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FY 2009-2011
Triennial Performance Audit of Morongo Basin Transit Authority

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PATTI POST & ASSOCIATES

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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 Morongo Basin Transit Authority (MBTA) 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 MBTA.

Compliance with TDA Requirements

MBTA has complied with most applicable TDA requirements with two exceptions. The operator was in partial compliance with regard to the timely submittal of the annual fiscal and compliance audits, and the consistency in recording performance data. Responsibility for submittal of the annual fiscal audit lies with the SANBAG auditor, which operates independently of MBTA. Two additional compliance requirements did not apply to MBTA (e.g., rural/urban farebox recovery ratios and serving an urbanized area).

Status of Prior Audit Recommendations

Four of the five prior audit recommendations were implemented. The recommendation pertaining to the proper recording of full-time equivalents into TransTrack and the State Controller's Report has been partially implemented and has been carried forward in this audit. MBTA has been utilizing TransTrack to correctly record employee work hours under the Personnel tab in TransTrack Manager. However, in the FY 2010 State Controller's Report prepared by SANBAG's fiscal auditor, the incorrect number of FTEs was recorded and transposed between the fixed-route and DAR modes.

System Performance Trends

1. Operating costs systemwide remained relatively flat over the past three years, increasing by 7.3 percent using audited data. Fixed route operating costs increased by a modest 3.1 percent while DAR costs increased 5.7 percent using unaudited data by mode. While MBTA has budgeted for increased CNG fuel during the audit period, fuel prices have stabilized. General administration and maintenance costs increased during the audit period encompassing salary step increases, facility repairs and the inclusion of TransTrack as an operating expense.

2. Operating cost per passenger decreased 10 percent systemwide, a positive indicator showing that ridership increased faster than operating costs. Cost per passenger decreased 23 percent on fixed route but increased by 36 percent on DAR. The trend in DAR ridership has been declining, while costs continue to increase.

3. Operating cost per hour increased 4.8 percent systemwide. The indicator increased by a negligible 0.5 percent on fixed route while increasing by 6.1 percent for DAR. Both cost and revenue hours increased for fixed route at comparable rates. Operating costs for DAR increased while revenue hours increased at more than twice the rate.

4. Passengers per hour decreased by 2.3 percent systemwide. Fixed route passengers per hour remained flat whereas DAR exhibited a 12 percent decrease. Vehicle service hours grew at a higher rate than passenger trips. For the fixed route, increases in the provision of revenue hours and passenger trips were at parity.

5. The farebox ratio for MBTA decreased slightly in the past three years, ranging from 19.78 percent in FY 2009 to 17.48 percent in FY 2011. The TDA minimum ratio of 10 percent was met in each year. Farebox for fixed route fluctuated between the 22 and 24 percent recovery range while DAR was relatively stable. Fare revenues are enhanced from group pass sales and the annual subsidy provided by the fundraising foundation of Copper Mountain College.

6. For most inspections, only minor vehicle and driver records violations were reported by the CHP. Satisfactory ratings were made for all inspections conducted during the audit period with minor violations noted for exposed edges of a wheelchair lift that was not padded and leaking fluids from the power steering gearbox.

Functional Review

1. The new Yucca Valley Transit Center opened in March 2009 with some fixed route realignment to meet at the transit center. The sawtooth design of the new transit center includes eight bays and passenger amenities such as restrooms.

2. MBTA released a marketing study in August 2009 which sought to identify more cost-effective ways to increase ridership by targeting four key market segments. The marketing study also included rebranding the MBTA logo.

3. Though outside of this audit review period, a Comprehensive Operations Analysis (COA) was completed in April 2012 that laid the foundation for enhancements and improvements in service delivery. The 2012 COA was initiated in August 2011 and provides an updated performance measurement system.

4. MBTA has not raised fares since 1999. The 2012 COA outlines a proposed fare structure that MBTA is seeking to implement in spring 2013 in concert with a route expansion and Sunday service. Based upon the COA recommendations, neighborhood and intercity fares would be increased by $0.50 to $1.50 and $2.50, respectively. The COA also proposed a $0.25 increase in student fares to $0.50 per trip.

5. In October 2008, the MBTA JPA was amended to permit the appointment of a fifth "floating" alternate who may act in the absence of any sitting member or alternative as well as allow members to receive compensation of $100 for their attendance at Governing Board meetings.

6. Staffing at MBTA has been fairly stable during the period. MBTA is a non-union shop where employment is on at-will basis. Employee turnover has been limited to two drivers leaving; one retired and the other quit voluntarily.

7. MBTA has developed its own grant funding program to assist local government agencies and 501(c)(3) non-profit providers in the Morongo Basin. The Transportation Assistance Grant (TAG) is a vehicle procurement program developed by MBTA that results in non-publicly funded income generated from fees paid by other agencies to access MBTA's vehicle purchasing contracts.

Recommendations

Performance Audit Recommendation	Background	Timeline
#1 Enter on-time performance data into TransTrack.	With the increased utilization of TransTrack as a central data collection source and monitoring tool, certain measures have yet to be tracked. One such measure pertains to on-time performance. Although on-time performance is tracked by having drivers call-in to the dispatchers at key time points, random time checks and other means, MBTA should enter this information into TransTrack to enhance the use of the monitoring software.	High Priority

Performance Audit Recommendation	Background	Timeline
#2 Work with the SANBAG fiscal auditor to properly record correct full-time equivalents in the State Controller's Report.	The correct count of employee hours is reported by MBTA in TransTrack which should serve as the basis for completing the actual State Controller's Report that is submitted to the State. MBTA has been utilizing TransTrack to record employee work hours under the Personnel tab in TransTrack Manager. However, in the FY 2010 State Controller's Report prepared by SANBAG's fiscal auditor, the incorrect number of FTEs was recorded and transposed between the fixed-route and DAR modes. MBTA should work with the fiscal auditor to conduct a final check of the State Controller Report for data accuracy prior to submittal to the State.	High Priority
#3 Maintain copies of the annual State Controller's Report at the MBTA office.	MBTA's State Controller Report is prepared and submitted to the State on behalf of the agency by SANBAG's fiscal auditor. However, MBTA has not received final copies of its State Controller's Reports to keep in its office file. As some portions of State Transit Assistance Funding determined by the State is based on information contained in the controller reports, MBTA should have these reports readily accessible at its office.	Medium Priority

Section I

Introduction

California's Transportation Development Act (TDA) requires that a triennial performance audit be conducted of public transit entities that receive TDA revenues. The performance audit serves to ensure accountability in the use of public transportation revenue.

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 Morongo Basin Transit Authority (MBTA) covering the most recent triennial period, fiscal years 2008-09 through 2010-11.

The purpose of the performance audit is to evaluate MBTA's effectiveness and efficiency in its use of TDA funds to provide public transportation 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 the city's compliance with the conditions specified in the California Public Utilities Code (PUC). This task involves ascertaining whether the city is meeting the PUC's reporting requirements. Moreover, the audit includes calculations of transit service performance indicators and a detailed review of the transit administrative functions. From the analysis that has been undertaken, a set of recommendations has been made which is intended to improve the performance of transit operations.

In summary, this TDA audit affords 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 management, collection and review of agency documents, data analysis, and on-site observations. The *Performance Audit Guidebook for Transit Operators and Regional Transportation Planning Entities* published by the California Department of Transportation (Caltrans) was used to guide in the development and conduct of the audit.

Overview of the Transit System

MBTA has been providing transit service since its establishment as a Joint Powers Authority (JPA) in October 1989 between the City of Twentynine Palms and the County of San Bernardino. The JPA was expanded in September 1992 to include the Town of Yucca Valley. The JPA is administered by a Governing Board of seven members. Two members and two alternates are appointed by each member jurisdiction. Representing the County are the supervisors representing the First and Third Districts or their designees. The seventh member is a resident of the Morongo Basin, who is selected by a majority of the other six members for a term of two years.

In October 2008, the MBTA Joint Powers Agreement was amended to permit the appointment of a fifth "floating" alternate who may act in the absence of any sitting member or alternative as well as allow members to receive compensation of $100 for their attendance at Governing Board meetings. Day-to-day operations are overseen by a General Manager from MBTA's operations center in Joshua Tree.

As the third largest transit operator in the county, MBTA provides general public deviated fixed route and demand responsive service primarily for seniors and the disabled. In addition, MBTA regulates taxicab operations within its service area. Route deviated service is provided within Yucca Valley, Twentynine Palms, the unincorporated community of Landers, the Marine Corps Air Ground Combat Center (MCAGCC), and along the State Route 62 corridor between Twentynine Palms and Yucca Valley. A deviated service is also provided connecting the MBTA service area from a park and ride facility in Yucca Valley to the Palm Springs area for commuters and for medical appointments and shopping. The demand responsive service, Ready Ride, serves most of the same area as the deviated fixed route, with the exception of the Palm Springs service, and includes the communities of Joshua Tree, Morongo Valley, Wonder Valley and Yucca Mesa.

The Morongo Basin is located in the south-central portion of San Bernardino County between Interstate 10 on the south and Interstate 40 on the north. The basin is part of the Mojave Desert and home to Joshua Tree National Park. The MBTA service area consists of 10 communities with a combined population of around 108,000, which mirrors approximately the service area of the Morongo Unified School District (excluding Palm Springs).

A demographic snapshot of key cities and Census-designated Places (CDPs) within the MBTA service area is presented below in Table I-1:

Table I-1
MBTA Service Area Demographics

City/CDP	2010 US Census Population	Change from 2000 US Census	Population 65 years & older	Land area (in square miles)
Joshua Tree CDP	7,414	76.2%	15.7%	37.04
Twentynine Palms	25,048	69.7%	5.8%	59.14
Yucca Valley	20,700	22.7%	18.5%	40.02

Source: 2010 U.S. Census

The two largest communities in the Morongo Basin are Twentynine Palms and Yucca Valley. The 2012 population for the City of Twentynine Palms and the Town of Yucca Valley are estimated to be 25,713 and 20,916 respectively as reported by the State Department of Finance.

System Characteristics

Fixed Route: Deviated fixed route (herein referred to as "fixed route") includes eight routes, six of which provide local trips in the Morongo Basin area on one-hour headways. The Landers Loop route operates on between one- and three-hour headways. Route 1 is MBTA's principal trunk

route linking the MCAGCC and Twentynine Palms with Yucca Valley with one-hour headways during the week and one to two-hour headways on Saturday. Route 12 provides intercity service during the week between Yucca Valley and Palm Springs, whereas Route 15 provides similar service between the MCAGCC and Palm Springs Friday through Sunday. Deviated service fulfills the requirements for the Americans with Disabilities Act and extends ¾ of a mile beyond the fixed route. Route 21 (Landers Loop) has a maximum corridor of 1.5 miles along its route.

Transfer centers are located in both Yucca Valley and Twentynine Palms. Passengers are able to transfer between the local routes that operate within each city, as well as connections onto the intercity route. Table I-2 details the fixed route services.

Table I-2
MBTA Fixed Route Services

Route Number	Description	Frequency/Operation	Destinations
1	Yucca Valley – Marine Base	Hourly (Monday through Friday from 6:00 a.m. to 10:00 p.m.); every 1 to 3 hours (Saturday from 7:15 a.m. to 10:08 p.m.); limited headways between the MCAGCC and Twentynine Palms Community Center	▪ Yucca Valley Park 'N Ride ▪ Yucca Valley Transit Center ▪ Hi-Desert Hospital ▪ Copper Mountain College ▪ Twentynine Palms Staters ▪ Twentynine Palms Transit Center ▪ Himalaya Plaza ▪ MCAGCC Commissary
3A	Twentynine Palms Marine Base	Hourly (Monday through Friday from 7:00 a.m. to 5:50 p.m.)	▪ Twentynine Palms Transit Center ▪ Base Commissary ▪ Base Hospital ▪ Post Exchange ▪ DMV
3B	Twentynine Palms	Hourly (Monday through Friday from 7:00 a.m. to 5:50 p.m.)	▪ Twentynine Palms Transit Center ▪ Twentynine Palms Staters ▪ El Paseo Apartments ▪ Lucky Park ▪ Utah & Baseline
7A	Yucca Valley North	Hourly (Monday through Friday from 7:00 a.m. to 5:50 p.m.)	▪ Yucca Valley Transit Center ▪ Paxton & Avalon ▪ Mohawk Apartments ▪ Town Hall ▪ Park 'N Ride
7B	Yucca Valley South	Hourly (Monday through Friday from 7:00 a.m. to 5:50 p.m.)	▪ Yucca Valley Transit Center ▪ Paxton & Avalon ▪ DPSS ▪ Park 'N Ride
12	Yucca Valley – Palm Springs	Two morning and one bi-	▪ Yucca Valley Transit Center

Route Number	Description	Frequency/Operation	Destinations
		directional afternoon headways (Monday through Friday)	▪ Park 'N Ride ▪ Morongo Valley Country Market ▪ Morongo Valley Post Office ▪ Palm Springs Airport
15	MCAGCC – Palm Springs	One evening bi-directional headway (Friday); two bi-directional headways (Saturday and Sunday)	▪ Base Post Exchange ▪ Building 1664 ▪ Twentynine Palms Transit Center ▪ Twentynine Palms Staters ▪ Yucca Valley Transit Center ▪ Palm Springs Airport
21	Landers Loop	Every two hours (Monday through Friday from 6:45 a.m. to 10:00 a.m. and from 1:00 p.m. to 5:00 p.m.)	▪ Yucca Valley Transit Center ▪ Landers Post Office ▪ Haliday's Market ▪ Mojave Market ▪ Heros Market ▪ Aberdeen & Yucca Mesa

Source: MBTA

Routes 7A and 7B were realigned during the spring of 2009 to allow for connectivity to the new Yucca Valley Transit Center located adjacent to the Post Office. In addition, MBTA provides deviated special service on Route 7B to serve the Monterey Business Center and several school sites. This service operates by request only at 7:00 a.m. and 2:00 p.m. Monday through Friday.

Dial-a-Ride: Ready Ride is a door-to-door service available primarily for Senior and Disabled passengers at a discounted rate, but is available for all passengers at a premium rate. The door-to-door service is divided into zones that are generally split among the communities in the service area, including Yucca Valley, Morongo Valley, Joshua Tree and Twentynine Palms. One-day advance reservations are recommended, with same-day reservations accepted on a space available basis. Reservations for specific times are accepted up to seven days in advance. The Ready Ride service areas are displayed in Table I-3.

Table I-3
MBTA Ready Ride

Service Area	Days of Operation	Hours of Operation
Joshua Tree	Monday through Friday	7:30 a.m. to 3:00 p.m.
Landers	Monday through Friday	7:00 a.m. to 5:00 p.m.
Morongo Valley	Monday and Thursday	8:30 a.m. to 11:30 a.m.
Twentynine Palms	Monday through Friday	7:00 a.m. to 1:00 p.m.
Wonder Valley	Tuesday and Friday	7:00 a.m. to 11:30 a.m.
Yucca Valley	Monday through Friday	7:30 a.m. to 4:30 p.m.

Source: MBTA

MBTA does not operate on the following major holidays: New Year's Day, Memorial Day, Independence Day, Labor Day, Thanksgiving and Christmas. Regular day service is provided on other holidays.

Fares

MBTA's fares are structured accordingly to service type and destination. Up to three small children age 5 or under may ride free with an adult. Fares have not increased since 1999 which is quite remarkable given that MBTA continues to exceed its required farebox recovery ratio. The fare structure is shown in Table I-4.

Table I-4
MBTA Fare Schedule

Deviated Fixed Route	**Adult**	**Student**	**Senior/ Disabled**
Intercity (Route 1) One Way	$2.00	$2.00	$1.00
Neighborhood Shuttles (Routes 3A, 3B, 7A, 7B & 21) One Way	$1.00	$1.00	$0.75
Route 12			
From Twentynine Palms One Way	$10.00	$10.00	$4.50
Round Trip	$15.00	$15.00	$9.00
From Joshua Tree/Yucca Valley One Way	$7.00	$7.00	$4.50
Round Trip	$11.00	$11.00	$9.00
From Morongo Valley One Way	$5.00	$5.00	$4.50
Round Trip	$9.00	$9.00	$9.00
Route 15			
From Twentynine Palms One Way	$20.00	$20.00	$14.50
Round Trip	$25.00	$25.00	$19.00
From Joshua Tree/Yucca Valley One Way	$17.00	$17.00	$14.50
Round Trip	$21.00	$21.00	$19.00
From Morongo Valley One Way	$15.00	$15.00	$14.50
Round Trip	$19.00	$19.00	$19.00
Bus Passes	**Adult**	**Student**	**Senior/ Disabled**
Day Pass (Routes 1, 3A, 3B, 7A, 7B & 21)	$3.00	N/A	N/A
31-Day *Go Pass*	$30.00	$20.00	$20.00

Palm Springs 7-Day Pass (Route 12)	$35.00	N/A	N/A
Ready Ride Dial-a-Ride	**Adult**	**Student**	**Senior/ Disabled**
Regular Fares	$4.00	$4.00	$1.50
Discount Passes (Seniors/Disabled Only)			
10-Punch Pass	N/A	N/A	$10.00
20-Punch Pass	N/A	N/A	$20.00

Source: MBTA

Fleet

There were 25 vehicles in the total fleet during the audit period. MBTA operates an all compressed natural gas (CNG) powered fleet. Table I-5 shows the vehicle fleet and service type.

Table I-5
MBTA Fleet

Year	Manufacturer	Quantity	Fuel Type	Service Type	Seating Capacity
2000	El Dorado MST	1	CNG	Fixed-Route	24 + 2 WC
2001	Transmark	1	CNG	Fixed-Route	24 +2 WC
2002	El Dorado MST	2	CNG	Fixed-Route	24 + 2 WC
2004	Ford Cutaway 16	1	CNG	DAR/Fixed-Route	14 + 2 WC
2004	El Dorado MST	1	CNG	Fixed-Route	24 + 2 WC
2006	Ford Aerotech 14	3	CNG	DAR/Fixed-Route	14 + 2 WC
2007	GMC	1	CNG	Fixed-Route	31 + 2 WC
2007	Starcraft Cutaway	6	CNG	Fixed-Route	14 + 2 WC
2007	Transmark	1	CNG	Fixed-Route	24 + 2 WC
2008	Glaval	2	CNG	DAR/Fixed-Route	14 + 2 WC
2008	Glaval SM	2	CNG	DAR/Fixed-Route	14 + 2 WC
2009	Glaval SM	3	CNG	DAR/Fixed-Route	14 + 2 WC
2011	Arboc	1	CNG	DAR/Fixed-Route	14 + 2 WC
Total		**25**			

Source: TransTrack Manager

MBTA Facility

Administration and central operations and maintenance are located in Joshua Tree. The total acreage of the site is 15 acres which has ample space to accommodate the current fleet plus future expansion. Buses are also parked in the City of Twentynine Palms corporation yard to reduce deadhead miles and hours at the beginning and end of the runs.

MBTA utilizes two CNG stations with fast fill capability. One station is located at the MBTA facility in Joshua Tree and the other in Twentynine Palms. MBTA also utilizes a private CNG station near a park and ride lot in Yucca Valley. The Marine Base also has a CNG fueling site.

A new bus wash was installed at the Joshua Tree facility for convenience since vehicles were previously taken to a wash facility 7 miles away and cleaned at a cost of $6-$10 per vehicle.

Taxi Administration

Although not included in the performance audit, MBTA provides taxi program administration and management through supervising drug tests, inspections of cabs and background checks. All of these tasks are completed by outside contractors. For example, a local garage conducts the cab inspections. The MBTA clerk records how much time is spent by the agency on taxi business, and MBTA is reimbursed through fees charged to the taxi drivers for annual renewal of the taxi license. Estimated MBTA administrative staff time charged to the taxi program during FY 2011-12 include: General Manager – 9 hours, Operations Manager – 62 hours, Office Manager – 13, Administrative Assistant – 51.

Section II

Operator Compliance Requirements

This section of the audit report contains the analysis of MBTA'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. 28/29), or 110 days (Oct. 19/20) if filed electronically (Internet).	Public Utilities Code, Section 99243	Completion/submittal dates: FY 2009: October 20, 2009 FY 2010: October 12, 2010 FY 2011: October 20, 2011 **Conclusion: Complied.**
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	Completion/submittal dates: FY 2009: December 16, 2009 FY 2010: March 31, 2011 FY 2011: April 9, 2012 The annual fiscal and compliance audit for FY 2010 was submitted within the 90-day extension period. The FY 2011 audit was submitted after the 90-day extension period.

Table II-1 Operator Compliance Requirements Matrix		
Operator Compliance Requirements	**Reference**	**Compliance Efforts**
		Conclusion: Partial Compliance.
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 B	MBTA participates in the CHP Transit Operator Compliance Program in which the CHP has conducted inspections within the 13 months prior to each TDA claim. Inspection dates applicable to the audit period were February 17 & 18, 2009; February 17, 2010 and February 8 & 9, 2011. Inspections were found to be satisfactory with minor violations noted for exposed edges of a wheelchair lift that was not padded and leaking fluids from the power steering gearbox. **Conclusion: Complied.**
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	As a condition of approval, MBTA's annual claims for Local Transportation Funds and State Transit Assistance are submitted in compliance with the rules and regulations adopted by SANBAG. **Conclusion: Complied.**
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	Public Utilities Code, Section 99270.1	This requirement is not applicable, as MBTA serves a non-urbanized area only. **Conclusion: Not Applicable.**

Table II-1 Operator Compliance Requirements Matrix		
Operator Compliance Requirements	**Reference**	**Compliance Efforts**
determined by the rules and regulations adopted by the RTPA.		
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).	Public Utilities Code, Section 99266	Percentage increase in MBTA's operating budget: FY 2009: +2.5% FY 2010: +3.1% FY 2011: +1.0% Source: MBTA Budgets for FY 2009-2011 **Conclusion: Complied.**
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.	Public Utilities Code, Section 99247	A review of TransTrack and State Controller's Reports indicate overall compliance. However, there are some data discrepancies between these reports maintained by MBTA, such as revenue hours. The calculation of full-time equivalents is not recorded accurately by SANBAG's fiscal auditor in the State Controller's Report. This would impact the measure of vehicle service hours per employee. **Conclusion: Partial Compliance.**
If the operator serves an urbanized area, it has maintained a ratio of fare revenues to operating costs at least equal to one-fifth (20 percent), unless it is in a county with a population of less than	Public Utilities Code, Sections 99268.2, 99268.3, 99268.12, 99270.1	This requirement is not applicable, as MBTA serves a non-urbanized area. **Conclusion: Not Applicable**

Table II-1
Operator Compliance Requirements Matrix

Operator Compliance Requirements	Reference	Compliance Efforts
500,000, in which case it must maintain a ratio of fare revenues to operating costs of at least equal to three-twentieths (15 percent), if so determined by the RTPA.		
If the operator serves a rural area, or provides exclusive services to elderly and disabled persons, it has maintained a ratio of fare revenues to operating costs at least equal to one-tenth (10 percent).	Public Utilities Code, Sections 99268.2, 99268.4, 99268.5	MBTA's operating ratios using audited data were as follows: FY 2009: 19.80% FY 2010: 18.40% FY 2011: 17.48% Source: Annual Fiscal and Compliance Audits **Conclusion: Complied.**
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.	Public Utilities Code, Section 99271	To be eligible for TDA funds, the annual TDA claims form requires a sign-off from the transit claimant to comply with standard assurances, one of which is that the agency's retirement system is funded. **Conclusion: Complied**
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.	California Code of Regulations, Section 6754(a)(3)	MBTA utilizes federal funds that are available to the agency, as reported in the annual fiscal and compliance audits as follows: FY 2009: Operations ($292,031) Capital ($665,581) FY 2010: Operations ($482,103) Capital ($927,552) FY 2011: Operations ($288,271)

Table II-1 Operator Compliance Requirements Matrix		
Operator Compliance Requirements	**Reference**	**Compliance Efforts**
		Capital ($205,211) **Conclusion: Complied.**

Findings and Observations from Operator Compliance Requirements Matrix

1. Of the compliance requirements pertaining to MBTA, the operator fully complied with seven out of the nine requirements. The operator was in partial compliance with regard to the timely submittal of the annual fiscal and compliance audits, and the consistency in recording performance data. Responsibility for submittal of the annual fiscal audit lies with the SANBAG auditor, which operates independently of MBTA. Two additional compliance requirements did not apply to MBTA (e.g., rural/urban farebox recovery ratios).
2. MBTA's farebox recovery ratio remained well above the required 10 percent standard in spite of a slightly downward trend. The average systemwide farebox recovery ratio was 18.56 percent during the triennial review period.
3. MBTA participates in the CHP Transit Operator Compliance Program and received vehicle inspections within the 13 months prior to each TDA claim. Satisfactory ratings were made for all inspections conducted during the audit period with minor violations noted for exposed edges of a wheelchair lift that was not padded and leaking fluids from the power steering gearbox.
4. The operating budget increased modestly during the period. There was an increase of 2.5 percent in FY 2009 followed by a 3.1 percent in FY 2010 and a 1.0 percent increase in FY 2011.

Section III

Prior Triennial Performance Recommendations

MBTA'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 Authority'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

Develop/install software program to track vehicle parts inventory electronically.

Actions taken by MBTA

The prior audit identified a deficiency in MBTA's maintenance software, which did not include a module that would allow for vehicle parts inventory to be tracked electronically or linked when parts are used for vehicle maintenance. MBTA has taken steps to upgrade its capability to code and track vehicle parts electronically. By utilizing the Parts Controller module, which is compatible with the Fleet Controller maintenance software program, parts have been inventoried and coded according to the manufacturer. Vendor codes have also been programmed into the system. Bulbs and nuts are not generally inventoried due to their low unit cost. The labor hours to integrate the two systems were estimated by the Maintenance Manager at the equivalent of 2.5 weeks for two full time employees.

Conclusion

This recommendation has been implemented.

Prior Recommendation 2

Record key operations data such as on-time performance, roadcalls and accidents into TransTrack.

Actions taken by MBTA

MBTA had been tracking its operational data through internal reports without transferring such data to TransTrack. The advantage of using TransTrack is its ability to calculate performance measures that provide trend information about the transit system. During the audit period, MBTA has taken concrete steps to utilize TransTrack as a performance data and monitoring tool. A sampling of TransTrack reports shows that MBTA has been recording data for each mode and route along with cost and performance indicators. MBTA is also using TransTrack to record and

track roadcalls, customer service issues, and accidents. In addition, a monthly ridership report and a monthly performance statistical summary are included in the MBTA Board of Directors agenda packet.

Conclusion

This recommendation has been implemented.

Prior Recommendation 3

Strengthen the method for determining on-time performance for dial-a-ride.

Actions taken by MBTA

The prior audit suggested an alternative means for verifying on-time performance in addition to reviewing driver manifests. Such measures would aid in enforcement of the no-show policy and ensure fewer customer complaints. During the audit period, MBTA took steps toward improving its on-time performance tracking. On-time performance tracking for the dial-a-ride service is measured by ride checks and sampling manifests on a random basis.

Conclusion

This recommendation has been implemented.

Prior Recommendation 4

Provide side-by-side comparison of planned versus actual performance indicators and include in Board meeting agendas.

Actions taken by MBTA

MBTA's Financial Report, included in the Board agenda, contains a side-by-side comparison of budgeted and actual expenditures and revenues including passenger fares for all modes. The monthly ridership report generated from TransTrack gives a comparison of prior year versus current year data for passenger trips, passengers per revenue hour and farebox.

Conclusion

This recommendation has been implemented.

Prior Recommendation 5

Properly record correct full-time equivalents into TransTrack and the State Controller's Report.

Actions taken by MBTA

It was recommended that MBTA report the correct number of full-time equivalents in the State Controller's plan module in TransTrack to serve as the basis for completing the actual State Controller's Report. MBTA has been utilizing TransTrack to correctly record employee work hours under the Personnel tab in TransTrack Manager. However, in the FY 2010 State Controller's Report prepared by SANBAG's fiscal auditor, the incorrect number of FTEs was recorded and transposed between the fixed-route and DAR modes. Based on interviews with MBTA staff, the correct number of FTEs is 25 for fixed-route and 7 for DAR.

Conclusion

This recommendation has been partially implemented, and is carried forward in this audit for full implementation.

Section IV

TDA Performance Indicators

This section reviews MBTA'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. A comparison of performance by mode against the benchmark standards contained in MBTA's Comprehensive Operations Analysis is also conducted.

Tables IV-1 through IV-3 provide the performance indicators for MBTA systemwide, fixed route and dial-a-ride. Charts are also provided to depict the trends in the indicators.

Table IV-1
MBTA TDA Performance Indicators
Systemwide

		Audit Period			
Performance Data and Indicators	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	***% Change FY 2008-2011***
Operating Cost [(a)]	$2,033,839	$2,132,976	$2,202,169	$2,182,190	***7.3%***
Total Passengers	346,475	383,074	357,876	354,738	***2.4%***
Vehicle Service Hours	31,900	32,229	32,214	33,413	***4.7%***
Vehicle Service Miles	662,875	661,797	681,722	676,168	***2.0%***
Employee FTEs	25	25	32	32	***28.0%***
Passenger Fares [(b)]	$374,147	$421,931	$405,092	$381,482	***2.0%***
Operating Cost per Passenger	$5.87	$5.57	$6.15	$6.15	***4.8%***
Operating Cost per Vehicle Service Hour	$63.76	$66.18	$68.36	$65.31	***2.4%***
Operating Cost per Vehicle Service Mile	$3.07	$3.22	$3.23	$3.23	***5.2%***
Passengers per Vehicle Service Hour	10.9	11.9	11.1	10.6	***-2.3%***
Passengers per Vehicle Service Mile	0.52	0.58	0.52	0.52	***0.4%***
Vehicle Service Hours per Employee	1,276.0	1,289.2	1,006.7	1,044.2	***-18.2%***
Average Fare per Passenger	$1.08	$1.10	$1.13	$1.08	***-0.4%***
Fare Recovery Ratio	18.40%	19.78%	18.40%	17.48%	***-5.0%***
Consumer Price Index (CPI-Los Angeles CSMA)	3.5%	1.1%	0.5%	1.8%	***-48.6%***

(a) Excludes depreciation and amortization costs. MBTA systemwide operating costs are drawn from annual fiscal audit. The breakdown by mode is drawn from unaudited data, so modal costs will not add up to audited costs.

(b) Passenger fares are drawn from annual fiscal audit. The breakdown by mode is drawn from TransTrack data, so modal fare revenues will not add up to audited fare revenue.

Source: NTD, TransTrack, 2012 COA, FYs 2008-11 Annual Fiscal Audits

Table IV-2
MBTA TDA Performance Indicators
Fixed Route

		Audit Period			
Performance Data and Indicators	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	***% Change FY 2008-2011***
Operating Cost [(a)]	$1,497,707	$1,586,171	$1,680,031	$1,544,020	***3.1%***
Total Passengers	320,171	357,110	333,562	328,548	***2.6%***
Vehicle Service Hours	25,137	25,274	25,258	25,760	***2.5%***
Vehicle Service Miles	551,463	553,681	576,373	571,790	***3.7%***
Employee FTEs [(b)]	21	21	25	25	***19.0%***
Passenger Fares [(c)]	$323,707	$391,821	$372,322	$345,477	***6.7%***
Operating Cost per Passenger	$4.68	$4.44	$5.04	$4.70	***0.5%***
Operating Cost per Vehicle Service Hour	$59.58	$62.76	$66.51	$59.94	***0.6%***
Operating Cost per Vehicle Service Mile	$2.72	$2.86	$2.91	$2.70	***-0.6%***
Passengers per Vehicle Service Hour	12.7	14.1	13.2	12.8	***0.1%***
Passengers per Vehicle Service Mile	0.58	0.64	0.58	0.57	***-1.0%***
Vehicle Service Hours per Employee	1,197.0	1,203.5	1,010.3	1,030.4	***-13.9%***
Average Fare per Passenger	$1.01	$1.10	$1.12	$1.05	***4.0%***
Fare Recovery Ratio	21.61%	24.70%	22.16%	22.38%	***3.5%***
Consumer Price Index (CPI-Los Angeles CSMA)	3.5%	1.1%	0.5%	1.8%	***-48.6%***

(a) Excludes depreciation and amortization costs. Data is drawn from unaudited TransTrack data.
(b) Estimated by mode using total FTEs in State Controller's Report.
(c) Data is drawn from unaudited TransTrack data.

Source: NTD, TransTrack, 2012 COA

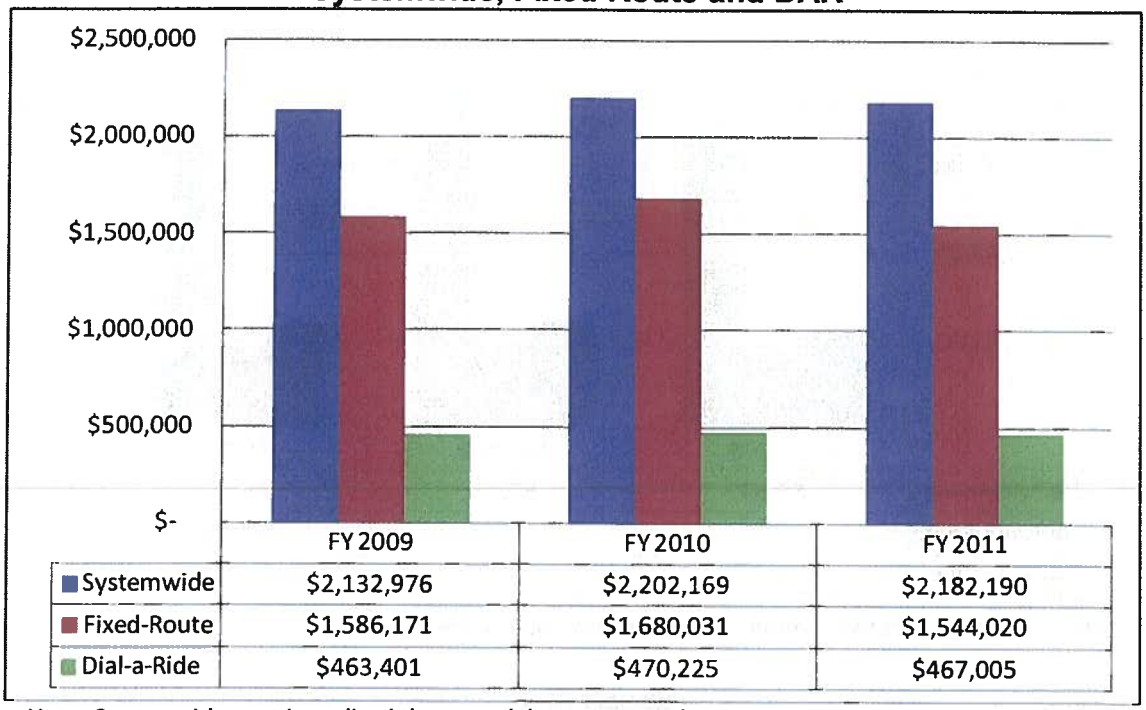
Table IV-3
MBTA TDA Performance Indicators
Dial-a-Ride

		Audit Period			
Performance Data and Indicators	**FY 2008**	**FY 2009**	**FY 2010**	**FY 2011**	***% Change FY 2008-2011***
Operating Cost [(a)]	$441,868	$463,401	$470,225	$467,005	***5.7%***
Total Passengers	26,304	25,964	24,314	26,190	***-0.4%***
Vehicle Service Hours	6,763	6,955	6,956	7,653	***13.2%***
Vehicle Service Miles	111,412	108,116	105,349	104,378	***-6.3%***
Employee FTEs [(b)]	4	4	7	7	***75.0%***
Passenger Fares [(c)]	$34,801	$28,858	$33,793	$31,458	***-9.6%***
Operating Cost per Passenger	$16.80	$17.85	$19.34	$17.83	***6.1%***
Operating Cost per Vehicle Service Hour	$65.34	$66.63	$67.60	$61.02	***-6.6%***
Operating Cost per Vehicle Service Mile	$3.97	$4.29	$4.46	$4.47	***12.8%***
Passengers per Vehicle Service Hour	3.9	3.7	3.5	3.4	***-12.0%***
Passengers per Vehicle Service Mile	0.24	0.24	0.23	0.25	***6.3%***
Vehicle Service Hours per Employee	1,690.8	1,738.8	993.7	1,093.3	***-35.3%***
Average Fare per Passenger	$1.32	$1.11	$1.39	$1.20	***-9.2%***
Fare Recovery Ratio	7.88%	6.23%	7.19%	6.74%	***-14.5%***
Consumer Price Index (CPI-Los Angeles CSMA)	3.5%	1.1%	0.5%	1.8%	***-48.6%***

(a) Excludes depreciation and amortization costs. Data is drawn from unaudited TransTrack data.
(b) Estimated by mode using total FTEs in State Controller's Report.
(c) Data is drawn from unaudited TransTrack data.

Source: NTD, TransTrack, 2012 COA

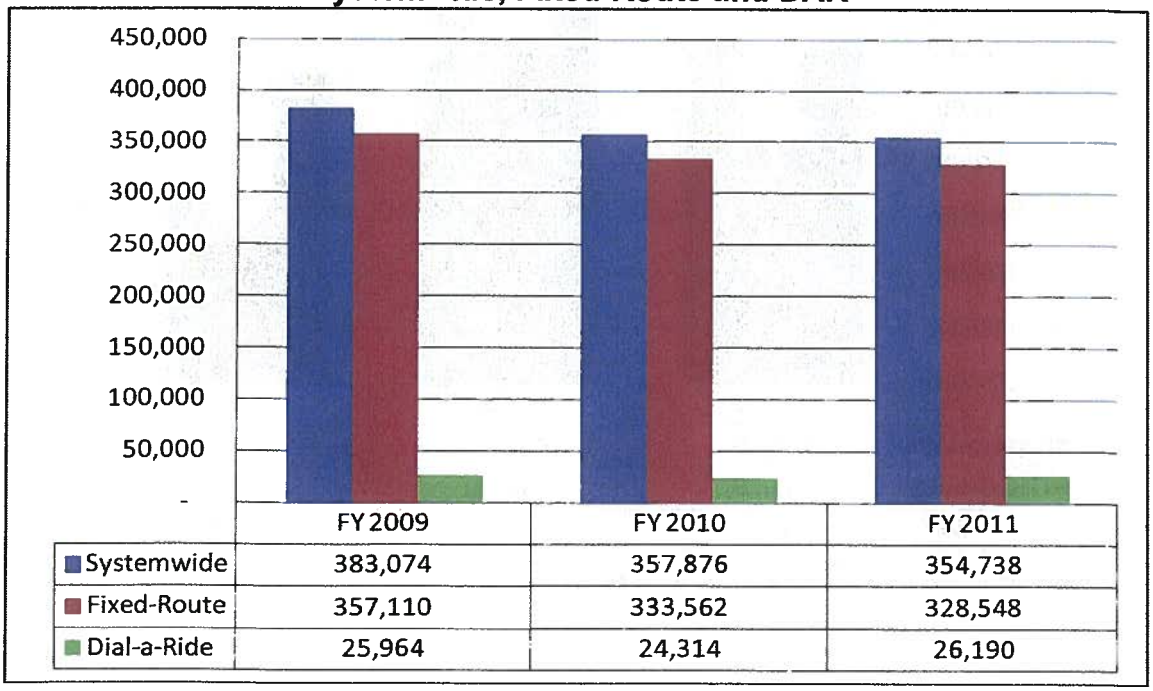
Graph IV-1
Operating Costs
Systemwide, Fixed Route and DAR



	FY 2009	FY 2010	FY 2011
Systemwide	$2,132,976	$2,202,169	$2,182,190
Fixed-Route	$1,586,171	$1,680,031	$1,544,020
Dial-a-Ride	$463,401	$470,225	$467,005

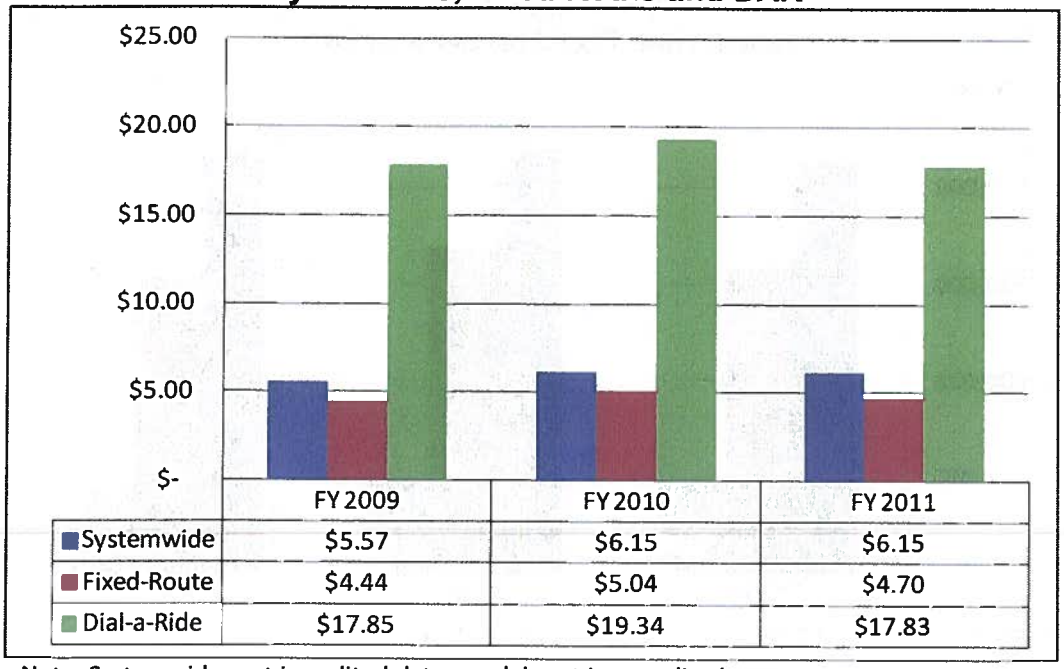
Note: Systemwide cost is audited data; modal cost is unaudited.

Graph IV-2
Ridership
Systemwide, Fixed Route and DAR



	FY 2009	FY 2010	FY 2011
Systemwide	383,074	357,876	354,738
Fixed-Route	357,110	333,562	328,548
Dial-a-Ride	25,964	24,314	26,190

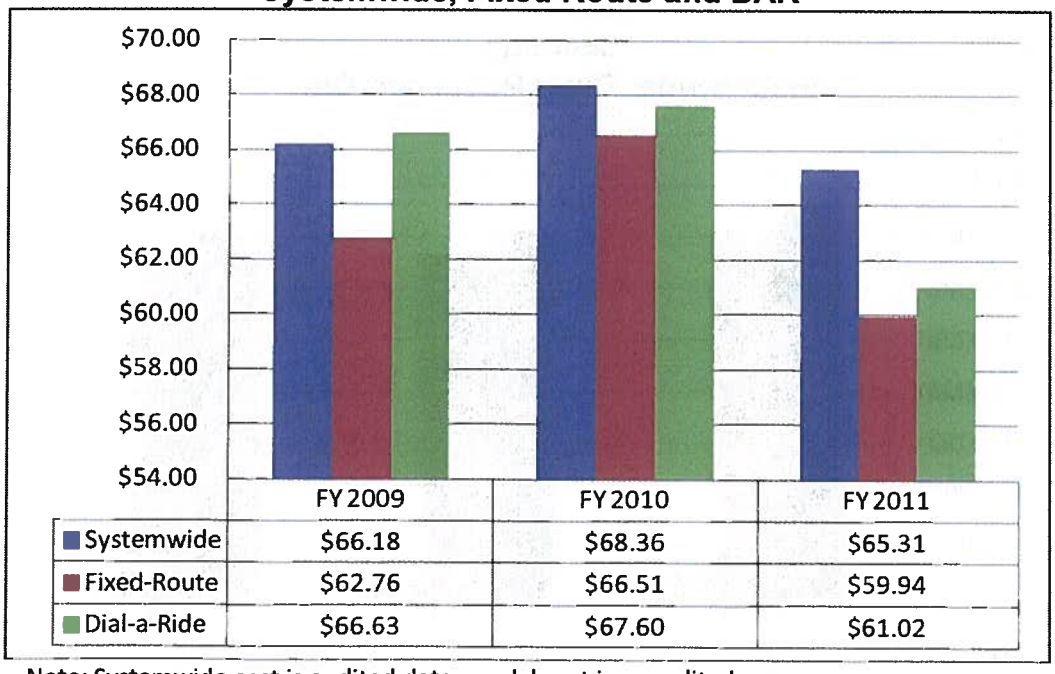
Graph IV-3
Operating Cost Per Passenger
Systemwide, Fixed Route and DAR



	FY 2009	FY 2010	FY 2011
Systemwide	$5.57	$6.15	$6.15
Fixed-Route	$4.44	$5.04	$4.70
Dial-a-Ride	$17.85	$19.34	$17.83

Note: Systemwide cost is audited data; modal cost is unaudited.

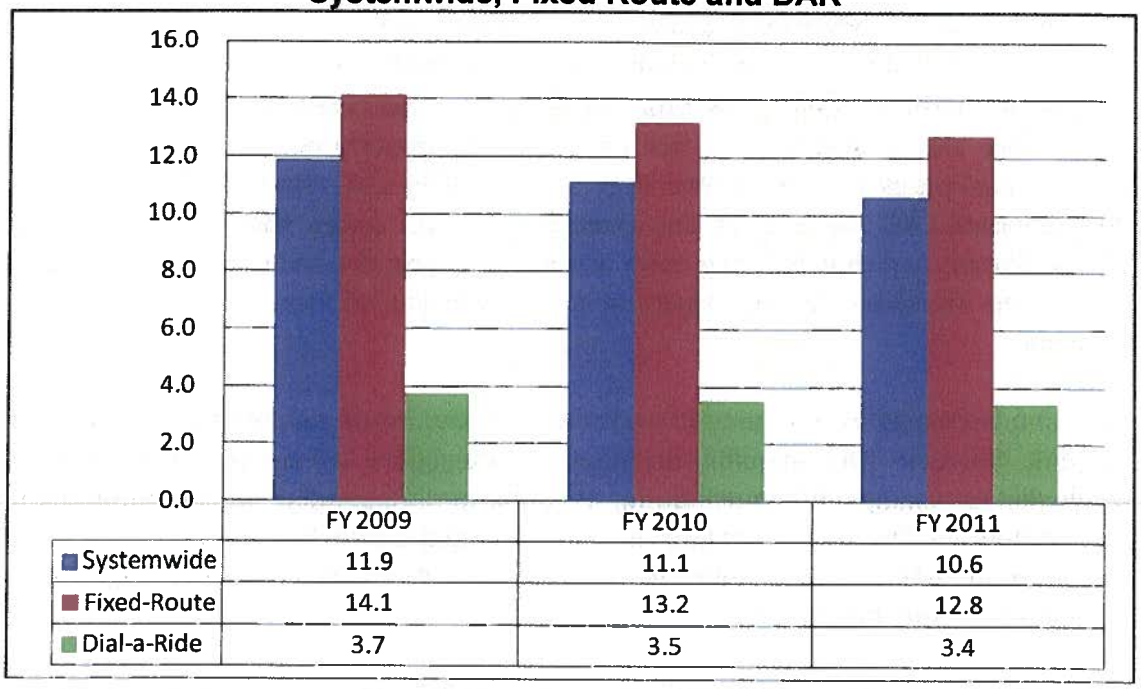
Graph IV-4
Operating Cost Per Vehicle Service Hour
Systemwide, Fixed Route and DAR



	FY 2009	FY 2010	FY 2011
Systemwide	$66.18	$68.36	$65.31
Fixed-Route	$62.76	$66.51	$59.94
Dial-a-Ride	$66.63	$67.60	$61.02

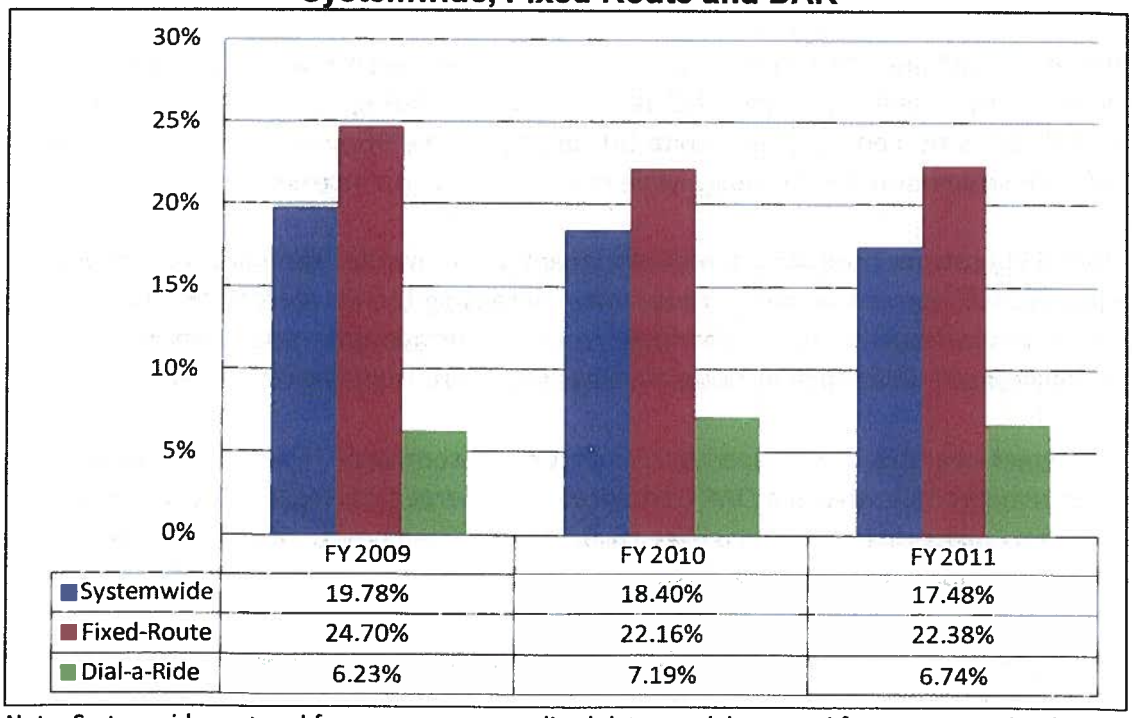
Note: Systemwide cost is audited data; modal cost is unaudited.

Graph IV-5
Passengers Per Vehicle Service Hour
Systemwide, Fixed Route and DAR



	FY 2009	FY 2010	FY 2011
Systemwide	11.9	11.1	10.6
Fixed-Route	14.1	13.2	12.8
Dial-a-Ride	3.7	3.5	3.4

Graph IV-6
Fare Recovery Ratio
Systemwide, Fixed Route and DAR



	FY 2009	FY 2010	FY 2011
Systemwide	19.78%	18.40%	17.48%
Fixed-Route	24.70%	22.16%	22.38%
Dial-a-Ride	6.23%	7.19%	6.74%

Note: Systemwide cost and fare revenue are audited data; modal cost and fares are unaudited.

Findings from Verification of TDA Performance Indicators

1. Operating costs systemwide remained relatively flat over the past three years, increasing by 7.3 percent using audited data. Fixed route operating costs increased by a modest 3.1 percent while DAR costs increased 5.7 percent using unaudited data by mode. The transit system was not impacted as severely during the fluctuations in gasoline fuel prices since the entire fleet is powered by CNG. While MBTA has budgeted for increased CNG fuel during the audit period, fuel prices have stabilized. General administration and maintenance costs increased during the audit period encompassing salary step increases, facility repairs and the inclusion of TransTrack as an operating expense.

2. Ridership increased by 2.4 percent systemwide. Fixed route passengers increased by 2.6 percent; however DAR ridership declined by a negligible 0.4 percent. The service as a whole did not change very much during the audit period, pending implementation of the Comprehensive Operations Analysis in 2012. Aggregate ridership has remained constant despite routing adjustments with the opening of the Yucca Valley Transit Center and the fluctuations in fuel prices.

3. The provision of revenue hours and miles was relatively flat systemwide during the audit period increasing 4.7 percent and 2.0 percent, respectively. Fixed route revenue hours increased 2.5 percent while revenue miles increased by 3.7 percent. DAR revenue hours increased by 13.2 percent while revenue miles decreased by 6.3 percent.

4. Operating cost per passenger decreased 10 percent systemwide, a positive indicator showing that ridership increased faster than operating costs. Cost per passenger decreased 23 percent on fixed route but increased by 36 percent on DAR. The trend in DAR ridership has been declining, while costs continue to increase.

5. Operating cost per hour increased 4.8 percent systemwide. The indicator increased by a negligible 0.5 percent on fixed route while increasing by 6.1 percent for DAR. Both cost and revenue hours increased for fixed route at comparable rates. Operating costs for DAR increased while revenue hours increased at more than twice the rate.

5. Passengers per hour decreased by 2.3 percent systemwide. Fixed route passengers per hour remained flat whereas DAR exhibited a 12 percent decrease. Vehicle service hours grew at a higher rate than passenger trips. For the fixed route, increases in the provision of revenue hours and passenger trips were at parity.

6. Vehicle hours per full-time equivalent, which measures labor productivity, decreased by 18.2 percent systemwide over the past three years. This performance measure decreased modestly for fixed route but increased significantly for DAR. As the allocation

of FTEs between the two modes are estimates, this indicator provides approximations for fixed route and DAR. The agencywide employee count remained fairly stable at between 25 and 32 FTEs. MBTA staff provided the most current FTE count as 25 for fixed route and 7 for DAR.

7. The trend in the fare recovery ratio shows general stability. The farebox ratio for MBTA decreased slightly in the past three years, ranging from 19.78 percent in FY 2009 to 17.48 percent in FY 2011. The TDA minimum ratio of 10 percent was met in each year. Farebox for fixed route fluctuated between the 22 and 24 percent recovery range while DAR was relatively stable. Fare revenues are enhanced from group pass sales and the annual subsidy provided by the fundraising foundation of Copper Mountain College.

MBTA Performance Against COA Benchmark Standards

The MBTA Comprehensive Operations Analysis (COA) developed in May 2007 contained a list of suggested performance standards and benchmarks to help evaluate current services. Subsequently, some of the standards and benchmarks that were carried over to the 2012 COA remained unchanged. The evaluation of performance during the audit period against these benchmarks is summarized in Table IV-4. There is a mixture of performance indicators during the audit period that both meet the benchmarks and fall below the benchmarks. The local fixed route service appears to meet the COA performance benchmarks.

The General Manager has developed a separate set of internal performance targets to gauge performance of the transit service. The targets set annual and monthly benchmarks based on the previous year's data for systemwide operating costs, farebox ratio, passengers, cost per passenger and revenue per passenger.

Table IV-4
MBTA Performance Against COA Benchmark Standards

COA Performance Standard		Benchmarks		FY 2009			FY 2010			FY 2011		
		2007 COA	2012 COA	Commuter Route	Local Fixed Route	Ready Ride	Commuter Route	Local Fixed Route	Ready Ride	Commuter Route	Local Fixed Route	Ready Ride
Operating Cost/Passenger	Fixed Route	$6.00	$6.50	$14.11	$4.07		$18.95	$4.61		$17.35	$4.30	
	Ready Ride	$15.00	$18.00			$17.85			$19.34			$17.83
	Systemwide		$10.00	$5.35			$6.01			$5.67		
Operating Cost/Revenue Hour	All Services	$65.00	$70.00									
	Fixed Route			$74.81	$61.44		$80.65	$65.06		$73.07	$58.61	
	Ready Ride					$66.63			$67.60			$61.02
Passengers/Revenue Hour	Fixed Route	11	11	5.3	15.1		4.3	14.1		4.2	13.6	
	Ready Ride	4.5	3.5			3.7			3.5			3.4
	Systemwide		8	11.9			11.1			10.6		
Farebox Recovery Ratio	Fixed Route	15%-20%	15%-20%	46.70%	21.76%		34.54%	20.58%		33.57%	20.96%	
	Ready Ride	5%-7%	5%-7%			6.22%			7.18%			6.74%
	Systemwide	10%	10%	20.52%			18.88%			18.74%		
Revenue to Non-Revenue Hour Ratio	*Non-revenue hours should not exceed 10% of total revenue and non-revenue hours for all service types.*											
	Fixed Route			13%	8%		16%	8%		15%	8%	
	Ready Ride					9%			9%			9%

Source: TransTrack for FY 2009, 2010 and 2011 performance data

is considered a no-show. A late cancellation is failure to notify MBTA within one hour of the scheduled pickup time. A series of verbal and written warnings are issued for no-shows until the third offense in which a letter of suspension for 30 days is issued.

No-shows are reported internally for each of the five DAR routes on an Excel spreadsheet. Trip denials are not tracked in TransTrack Manager. Based on the data in the MBTA No-Show Reports, there were 312 no-shows in FY 2009; 373 no-shows in FY 2010; and 356 no-shows in FY 2011.

Operations Performance

On-time performance for fixed route is measured by the bus arriving no later than 5 minutes from the scheduled stop. The buses make some deviations to pick up passengers off the route but the time schedules build in some additional time to accommodate the deviations. Fixed route on-time performance is checked using several methods, including the following:

- Dispatch makes random calls to the drivers in the field. The Operations Director provides dispatch with a weekly sheet detailing the route and location of random time checks, which accumulate to about 30 time checks a week. The sheet provides space to record scheduled and actual depart time, time difference, bus number, driver and comments.
- Time checks at select locations by the two Operations Supervisors.
- Shadow rider program to evaluate drivers and conduct on-time checks.

Routes serving the Twentynine Palms Marine Corps Base could involve delays due to security checks performed by the military police as the vehicles go onto the base for pickups and drop-offs as part of the route.

On-time performance for dial-a-ride is checked primarily from reviews of driver manifests by dispatchers. About 25 checks a week are conducted. However, currently the drivers are not required to call in to dispatch to verify their pickup time and location. Calling in would provide another means to confirm the rate of on-time performance. The current pickup window is approximately 20 minutes before and after the scheduled pickup time. MBTA is considering returning to a longer pickup window of one hour (30 minutes before and after the pickup time), as rider productivity has not increased since shortening the window.

Table V-1
On-Time Performance

Fiscal Year	2009	2010	2011	Performance Target
Fixed Route	N/A	96.2%	97.3%	Greater than 90%

Dial-a-Ride		97.3%	99.9%	Greater than 90%

Note: The MBTA Comprehensive Operations Analysis suggests a 90% on-time benchmark.
Source: MBTA internal performance reports.

Customer complaints are made via email to MBTA, called in, or filled out on the customer comment form that is available on the buses. Each complaint is logged into TransTrack by the Operations Director who then calls the customer to inform them of the steps that will be taken to address the issue. Follow-up and resolution with the appropriate staff is made. The process is entered into TransTrack for record keeping while the comment form is placed in the employee's training file for future reference. The complaints are noted during the employee's evaluation.

Using TransTrack, there were 94 complaints recorded in FY 2009, 65 complaints in FY 2010 and 67 complaints in FY 2011. The number of complaints can be measured as complaints per 100,000 passengers. Table V-2 shows this indicator for the transit system using TransTrack. The data shows that the trend of complaints has decreased during the audit period from 24.54 in FY 2009 to 18.16 in FY 2010, with a slight increase to 18.89 in FY 2011 indicating a positive trend of reduced complaints.

Table V-2
Complaints Per 100,000 Passengers

Fiscal Year	Complaints per 100,000 Passengers	Percentage Change
2009	24.54	--
2010	18.16	-26%
2011	18.89	+4%

Note: The MBTA Comprehensive Operations Analysis suggests a benchmark of 1 complaint per 1,000 riders.
Source: TransTrack

Another measure of operations and driver performance is the number of preventable accidents. There is no performance data on preventable accidents entered in TransTrack, although MBTA internal documents were provided that track vehicle incidents. During the audit period, five collision accidents occurred. There was one accident reported in FY 2009 and two accidents reported in FYs 2010 and 2011, respectively. The benchmark in the COA is one preventable accident per 200,000 revenue miles. Given that MBTA records about 680,000 revenue miles systemwide per fiscal year, the benchmark performance measure is generally met.

Maintenance

Section V

Review of Operator Functions

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

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

Within some departments are sub-functions that require review as well, such as Grants Administration that falls under General Administration.

Several changes at MBTA occurred over the past three years, including the following:

- The new Yucca Valley Transit Center opened in March 2009 with some fixed route realignment to meet at the transit center. The sawtooth design of the new transit center includes eight bays and passenger amenities such as restrooms.
- MBTA released a marketing study in August 2009, which sought to identify more cost-effective ways to increase ridership by targeting four key market segments. The marketing study also included rebranding the MBTA logo.
- The agency staffing has stabilized over the past three years. Personnel turnover has been minimal with only two drivers leaving MBTA.
- Though outside of this audit review period, a Comprehensive Operations Analysis (COA) was completed in April 2012 that laid the foundation for enhancements and improvements in service delivery. MBTA has implemented some of the recommended service changes and is continuing its evaluation of other suggestions.

Operations

There have been no significant changes with regard to MBTA's operations yet the operator has sought to increase its visibility and become more responsive to key markets in its service area. MBTA faced three primary cost factors: conversion to and additional fueling infrastructure for CNG; insurance cost containment, and; modest wage increases. Aggregate ridership has remained constant despite disruptions in routing with the opening of the Yucca Valley Transit

Center and the fluctuation in fuel prices. Trips to and from Copper Mountain College in Joshua Tree have also been consistent. The Copper Mountain College Foundation subsidizes ridership at $0.25 per trip. The Yucca Valley Transit Center provides interconnectivity between most of the fixed-routes, including the commuter service to Palm Springs and Route 1, which is the main trunk route along SR-62. The Twentynine Palms Transit Center located at the corner of Adobe and Cactus Streets connects the Route 1 trunk route with the local neighborhood circulators. It is equipped with four bus bays and was completed with the assistance of $500,000 in federal American Recovery and Reinvestment Act (ARRA) funds. According to the 2012 COA, the Twentynine Palms Transit Center ranks highest for the number of alightings and boardings. The Yucca Valley Transit Center ranks fourth in the number of alightings and fifth in the number of boardings.

MBTA has found it challenging to accommodate service requests on Ready Ride to outlying areas given that many of the trips require travel on rural dirt roads. The northern reaches of the Morongo Basin such as Landers, Rimrock, Sunfair Heights and Wonder Valley are more remote with substandard rights-of-way for transit vehicles and pose safety risks. The COA developed policy guidance for addressing these trips.

The deviated fixed route is more productive from a systemwide perspective. Fleet upgrades have been focused on acquiring larger vehicles, which utilize CNG and have a longer range in between fill ups. Drivers use fuel cards to access either slow of fast fill pumps for the vehicles. Smaller vehicles are utilized for Ready Ride demand response service, although MBTA is reviewing larger cutaways to accommodate increasing demand.

MBTA has not raised fares since 1999. The 2012 COA outlines a proposed fare structure that MBTA is seeking to implement in spring 2013 in concert with a route expansion and Sunday service. Based upon the COA recommendations, neighborhood and intercity fares would be increased by $0.50 to $1.50 and $2.50, respectively. The COA also proposed a $0.25 increase in student fares to $0.50 per trip. And in conjunction with the student fare increase, the Copper Mountain College Foundation would increase its contribution to MBTA by $25,000 annually.

With regard to collection of fares, at the end of each day, drivers transfer the metal farebox from the bus to the dispatch office where the fares are deposited into a safe in the presence of the dispatcher. The driver signs the deposit form with the route number and the driver's name. Dispatchers provide an envelope for the fare proceeds, which is kept in a safe. Fares are counted by two employees the following day and deposited daily. A video camera monitors activity in the counting room. Data from driver trip sheets and the reconciliation form are entered into TransTrack.

DAR No-Show and Cancellation Policy

MBTA enforces a no-show policy to enhance productivity and accountability of the clients of Ready Ride, MBTA's demand response service. Reservations are requested at least 24 hours in advance. The wait time by the driver at the rider's designated pickup is 5 minutes before the trip

MBTA implemented its Parts Controller module during the audit period, which is compatible with the Fleet Controller maintenance software. The conversion process took approximately 200 hours, or the equivalent of 2.5 weeks of two full time employees. The coding system identifies a particular item based on a specific part code. Everything is inventoried and coded according to the make of the item. The exception is bulbs and nuts, which are not inventoried due to their relative low cost and categorization as shop supplies. Vendor codes are also programmed into the system.

The Joshua Tree facility has two bays and can accommodate two vehicles for maintenance. There is one SEFAC lift available to reach the vehicle undercarriage. The Twentynine Palms facility located on the corner of Cactus and Adobe has four bays. Maintenance staff is charged with ensuring that oil and other liquid hazards are contained on-site, as spraying to clean oil is not allowed due to water surface runoff issues and in compliance with the department's stormwater pollution prevention plan. A fireproof storage locker is available to store flammable equipment. Occasional welding is also done at the maintenance facilities.

There are three maintenance staff, including the maintenance manager who serves as the master mechanic, a bus mechanic and a utility worker. The utility worker attends to the bus shelters twice a week and empties trash, among other maintenance responsibilities. The bus technician is certified to conduct inspections of the facility's on-site oil tank which stores used vehicle oil. Maintenance of the CNG fueling stations are also conducted by maintenance staff. Vehicle maintenance is conducted during regular work hours between 7:00 a.m. and 4:30 p.m.

The Maintenance Department uses the Fleet Controller program to track vehicles and flag those ready for Preventive Maintenance Inspections (PMIs). There are various levels of preventive maintenance, including "A," "B," "C" and "D" inspections which are based on each vehicle's maintenance guide. "A" PMIs are completed every 30 days or 3,000 miles, whichever comes first, and include a safety check and base inspection. Brakes are inspected during every "A" inspection. "B" inspections include oil changes and are done every 3,000 to 6,000 miles depending on the make of the vehicle. Oil and transmission service are performed according to factory specifications. "C" and "D" inspections are for larger items such as spark plug replacement, transmission service and CNG tank inspections. The "C" inspections occur generally between 24,000 and 30,000 miles, while "D" inspections are conducted between 36,000 and 60,000 miles.

A measure of maintenance performance is the number of recorded incidents that are related to equipment breakdown. MBTA utilizes TransTrack to report roadcalls on the daily roadcall sheet. The daily roadcall sheet displays the date, route number, vehicle number, driver, and problem. The number of roadcalls derived from the daily roadcall sheet is shown in Table V-3:

Table V-3
MBTA Roadcalls

	FY 2009	FY 2010	FY 2011

Roadcalls	74	93	96

Source: TransTrack

The number of roadcalls reported by MBTA has shown an upward trend. Most of the problems incurred include engine issues, air conditioning, wheelchair lifts and tires. Upon further investigation, the number of revenue miles between roadcalls is not available on TransTrack.

Planning

MBTA's planning efforts have had their basis in the Comprehensive Operational Analysis (COA) and the unmet transit needs process. The 2007 COA has provided performance benchmarks and service improvement considerations for MBTA to implement. In addition, the COA takes into consideration market trends through rider surveys and focus groups, which lead to strategies to better serve those markets. Although outside of the audit period, the 2012 COA was commissioned and adopted in April 2012. The 2012 COA was initiated in August 2011 and provides an updated performance measurement system. Both COAs concluded that the primary focus of MBTA is to provide safe, reliable, and cost-effective means of transportation for its residents and adjoining communities.

The performance measurement system contained in the 2012 COA provides a series of four goals and corresponding objectives, performance measures and standards. Some goals and objectives from the 2007 COA believed to be relevant were carried forward. Table V-4 outlines the goals and objectives found in the 2012 COA:

Table V-4
2012 COA Performance Measurement System – Goals/Objectives

Goals	Objectives
I. Sustainably operate an efficient and effective transit system through maximizing service and minimizing cost impacts.	a. Minimize operating cost.
	b. Increase transit passengers.
	c. Increase revenues.
II. Provide safe, reliable, and high quality transportation.	a. Provide safe transportation.
	b. Provide quality transportation.
	c. Provide reliable transit service
III. Undertake effective marketing, outreach, and public participation.	a. Develop and implement marketing plan.
	b. Provide various opportunities for customer feedback.
IV. Provide transit service that is accessible to all persons while maintaining system productivity.	a. Handicap accessibility
	b. Bicycle accessibility

Source: 2012 MBTA COA

By updating these goals and objectives, MBTA has reaffirmed its commitment to further enhance the transit system through meeting the needs of Morongo Basin residents and providing viable mobility options. MBTA's planning initiatives extend to intergovernmental cooperation with its member jurisdictions. Through its Transit-Oriented Development (TOD) program, MBTA requires that bus shelters be a condition of approval for new development as well as bus turnouts.

Marketing

In 2009, MBTA commissioned a marketing study that examined how its advertising resources were being allocated. Past marketing efforts have consisted of cable television, newspaper and radio advertising. The study identified more cost-effective modes that would reach targeted high-productivity markets in the service area. The four targeted markets for the intercity bus service are service workers, college students, trainees at the Twentynine Palms Marine Base and senior citizens. Specific marketing tools were developed for each targeted market consisting of testimonials and benefits of using transit. The marketing study also included a rebranding campaign that features a bolder MBTA logo on the side of the buses as well as updated bus stop signage.

MBTA's website (www.mbtabus.com/) includes general information about changes to the service, bus schedules, fares and contact information. Links are also provided to the member agencies' home pages as well as to neighboring transit systems. A commuter calculator is available that helps determine how much money a commuter can save by taking the bus versus driving within the Morongo Basin or to Palm Springs.

MBTA has also developed a glossy multi-fold riders guide featuring a systemwide route map, schedules and fares and general ridership information. The riders guide underwent an update in the spring of 2009 and 2012. Bus shelters have been upgraded to include bus information, and additional illuminated I-Stops have been installed along the main SR-62 corridor to facilitate better visibility of passengers at bus stops.

The General Manager makes presentations at social service agencies and senior centers regarding the transit system. Volunteer transit ambassadors at these locations help to promote the system and train riders about taking the bus. Booths at local events are also available for transit marketing.

General Administration and Management

MBTA is governed by a seven member Board of Directors comprised of two members from each Twentynine Palms and Yucca Valley, two members from the San Bernardino County Board of Supervisors representing the First and Third Districts and one at-large resident member from the Morongo Basin. Each jurisdiction represented on the Board also appoints one alternate member. Board meetings are held monthly on the fourth Thursday at 5:00 p.m. at the MBTA

Operations Center in Joshua Tree. The Technical Advisory Committee meets prior to the regularly scheduled Board meeting.

In October 2008, the MBTA JPA was amended to permit the appointment of a fifth "floating" alternate who may act in the absence of any sitting member or alternative as well as allow members to receive compensation of $100 for their attendance at Governing Board meetings. The General Manager reports that the Board is very supportive.

Staffing at MBTA has been fairly stable during the period. Management personnel is comprised of a General Manager, Operations Manager, Office Manager, Maintenance Manager, and Operations Supervisor. There are 25 drivers, 4 dispatchers (3 full-time, 1 part-time), 1 mechanic, and 1 utility person. MBTA is a non-union shop where employment is on at-will basis. Employee turnover has been limited to two driver departures, one retiring and the other leaving voluntarily.

The MBTA Board is kept abreast of transit activities through a number of Board reports. Monthly board meetings are accompanied by a spiral-bound agenda packet. Also, annual reports are submitted and presented to the Councils at the Town of Yucca Valley and City of Twentynine Palms.

The Board is provided an agenda packet at each regular board meeting. A sample agenda provided by the agency shows that performance data is tracked and reported to the Board monthly. On the consent calendar, a series of performance-oriented reports are scheduled, including an Operations Report, Ridership Report, Financial Report, and Administrative Report.

The Operations Report provides the status of personnel, operations/safety, and maintenance, as well as descriptions and resolutions of complaints. Specific customer complaints for the month are included, as are the comments made and actions taken to resolve the complaints. The Ridership Report shows passenger ridership by route and certain performance indicators including passengers per revenue hour and farebox recovery. Both route-level data and total data are shown.

The Financial Report provides a comparison by line item of each expenditure during the month and year to date. Expenses are separated by departments including administrative, operations and maintenance. Revenues reported for the month are also shown in a separate statement of income. Finally, the Administrative Report includes a Management Report that provides an update on activities for the month and is accompanied by additional performance data on the transit system. TransTrack data is used as the basis of the operations and performance information.

Grants Administration

MBTA manages its grants using Excel spreadsheets and uses QuickBooks to track expenses by capital project. MBTA is a direct claimant of TDA funding through SANBAG. During the audit

period, MBTA budgeted TDA revenues, State funds (Proposition 1B), and federal monies (CMAQ, FTA 5311 and FTA 5311(f)). The largest capital project was the construction of the Yucca Valley Transit Center. The agency also received grants to install bus shelters and benches, I-Stops for bus stop locations in dark areas, and map cases for schedules. Replacement of transit vehicles is also programmed as vehicles are retired.

MBTA was awarded Proposition 1B funds toward an emergency generator and barrier doors. New vehicle procurement was funded through CMAQ and FTA Section 5311(f)/ARRA grant funds. About $300,000 in FTA Section 5311(f)/ARRA funds were awarded toward the completion of the Twentynine Palms Transit Center as well as $200,000 toward the procurement of two vehicles. FTA Section 5311 grant funds are utilized toward operating assistance which has averaged $290,000 annually during the audit period.

MBTA has developed its own grant funding program to assist local government agencies and 501(c)(3) non-profit providers in the Morongo Basin in meeting unmet transportation needs, accessing or augmenting MBTA's transit services. The Transportation Assistance Grant (TAG) is a procurement program developed by MBTA from vehicles that results in non-publicly funded income from fees paid by other agencies in order to access MBTA's vehicle purchasing contracts. The MBTA Board sets set amount of funding in any given fiscal year to fund eligible transportation assistance projects within the Morongo Basin subarea. Recent funding amounts have totaled about $40,000 annually. TAG funds awarded can be applied toward trip assistance programs, local matches for federal transportation grants, and capital and operating assistance for senior/disabled transportation services.

In addition, MBTA, as a member of CalACT's Rural Task Force Committee, is one of eight rural agencies to assist Caltrans in the streamlining of the grant funding and procurement process. MBTA, through the CalACT/MBTA Purchasing Cooperative, has direct involvement in the vehicle procurement process until the vehicles are awarded funding, from which then CalACT serves as the contract administrator. Caltrans has tended to be more procedural in its grant review process due to scrutiny and audits by the federal government, which have contributed to delays in processing applications. As a result, the MBTA general manager has had to spend more time on funding issues than in the past.

Section VI

Findings

The following summarizes the major findings obtained from this Triennial Audit covering fiscal years 2009 through 2011. A set of recommendations is then provided.

Triennial Audit Findings

1. Of the compliance requirements pertaining to MBTA, the operator fully complied with seven out of the nine requirements. The operator was in partial compliance with regard to the timely submittal of its annual fiscal and compliance audits and the consistency in recording performance data. Responsibility for submittal of the annual fiscal audit lies with the SANBAG auditor, which operates independently of MBTA. Two additional compliance requirements did not apply to MBTA (e.g., rural/urban farebox recovery ratios).

2. MBTA's farebox recovery ratio remained well above the required 10 percent standard in spite of a downward trend. The average systemwide farebox recovery ratio was 18.56 percent during the triennial review period.

3. MBTA participates in the CHP Transit Operator Compliance Program and received vehicle inspections within the 13 months prior to each TDA claim. Satisfactory ratings were made for all inspections conducted during the audit period with minor violations noted for exposed edges of a wheelchair lift that was not padded and leaking fluids from the power steering gearbox.

4. The operating budget increased modestly during the period. There was an increase of 2.5 percent in FY 2009 followed by a 3.1 percent in FY 2010 and a 1.0 percent increase in FY 2011.

5. Out of the five prior audit recommendations, four recommendations were implemented satisfactorily. The recommendation pertaining to the proper recording of full-time equivalents into TransTrack and the State Controller's Report has been partially implemented and has been carried forward in this audit.

6. Operating costs systemwide remained relatively flat over the past three years, increasing by 7.3 percent using audited data. Fixed route operating costs increased by a modest 3.1 percent while DAR costs increased 5.7 percent using unaudited data. While MBTA has budgeted for increased CNG fuel during the audit period, fuel prices have stabilized. General administration and maintenance costs increased during the audit

period encompassing salary step increases, facility repairs and the inclusion of TransTrack as an operating expense.

7. Operating cost per passenger decreased 10 percent systemwide, a positive indicator showing that ridership increased faster than operating costs. Cost per passenger decreased 23 percent on fixed route but increased by 36 percent on DAR. The trend in DAR ridership has been declining, while costs continue to increase.

5. Operating cost per hour increased 4.8 percent systemwide. The indicator increased by a negligible 0.5 percent on fixed route while increasing by 6.1 percent for DAR. Both cost and revenue hours increased for fixed route at comparable rates. Operating costs for DAR increased while revenue hours increased at more than twice the rate.

8. Passengers per hour decreased by 2.3 percent systemwide. Fixed route passengers per hour remained flat whereas DAR exhibited a 12 percent decrease. Vehicle service hours grew at a higher rate than passenger trips. For the fixed route, increases in the provision of revenue hours and passenger trips were at parity.

9. The farebox ratio for MBTA decreased slightly in the past three years, ranging from 19.78 percent in FY 2009 to 17.48 percent in FY 2011. The TDA minimum ratio of 10 percent was met in each year. Farebox for fixed route fluctuated between the 22 and 24 percent recovery range while DAR was relatively stable. Fare revenues are enhanced from group pass sales and the annual subsidy provided by the fundraising foundation of Copper Mountain College.

10. The new Yucca Valley Transit Center opened in March 2009 with some fixed route realignment to meet at the transit center. The sawtooth design of the new transit center includes eight bays and passenger amenities such as restrooms.

11. MBTA released a marketing study in August 2009, which sought to identify more cost-effective ways to increase ridership by targeting four key market segments. The marketing study also included rebranding the MBTA logo.

12. Though outside of this audit review period, a Comprehensive Operations Analysis (COA) was completed in April 2012 that laid the foundation for enhancements and improvements in service delivery. The 2012 COA was initiated in August 2011 and provides an updated performance measurement system.

13. MBTA has not raised fares since 1999. The 2012 COA outlines a proposed fare structure that MBTA is seeking to implement in spring 2013 in concert with a route expansion and Sunday service. Based upon the COA recommendations, neighborhood and intercity fares would be increased by $0.50 to $1.50 and $2.50, respectively. The COA also proposed a $0.25 increase in student fares to $0.50 per trip.

14. In October 2008, the MBTA JPA was amended to permit the appointment of a fifth "floating" alternate who may act in the absence of any sitting member or alternative as well as allow members to receive compensation of $100 for their attendance at Governing Board meetings.

15. Staffing at MBTA has been fairly stable during the period. MBTA is a non-union shop where employment is on at-will basis. Employee turnover has been limited to two drivers leaving; one retired and the other quit voluntarily.

16. MBTA has developed its own grant funding program to assist local government agencies and 501(c)(3) non-profit providers in the Morongo Basin. The Transportation Assistance Grant (TAG) is a vehicle procurement program developed by MBTA that results in non-publicly funded income generated from fees paid by other agencies to access MBTA's vehicle purchasing contracts.

Recommendations

1. Enter on-time performance data into TransTrack.
   (High priority)

   With the increased utilization of TransTrack as a central data collection source and monitoring tool, certain measures have yet to be tracked. One such measure pertains to on-time performance. Although on-time performance is tracked by having drivers call-in to the dispatchers at key time points, random time checks and other means, MBTA should enter this information into TransTrack to enhance the use of the monitoring software.

2. Work with the SANBAG fiscal auditor to properly record correct full-time equivalents in the State Controller's Report.
   (High Priority)

   The correct count of employee hours is reported by MBTA in TransTrack which should serve as the basis for completing the actual State Controller's Report that is submitted to the State. MBTA has been utilizing TransTrack to record employee work hours under the Personnel tab in TransTrack Manager. However, in the FY 2010 State Controller's Report prepared by SANBAG's fiscal auditor, the incorrect number of FTEs was recorded and transposed between the fixed-route and DAR modes. MBTA should work with the fiscal auditor to conduct a final check of the State Controller Report for data accuracy prior to submittal to the State.

3. Keep copies of the State Controller's Report on file.
   (Medium Priority)

   MBTA's State Controller Report is prepared and submitted to the State on behalf of the agency by SANBAG's fiscal auditor. However, MBTA has not received final copies of its State Controller's Reports to keep in its office file. As some portions of State Transit Assistance Funding determined by the State is based on information contained in the controller reports, MBTA should have these reports readily accessible at its office.