Passengers per Vehicle Service Mile	0.01	0.01	0.01	0.01	11.8%
Average Fare per Passenger	\$18.44	\$24.35	\$11.57	\$17.28	-6.3%
Fare Recovery Ratio	21.1%	23.3%	19.1%	22.8%	7.8%
Consumer Price Index (CPI-Los Angeles)	3.50%	1.1%	0.5%	1.8%	-49.8%

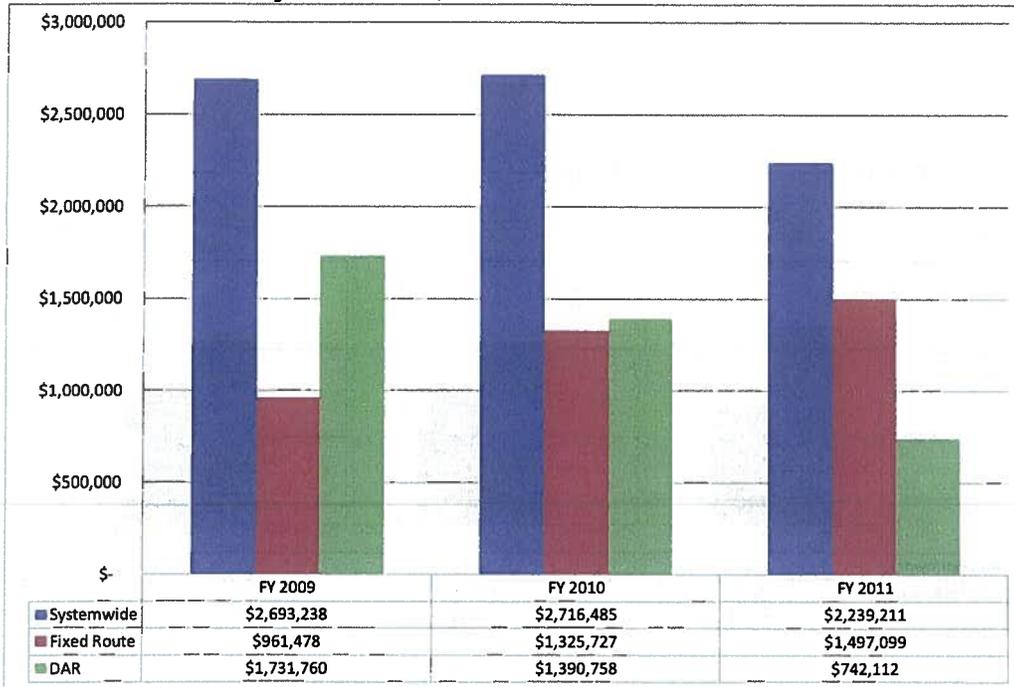
Source: Trans Track Transit Agency Service Forms (S-10) for passengers, hours and miles  
Trans Track Monthly Statistical Information System for operating cost and passenger revenue

**Table IV-5  
TDA Performance Indicators  
Trona Transit**

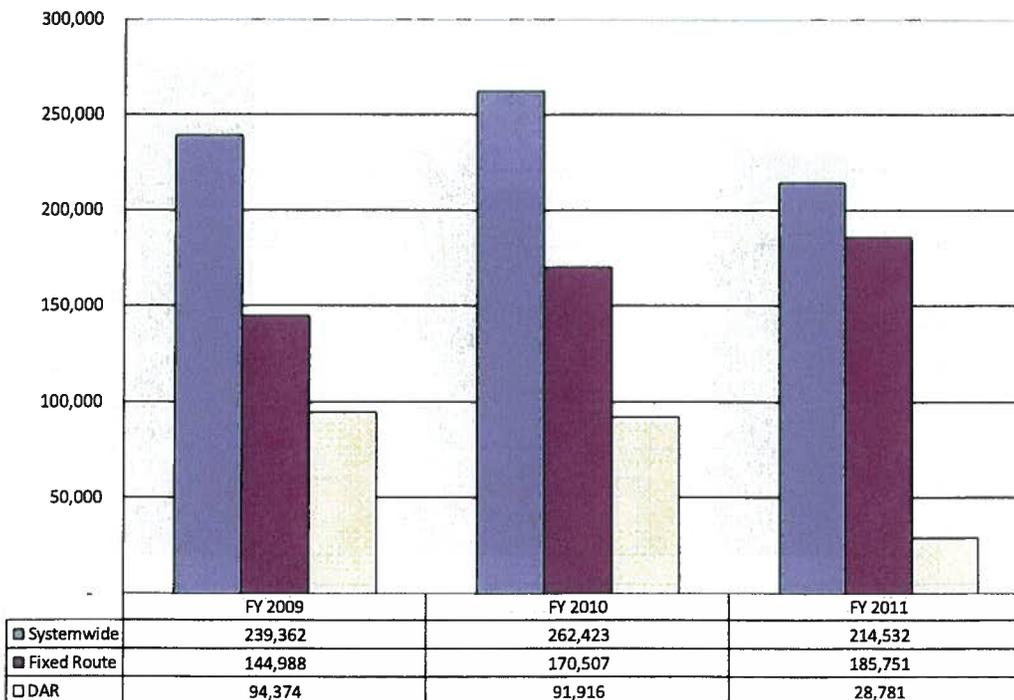
Performance Data and Indicators	Audit Period				% Change FY 2008-2011
	FY 2008	FY 2009	FY 2010	FY 2011	
Operating Cost	\$23,937	\$26,173	\$38,843	\$38,832	<b>62.2%</b>
Total Passengers	646	551	643	643	<b>-0.5%</b>
Vehicle Service Hours	1,984	2,402	2,893	2,387	<b>20.3%</b>
Vehicle Service Miles	56,408	13,894	73,233	63,138	<b>11.9%</b>
Passenger Fares	\$8,611	\$10,222	\$11,599	\$11,280	<b>31.0%</b>
Operating Cost per Passenger	\$37.05	\$47.50	\$60.41	\$60.39	<b>63.0%</b>
Operating Cost per Vehicle Service Hour	\$12.07	\$10.90	\$13.43	\$16.27	<b>34.8%</b>
Operating Cost per Vehicle Service Mile	\$0.42	\$1.88	\$0.53	\$0.62	<b>44.9%</b>
Passengers per Vehicle Service Hour	0.3	0.2	0.2	0.3	<b>-17.3%</b>
Passengers per Vehicle Service Mile	0.01	0.04	0.01	0.01	<b>-11.1%</b>
Average Fare per Passenger	\$13.33	\$18.55	\$18.04	\$17.54	<b>31.6%</b>
Fare Recovery Ratio	36.0%	39.1%	29.9%	29.0%	<b>-19.3%</b>
Consumer Price Index (CPI-Los Angeles)	3.50%	1.1%	0.5%	1.8%	<b>-49.8%</b>

Source: Trans Track Transit Agency Service Forms (S-10) for passengers, hours and miles. Trans Track Monthly Statistical Information System for operating cost and passenger revenue.

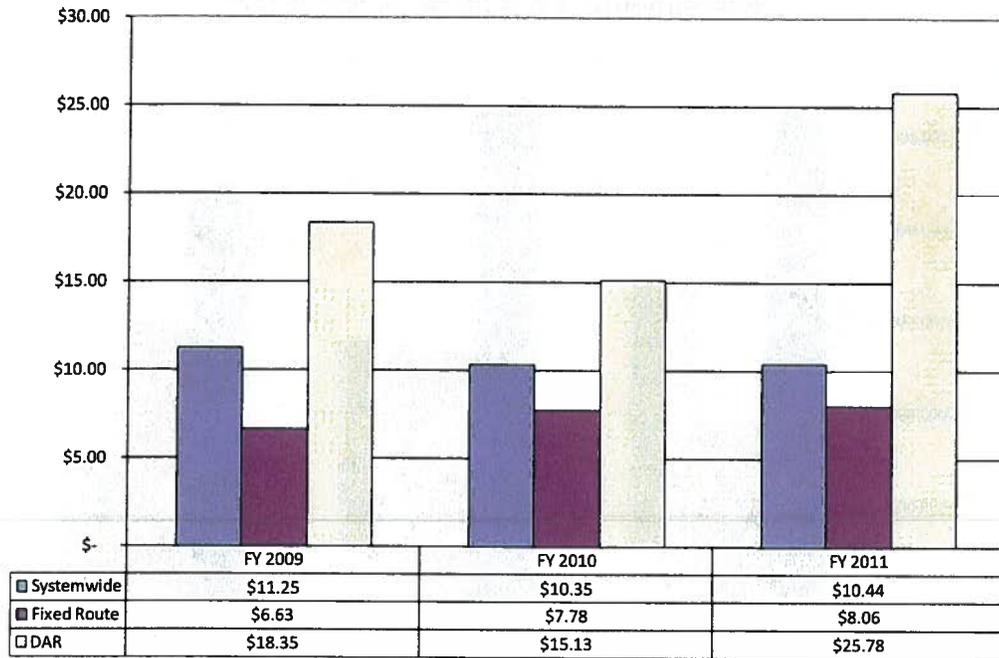
**Graph IV-1  
Operating Costs  
Systemwide, Fixed Route and DAR**



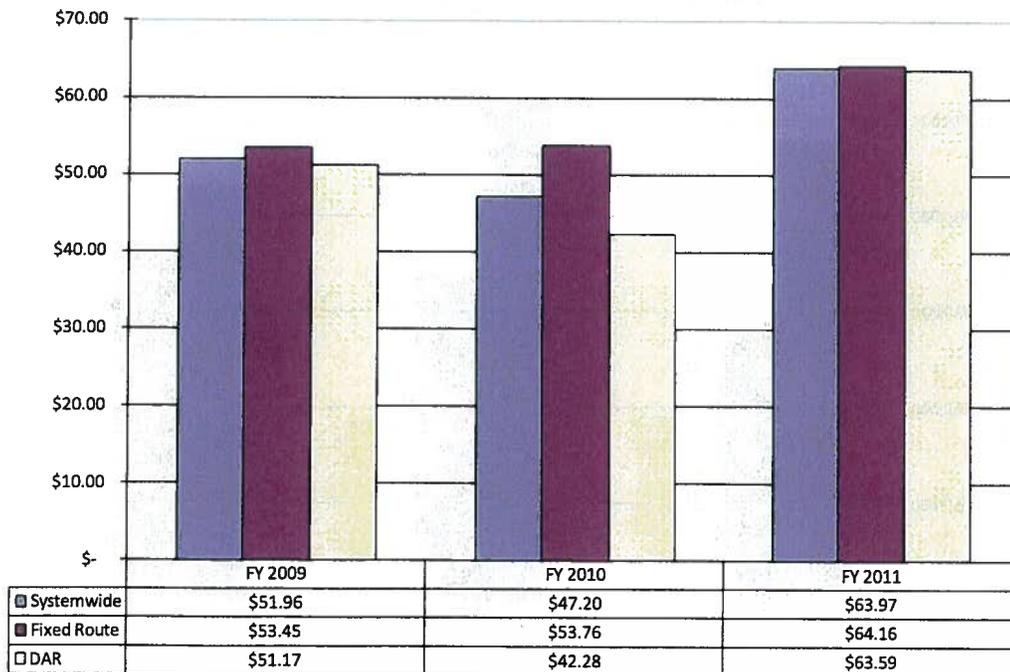
**Graph IV-2  
Ridership  
Systemwide, Fixed Route and DAR**



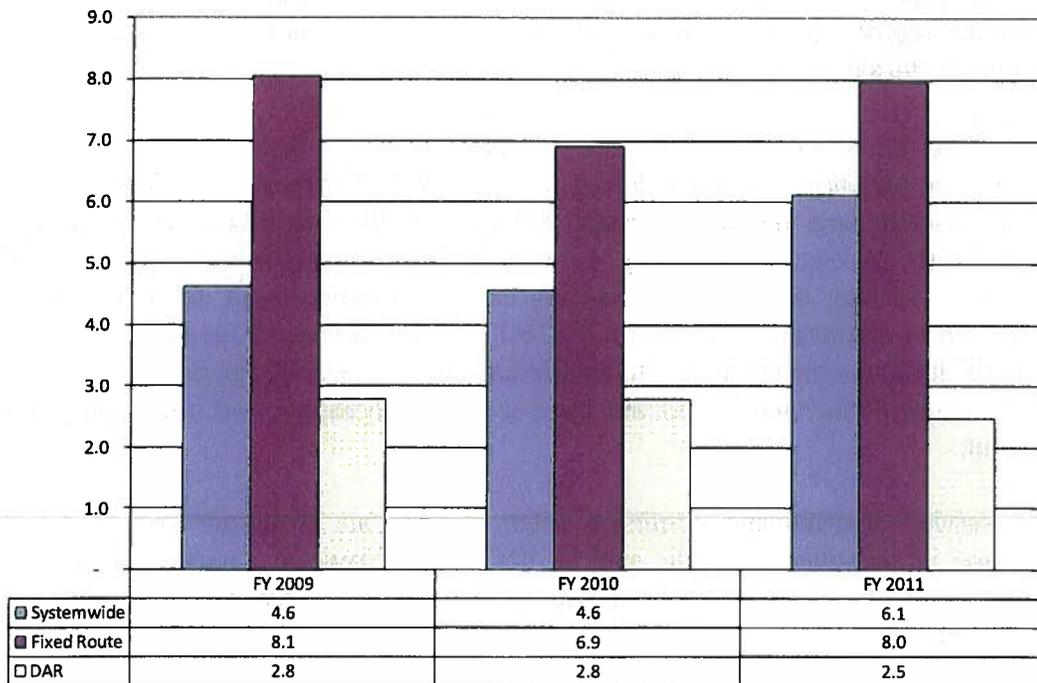
**Graph IV-3  
Operating Cost per Passenger  
Systemwide, Fixed Route and DAR**



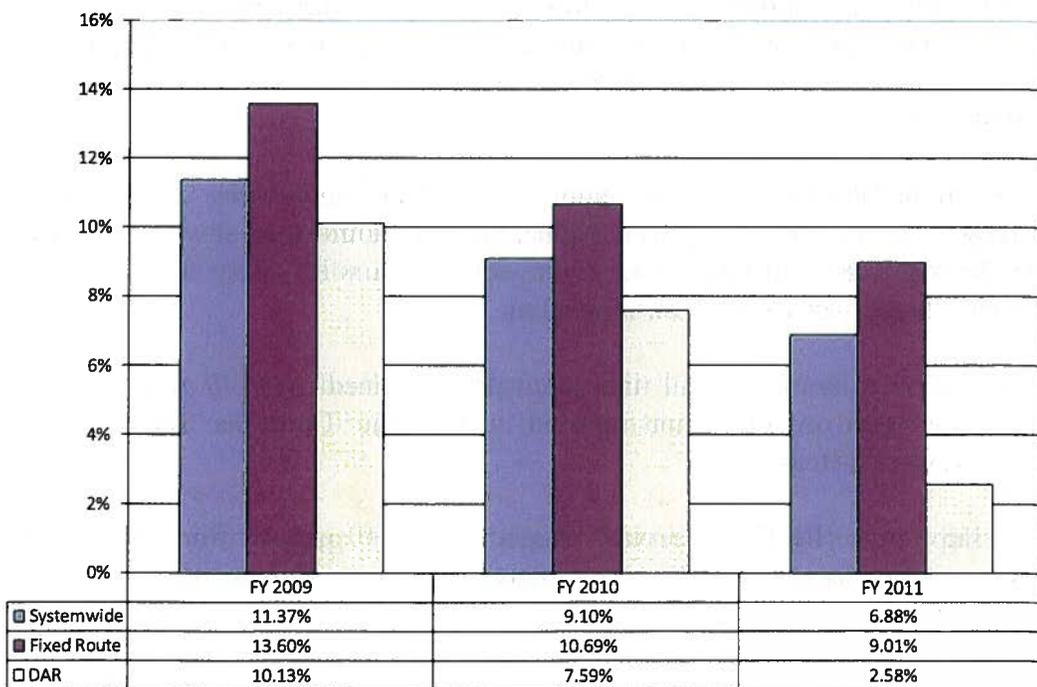
**Graph IV-4  
Operating Cost per Vehicle Service Hour  
Systemwide, Fixed Route and DAR**



**Graph IV-5  
Passengers per Vehicle Service Hour  
BAT System, Fixed Route, DAR and Volunteer Services**



**Graph IV-6  
Fare Recovery Ratio  
BAT System, Fixed Route, DAR and Volunteer Services**



## Findings from Verification of TDA Performance Indicators

The analysis of trends is conducted using data that is not consistent among various BAT financial and performance reports. However, despite the discrepancies, broad trends in system performance can be concluded during the audit period

1. Operating costs for Barstow Area Transit decreased between FY2008 and FY2011. During the middle of the audit period, commencing on January 1, 2010, BAT restructured its fixed-route and demand-response services resulting in increased operating expenses. Prior to the service restructuring, costs were already increasing at a fairly rapid pace in FY2009. A later reduction in funding caused a decrease in services and subsequent reduction in operating expenses in FY2011 by 17.6 percent from the prior fiscal year. In spite of these cost increases in the middle of the audit period, operating expenses at the end of the audit period were about the same as at the beginning, and just slightly down by 1.6 percent.
2. The service restructuring confused riders at first but eventually triggered a significant increase in passengers at the end of FY 2010. However, because of the subsequent reduction in service, the overall change in passengers over the audit period was a decrease of 6.5 percent.
3. Restructuring shifted resources to fixed-route services, as services in the unincorporated areas were changed from demand response to fixed route for about a year, only to revert back to demand response due to confusion among residents and loss of ridership. Operating expenses for fixed route increased 65 percent, while demand response operating expenses fell 46 percent. Similarly, fixed route passengers increased 47 percent and demand response passengers fell 72 percent during the audit period. There was an especially large drop in demand response passengers during FY2011; at the same fixed route passengers rose that year.
4. Restructuring increased service hours but funding reductions caused an even larger decrease. By the end of FY2011, vehicle service hours were down 32 percent compared with the base year statistics. Fixed route service hours fell nearly 30 percent while demand response hours were down over 65 percent.
5. Vehicle service hours per full time equivalent declined over 17 percent. However, this statistic is based on headcount reported in the State Controller Report instead of FTEs which skews this trend.
6. Ridership on the Big River service jumped almost 50 percent from 457 passenger to 683 passengers per year. Operations cost increased almost 30 percent, but cost per rider was down 13 percent.

7. Trona Transit ridership was flat during the audit period. However, operating costs and service hours rose significantly by 62 percent and 20 percent, respectively. This led to large increases in operating cost per passenger and cost per hour.
8. Operating cost per passenger increased 5 percent systemwide, while cost per vehicle service hour rose 45 percent. During the same period passengers per vehicle service hour rose 38 percent. There were significant differences by mode as operating cost per passenger on fixed route rose by 12 percent, while on the demand response service it increased over 94 percent. Fixed route cost per vehicle service hour rose 27 percent, while demand response service saw a 57 percent increase. Passengers per hour rose about 13 percent on the fixed route services but fell almost 20 percent on demand response services.
9. The trend in the fare recovery ratio shows a general decline during the audit period. The farebox ratio for BAT service (excluding Big River and Trona Transit systems) decreased from 10.4 percent in FY 2008 to 6.9 percent in FY 2011 with big drops in both FY2010 and FY2011. Since FY2005 the farebox ratio has declined from about 15 percent to under 7 percent. The TDA minimum ratio of 10 percent adopted by the SANBAG Board in 1994 was not met in two of the three audit years, placing the service out of compliance with a key TDA measure.
10. Big River Transit and Trona Transit data is submitted to city transit staff in raw form for processing as neither agency has the ability to process the information. The farebox recovery for these two transit services has been declining during the audit period, but they are still well above the TDA standard of 10 percent.

## Section V

### Review of Operator Functions

This section provides an in-depth review of various functions within BAT. The review highlights accomplishments, issues and/or challenges that were determined during the audit period. The following functions were reviewed with the City:

- Operations
- Maintenance
- Planning
- Marketing
- General Administration and Management

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#### Operations

A description of the service prior to the completion of the 2010 Comprehensive Operations Analysis (COA) is provided to provide context to the activities and changes at BAT that occurred over the past three years.

The BAT service hours were quite long, running from 6 am to 11:30 pm from a combination of fixed route and All-Ride demand response services. This contributed to elevated operating costs, and some routes were not productive in the evening. The overall system was confusing with the demand-responsive service operating between 6 am and 7 am, when the fixed-routes started, and then in the evenings, from 7 pm to 11:30 pm, when fixed route ended.

According to staff, All Ride service had become like a taxi service, and some riders would wait until after 7 pm to travel because they preferred the demand-response to the fixed-route. This evening service was hard to schedule because many riders waited to request rides until just before the trip started. Before the change, All Ride (the evening demand response service) was about 60 percent single ride trips. People knew they were likely to get direct service so many seniors waited until All Ride service hours started to request rides. All Ride carried about half its riders (about 500 trips) between 7 pm and 11 pm.

Fares were also complicated, with many different types dating from the last fare increase in 2002. Transit staff thought many policies and procedures were out of date. Plus, the zones for the County general public dial-a-ride were very large and difficult to serve. System amenities had deteriorated, and BAT lacked capital for vehicle replacement and bus shelters. There was no system map, and the schedule were very difficult to understand. As a result, there were a lot of complaints.

The City engaged a consulting firm and conducted a Comprehensive Operations Analysis (COA) in 2007 with completion in May 2009. The COA recommendations were implemented on January 1, 2010. The BAT system underwent substantial change during the audit period as a result of implementing the COA recommendations. The system converted from about 70 percent demand response and 30 percent fixed route to about 70 percent fixed route and 30 percent demand response.

Changes included a new, simplified fare structure with a fare increase. The number of fixed routes was reduced from five to three, but almost all points were still served. Fixed-route hours were reduced to 7 am to 9 pm on weekdays. Sunday service was added. The morning All Ride demand-responsive service was eliminated along with extended evening All Ride. The ADA service continued but there were few trip requests after 7 pm. A system map was also introduced.

The County moved from a general public dial-a-ride to deviated fixed routes. However, those routes were long and slow, about three hours round trip due to the large area served. Subsequently, riders complained about the change. Riders within the City of Barstow responded well to the initial changes, but the County riders were unhappy due to the change from demand response to fixed route service with flag down stops.

Policies and procedures were updated so that BAT no longer served locations on unmaintained roads. Also, BAT limited the number of packages that could be brought on the vehicle.

Shortly after restructuring its service, Barstow was notified of upcoming funding cutbacks by SANBAG. A subsequent funding reduction required further changes by July 2010. As a result, many did not understand the new changes and thought their service was being discontinued. Because of budget cuts announced soon after the initial service change, a public hearing was held and service hours were reduced. Fixed-route hours were cut to 7 am to 7 pm. The County services reverted back to demand-response by 2011 because of excessive complaints and operating issues.

In spite of these service adjustments, the fixed route system has been gaining new riders. More reliability in service has contributed to this growth. Also, changes in the fleet design have made the fixed route more visible and distinguishing from demand response since all the vehicles looked the same in the past. Also, as a result of the two set of changes, on-time performance of fixed-route improved and passenger amenities and quality of service improved. Information about transit services was easier to get with the new map and riders' guide.

After the January 2010 changes, the converted County fixed routes carried about 1 passenger per hour because of the circuitous, deviated route. When the service changed back to demand response in 2011, the revenue service hours were cut in half while the service carried about the same number of passengers. Productivity is now closer to 3 passengers per hour.

BAT made some capital improvements during the audit period. BAT replaced vehicles with larger buses that have longer range capability and better air conditioning systems. Additional vehicle replacements are needed but are on hold until the Consolidation Study is completed in early 2013. Many buses in the fleet could surpass their useful lives if replacements are delayed very long.

### Contract BAT Operations

BAT's services are operated by MV Transportation. The current contract was effective July 1, 2008 and runs through June 30, 2013. MV operates out of a facility in Barstow, where it stores and maintains the vehicles. The City owns all the vehicles and pays for the fuel.

The contractor pulls the vaults from the vehicle. The afternoon Operations Supervisor pulls the demand response vaults, and the morning Operations Supervisor pulls the vaults from the fixed route buses before they leave the yard. The vaults for the two services are locked in different places. The money is counted under video surveillance by one counter and one watcher. The manager takes the money to the bank.

### Contract Operator Staffing

The contractor currently employs the following staff:

- General Manager
- 24 total drivers
- 3 maintenance staff (two mechanics a utility worker)
- 3 dispatchers
- 2 Operations Supervisors
- 1 ADA certifier/administrative assistance

Drivers are part of Teamsters Local 166. The mechanics are not unionized. There is no extraboard, but there is one cover driver. There is not much overtime as it is used only for special events. Missed trips are rare.

Drivers receive training that includes 24.5 hours in classroom, 32.5 hours behind the wheel, 34 hours of observation and 24 hours of cadetting (driving with trainer). Discipline is handled locally with a 4-step grievance process. They have not had any arbitrations.

BAT can use part-time drivers but the contractor prefers to use all full-time drivers. The contractor believes they get better drivers with full-time assignments and benefits. Absenteeism is not a problem. The contractor attributes this to economic conditions and attractive compensation. There is one split shift, but most assignments are straight shifts.

There are enough drivers in the pool to fill each assignment. The contractor does not recruit actively, and does not advertise. Still, they receive about 20 applications per week and are getting qualified applicants. There is a three-step interview process for new applicants. Turnover is relatively low at about 4 people per year. While on probation, new drivers are observed and evaluated at 30 days, 45 days, 60 days and 90 days. After that, drivers are evaluated every six months.

### ADA Certification

In July 2008, City transit management implemented a new ADA application and recertification process to improve enforcement with rider eligibility. The Transportation Manager received assistance from SANBAG transit staff in the development of the form. The new application form provides more thorough questions about mobility impairment and a new section that requires completion by the applicant's health care professional. The new 9 page form and process established clear timelines and responsibilities to become certified.

The transit operations contractor, MV Transportation, is responsible for responding to requests for an application, processing the approved applications in the database, and issuing the identification card. The issuance of a card takes about two weeks. As the application itself requires the applicant to receive a doctor's signed approval for ADA certification, neither the City nor MV Transportation makes the decision regarding certification.

There is a three-year eligibility period before recertification is required. Transit management indicated that the number of recertifications has increased recently due to the expiration of original eligibility which did not require the more stringent certification. Prior certification was good for up to ten years but is now limited to three years. Meetings were held with senior center management to discuss the changes and address concerns. Through this more stringent certification process, the ADA certified population has decreased from about 300 riders to about 100. This reduced number of certifications has impacted the ridership on the demand response service which might not be an adverse trend given the rising cost per passenger.

#### Dial-a-Ride

The Dial-a-Ride service is based on trip requests being made the day prior to the travel day. Same day service is offered on a space available basis. The dispatcher sorts the trip requests by time and assigns passengers to drivers three at a time.

When there are too many requests for a particular time, the dispatcher taking the reservation will negotiate with the passenger within a two-hour window. The demand response services are open to seniors as well as those certified as ADA-eligible. Most of the riders are seniors given the more stringent ADA certification process. Senior passengers can have their trips shifted in order to avoid trip denials for ADA passengers, but this rarely happens. On the heaviest travel days the service carries 100 to 110 riders, with the majority of days seeing lighter usage.

#### Operations Standards and Performance

The prior and current contract agreement with MV contains service standards, shown in Table V-1. These represent BAT's minimum services standards based on the system's previous performance history and represent the reasonable expectation of the City and BAT riders. The City Transportation Manager indicated holding regular meetings with the contract Transit Manager to discuss the operator's performance. MV also performs self-assessments using the standards. The Transportation Manager has not had the need to consider invoking the liquidated damage provisions in the contract.

As shown in the previous section of this report, fixed route passengers per hour increased from 7.0 in FY 2008 to 8.0 in FY 2011, although the indicator slipped to 6.9 in FY2010. This indicates that fixed route performance both met and fell below the standard. DAR passengers per hour for the County DAR (the City DAR was discontinued during the audit period) fell below standard during the audit period with a downward trend.

**Table V-1  
BAT Service Standards**

		<u>MINIMUM STANDARD</u>
<b><u>Demand Response Service</u></b>		
A.	On-Time - pickup within 40-minute window of call, based on dispatch estimate	≥90%
B.	Average Wait-Time (elapsed time between an immediate service request and passenger pickup)	40 min.
C.	Average Service Time (wait-time plus ride time although may be longer for service from outlying areas)	≤ 60 min.
D.	City DAR Productivity (passengers per hour) County DAR Productivity	≥ 4.5 pass. per hour ≥ 3.0 pass. per hour
E.	No Shows (per reporting period)	5%
<b><u>Fixed-Route Services</u></b>		
A.	On-Time Performance (zero minutes early and up to five minutes after the scheduled arrival time)	95%
B.	Scheduled Hours of Operation (completion of scheduled service hours)	99.5%
C.	Productivity (in passenger per hour)	7.5
<b><u>Overall System</u></b>		
A.	Customer Complaints (verifiable complaints, not including questions or comments)	3 monthly
B.	Average Time Hold (Reservation Line)	60 sec.

Source: 2008 MV Transportation Contract Agreement.

The MV contract also contains a set of performance deductions that may be instituted by the City. Deductions may include missed runs, on-time performance and the rate of complaints

**Table V-2  
On-Time Performance**

Fiscal Year	On-Time Performance	Performance Target
2009	92%	Greater than 90- 95%
2010	92%	Greater than 90- 95%
2011	95%	Greater than 90- 95%

Source: TransTrack, MV contract. Standard is 90% of trips on time for fixed route and 95% for demand response trips.

Complaints are entered into TransTrack. A comment card is available on the buses to receive feedback from riders. Developed by the City in 2008 as a result of the transit unmet needs hearings, the comment card is postcard-sized and addressed to City Hall for easy mailing. The card includes lines to identify the bus number and driver, as drivers are now required to wear an identification badge. Five categories to rate the service are shown on the card and include:

- Cleanliness of bus;
- Professionalism of drivers;
- Professionalism of dispatch;
- Whether the route met their travel need; and
- Availability of service.

An open space at the bottom enables a bus passenger to include any specific comments. The phone number of the Transportation Manager is provided on the form as well as an alternative to make a complaint.

Complaints received by the City are typically referred to the contract operator's Transit Manager to follow up. Most complaints are addressed within a day and a follow-up call to the bus passenger is made with a resolution. The actions taken are recorded in TransTrack for record keeping. The City indicated that the number of complaints has been reduced due to a combination of factors, including better on-time performance and cooler air conditioned buses.

Complaints performance is often expressed as complaints per 100,000 passengers. Table V-3 shows this indicator for the transit system using TransTrack data. The data show that the number of complaints is quite small. Although the number of complaints is low, complaints per 100,000 passengers have risen and fluctuates from year to year.

**Table V-3  
Complaints per 100,000 Passengers**

Fiscal Year	Complaints per 100,000 Passengers	Percentage Change
2009	12	200%
2010	7	-42%
2011	10	43%

Source: TransTrack

Another operational performance measure is the ratio of accidents per 100,000 miles for BAT. BAT had no reportable accidents during the audit period, so this ratio could not be calculated.

### **Maintenance**

The contractor maintains all the BAT vehicles at its facility in Barstow. The contractor uses Fleet Focus software to track maintenance work and provide information. The mileage of each vehicle is entered each day. The system generates a watch list for scheduling preventative maintenance inspections (PMIs), based on manufacturer recommendations for each vehicle type. The window for conducting PMIs is within 500 miles or five days of the schedule.

The Fleet Focus software tracks the parts ordered and used by vehicle. Parts are locked in the shop and checked out to the mechanic. A physical parts inventory is taken every six months.

Most non-warranty work is done on-site including engine rebuilds and transmissions. Most warranty repairs are done off-site, which keeps the vehicle out of service for some time. Warranty work is tracked by hand in individual vehicles files at the contractor site. Whenever possible, the contractor prefers to do the work themselves and keep the vehicle within their control.

The maintenance facility has sufficient capacity to serve the fleet. The mechanics work only one shift per day. The drivers clean the inside of the vehicles at night upon returning to the facility.

Table V-4 shows the number of revenue miles between roadcalls for BAT. When a vehicle requires a roadcall, delays in service could occur. The performance indicator shows that the number of roadcalls relative to revenue miles was relatively stable during the first two years of the audit period and improved dramatically during the last year.

**Table V-4  
Miles Between Roadcalls**

Miles Between Roadcalls		
FY 2009	FY 2010	FY 2011
24,939	25,244	54,075

Source: TransTrack

An important performance indicator of the maintenance function is vehicle maintenance costs per revenue mile. BAT is not required to submit cost by function to NTD and does not do so. There are figures for BAT maintenance costs in TransTrack, but the amounts shown are questionable. For example, the TransTrack FY2011 Operating Expenses form F-30 for fixed route shows \$1,299,571 for vehicle operations but only \$1,680 for vehicle maintenance. A companion form for demand response for FY2011 shows vehicle operations expense of \$657,836 and maintenance expense of \$8,706. Given these relatively low maintenance expenses, BAT's vehicle maintenance cost per revenue mile would be about one cent per mile. The prior TDA Audit report shows maintenance cost per mile in the 38 to 48 cents per mile range.

**Planning**

A Comprehensive Operations Analysis commenced in October 2007 to assess the BAT system, goals and policies, demographic and ridership characteristics, and applicable transit technologies. The COA provided recommended service alternatives and a financial plan forecast.

The Transportation Manager indicated that there is no regular communication between transit administration and the City's Planning and Building Departments to identify and understand land use and development proposals that may impact demand for transit services. While the COA addressed the level of anticipated demand for service and where the demand will originate, as development patterns come to fruition, transit management should maintain an ongoing dialog with City planners to keep updated on residential and non-residential development proposals and be able to add transit friendly amenities on-site and adjust BAT service as necessary to respond to the potential new demand.

The annual transit unmet needs process administered by SANBAG serves as another means for the public to identify potential new or improved services. Select local elected officials attend the unmet needs hearings which are usually held in various locations in the desert region including Victorville and Barstow. As all TDA is used on existing transit, there are limited resources to expand service beyond growth in this funding source.

**Marketing**

BAT conducts little marketing. The City's website provides a link to BAT information which shows various items including bus riding rules, fixed route schedules, dial-a-ride information and

fares. The new map and guide is a vast improvement over the earlier materials, which were hard to understand and did not include graphics.

BAT does not actively advertise its services. The map and rider guide is its main vehicle for communicating with existing and potential riders. Outreach is included in the periodic Comprehensive Operations Analyses conducted for the transit system. Goals for transit services are also developed through the COA process.

### **General Administration and Management**

The mission statement of Barstow Area Transit is as follows:

“Barstow Area Transit is a joint effort of the public agencies of the City of Barstow and the County of San Bernardino. Barstow Area Transit provides transit services to the general population of the City of Barstow and to the surrounding unincorporated areas of the County of San Bernardino, including the communities of Hodge, Hinkley, Lenwood, Grandview, Daggett, Yermo and Newberry. Our mission is to provide excellent transportation in a cost efficient manner while working to reduce harmful air pollutants and enhance the quality of life within our service area.”

The Memorandum of Understanding between the County and the City for coordinating efforts to provide public transportation in the unincorporated area was revised in 2006 and again 2008. The MOU was revised to eliminate duplication of effort and more clearly define the roles and responsibilities for each party. The 2006 MOU defined the roles between the County and City for administration of the volunteer transit services including Trona Transit, Big River Transit and Havasu Lake Transit. The 2008 MOU developed by SANBAG expanded upon the definitions of roles and included that the administrative functions to be performed by Barstow include planning, budget development, grants and TDA claims, and management of transit operations. The MOU applied to all BAT services including both volunteer services and County dial-a-ride.

At its request, the City Council no longer receives quarterly updates about the performance of the BAT system. Transit program information is presented as needed or requested, when the Council adopts the budget or approves grant funding and vehicle purchases.

With regard to General Administration costs for BAT, as an entity within city government, the transit system incurs general administrative costs, both direct and indirect costs. Direct costs include those directly associated with the program, such as the Transportation Manager, while indirect costs include such components as city administrative services cost, among other allocated expenses.

According to the annual fiscal audits, general administrative costs, as a percentage of total transit operations expenditures less depreciation, increased from 9 percent in FY 2009 to close to 13 percent in FY 2011. Also, general administrative costs for Trona and Big River Transit comprise close to 50 percent of expenditures for these systems. This additional cost is inclusive of the transition of the Transportation Manager to a City employee in early 2009. However, budgeted

indirect City Administrative Costs (City overhead) allocated to transit has increased by 25 percent over a three year period.

This trend in increased administration expenses for BAT should be reviewed in detail by the Transportation Manager to determine whether all related costs are justified in the transit budget. With farebox recovery not being met, there should be further examination of these costs which impact BAT's ability to meet farebox, and adjustments made to the administrative charges as warranted to reflect the level of service afforded to transit by City personnel.

## Section VI

### Findings

The following summarizes the major findings obtained from this Triennial Audit covering fiscal years 2008 through 2011. A set of recommendations is then provided.

1. The BAT system underwent substantial change during the audit period as a result of implementing recommendations in the 2007 Comprehensive Operations. The system converted from about 70 percent demand response and 30 percent fixed route to about 70 percent fixed route and 30 percent demand response. A subsequent funding reduction required further changes in July 2010.
2. Riders within the City of Barstow responded well to the initial changes, but the County riders were unhappy due to the change from demand response to fixed route service with flag down stops. County services reverted back to demand response by 2011.
3. The new map and rider guide is a vast improvement over earlier materials. It is posted on the City web site and provides information on routes, schedules and other important information.
4. The San Bernardino Associated Governments has funded an effort to evaluate the feasibility of consolidating BAT's operations with the Victor Valley Transportation Authority and Needles Transit. That study should be complete in 2013.
5. The consolidation study has required the City of Barstow to suspend some decisions and capital purchases until its completion and adoption. If the process takes too long and purchases of replacement buses are delayed, vehicle maintenance could become an issue.

## Recommendations

### 1. Improve operations data collecting and reporting consistency (High priority)

Producing consistent performance data for both State and Federal reports has been an issue for Barstow Area Transit dating back to a recommendation made in the prior performance. The Transportation Manager reviews TransTrack input by contractor at least once a month and uses invoices as back up documentation. Some earlier problems were thought to arise from the lack of clear lines of responsibilities at the contractor. These have since been resolved, but there are still data consistency issues between the reports that BAT prepares internally that feed into external agency reports.

Data consistency between the reports that BAT prepares for external agencies is an ongoing challenge. The comparison of statistics reported by BAT in its National Transit Database (NTD) reports, State Controller Reports, audited financial statements from fiscal audits and Trans Track reports shown in Table II-2 highlights the lack of consistency. While the differences are not generally wide-ranging, the year end operations data for components such as ridership, service hours and miles, and employees should be fairly the same for internal and external reporting. For example, the full-time equivalents reported to the State Controller were not supported by the employee hours in TransTrack. Given these inconsistencies, it is difficult to ensure accuracy in drawing conclusions about trends particularly with the modal statistics.

BAT should reconsider its data collection, review and reporting practices and develop a written “desktop” guide using a flow chart outlining the data reporting process and assigning personnel responsible for each step in the process. Personnel may include city staff from within transit and the finance department, and the operations contractor. Specific staff can be assigned the responsibility of collecting, entering data into TransTrack, and overseeing the accuracy of the data and reports. Additionally, the Transportation Manager should assume the role of managing this process and be responsible for ensuring the overall accuracy of the data.

### 2. Meet Farebox Requirements (High priority)

The trend in the farebox recovery is down. For years the fare recovery ratio had been just above or below the 10 percent requirement, however decreasing well below this threshold during the audit period to under 7 percent.

As a result, the service is out of compliance with a key TDA measure.

BAT should work closely with the contract operator and SANBAG to address this trend, whether through a near-term service analysis under current funding assumptions, and/or a closer review of its operating expenses whether any cost efficiencies or savings can be made to improve the fare recovery ratio.

3. Hold regular communication with City development officials  
(High priority)

The Transportation Manager indicated that there is no regular communication between City transit administration and the City's Planning and Building Departments to identify and understand land use and development proposals that may impact demand for transit services. While the COA addressed the level of anticipated demand for service and where the demand will originate, as development patterns come to fruition, transit management should maintain an ongoing dialog with City planners to keep updated on residential and non-residential development proposals and be able to add transit friendly amenities on-site and adjust BAT service as necessary to respond to the potential new demand. This could include participating in development meetings with the private applicant, and meeting more regularly with planning staff on such proposals.

4. Develop Capital Improvement Plan  
(Medium priority)

Transit operations have capital needs for vehicle replacement, bus stop amenities and other facilities. With understanding of the potential implications from the consolidation study results, BAT should develop a Capital Improvement Plan and schedule for regular updates for fleet replacement and improvements to amenities. This will alert City management to the upcoming call on funds and allow the City time to work with SANBAG to secure funding for its capital needs.

The current fleet is aging (majority are reaching 5 years old) and replacement vehicles need to be programmed. This effort is on hold pending the progress of the consolidation study, but the plan will be useful when the City is ready to move forward.

5. Review BAT General Administration Charges  
(Medium priority)

As an entity within city government, the transit system incurs general administrative costs, both direct and indirect costs. Direct costs include those directly associated with the program, such as the Transportation Manager, while indirect costs include such components as city administrative services cost, among other allocated expenses.

According to the annual fiscal audits, general administrative costs, as a percentage of total transit operations expenditures less depreciation, increased from 9 percent in FY 2009 to close to 13 percent in FY 2011. Also, general administrative costs for Trona and Big River Transit comprise close to 50 percent of expenditures for these systems. This additional cost is inclusive of the transition of the Transportation Manager to a City employee in early 2009. However, budgeted indirect City Administrative Costs (City overhead) allocated to transit has increased by 25 percent over a three year period.

This trend in increased administration expenses for BAT should be reviewed in detail by the Transportation Manager to determine whether all related costs are justified in the transit budget. With farebox recovery not being met, there should be further examination of these costs which

impact BAT's ability to meet farebox, and adjustments made to the administrative charges as warranted to reflect the level of service afforded to transit by City personnel.