Merrimack Valley Regional Transit Authority's Use of American Recovery and Reinvestment Act Funds
For the period July 1, 2009 through September 30, 2011
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INTRODUCTION AND SUMMARY OF FINDINGS AND RECOMMENDATIONS

This audit was conducted as part of the Office of the State Auditor’s ongoing efforts to audit the receipt, administration, and disbursement of American Recovery and Reinvestment Act (ARRA) funds by state entities. In addition to reviewing controls over the receipt and expenditure of ARRA funds and determining compliance with applicable laws, rules, and regulations, we assessed the Merrimack Valley Regional Transit Authority’s (MVRTA) progress in taking corrective action relative to issues with internal controls over fixed bus route revenue collections reported in our prior audit.

Highlight of Audit Findings

• Our prior audit (No. 2008-0496-3A) revealed that automated farebox readings for buses were not in agreement with actual fare revenues collected for the entire period under review (July 1, 2006 to December 31, 2007), with the total variance exceeding $40,000. MVRTA management explained that the fareboxes in use had been repaired several times, but they were near the end of their useful life of about six years. MVRTA further informed us that it would cost over $600,000 to replace all of its bus fareboxes and that it did not have sufficient funds at that time; however, it plans to replace the entire farebox system within its 2009-2012 capital budget cycle. To immediately address the issue, MVRTA has implemented a program of routine testing of all fareboxes and repairing or replacing them, as appropriate.

Recommendations of the State Auditor

• Until MVRTA can replace all of its fareboxes, it should continue routine testing of all bus fareboxes to monitor their effectiveness and repair or replace them, as necessary.

Agency Progress

Until it can replace all the fareboxes, MVRTA tests each farebox once every 50 days; if the variance between readings and actual collections is more than 3%, the farebox is either repaired or replaced. During our current audit period, MVRTA participated in a joint procurement effort with nine other regional transit authorities, but had not replaced all fareboxes as of the completion of our audit fieldwork.

In response to our draft report, the MVRTA indicated that the new farebox installations were completed on January 29, 2012 and initial testing revealed an error rate of less than one (1) percent.
OVERVIEW OF AUDITED AGENCY

The Merrimack Valley Regional Transit Authority (MVRTA) was established in accordance with the provisions of Chapter 161B of the Massachusetts General Laws to provide public fixed route bus transportation service as well as supplementary paratransit service for the municipalities of Amesbury, Andover, Boxford, Georgetown, Groveland, Haverhill, Lawrence, Merrimac, Methuen, Newbury, Newburyport, North Andover, Rowley, Salisbury, and West Newbury. MVRTA contracts with the Merrimack Valley Area Transportation Company, a division of First Transit incorporated, to provide fixed route and demand transportation services, including maintenance and administrative functions. An Advisory Board composed of members from the local communities served by MVRTA maintains local control. The Advisory Board makes policy decisions for and provides general oversight of MVRTA’s administrative operations and appoints an Administrator, who manages the day-to-day activities of MVRTA.

The chief sources of funding for Authority operations are passenger fares, operating subsidies from the Commonwealth and federal government, and assessments to member municipalities. In addition, MVRTA receives state and federal capital grants to finance the acquisition and improvement of facilities and equipment.

During our audit period, MVRTA was awarded two grants under the American Recovery and Reinvestment Act (ARRA) for the Urbanized Area Formula Program under 49 U.S.C. 5307: MA-96-X013-01\(^1\) ($7,202,661), and MA-66-X012-00\(^2\) ($720,266). The ARRA grants, totaling $7,922,927, were awarded by the Federal Transit Administration (FTA) within the U.S. Department of Transportation.

The MA-96 grant has been used for renovations and additions at the MVRTA Haverhill office and maintenance facility, construction of a bus terminal transit center in Amesbury, acquisition of security equipment, operating assistance, and preventive maintenance. The MA-66 grant has been used to restore MVRTA’s ARRA capital program to its original level, following award of MA-96-

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\(^1\) ARRA funds appropriated for Transit Capital Assistance Urbanized Area Formula – Economic Recovery. Under the Supplemental Appropriations Act of 2009, recipients of Transit Capital Assistance Urbanized Area Program funds may use up to 10% of the amount appropriated under ARRA for operating assistance expenses. Available at http://www.ncppp.org/publications/TransitBoston_0909/Ledoux_0909.pdf.

\(^2\) ARRA funds appropriated for Transit Capital Assistance from the Surface Transportation Program (STP) Urbanized Area Formula – Economic Recovery (FHWA Flex). Funds are to be used to restore MVRTA’s ARRA capital program to its original level following the award of MA-96-X013-01, which allocated 10% of MVRTA’s ARRA program from capital to operating funds. Available at https://www.massdot.state.ma.us/Portals/20/Downloads/RTA_Stimulus.pdf
X013-01, which reallocated a like amount of funds equal to 10% of MVRTA’s ARRA program from capital to operating, as allowable under the Supplemental Appropriations Act of 2009 (H.R. 2346).

As of September 30, 2011, MVRTA received and expended ARRA funds as described in the following schedule:

<table>
<thead>
<tr>
<th>Grant Award</th>
<th>Award Amount</th>
<th>Amount Received</th>
<th>Amount Expended</th>
</tr>
</thead>
<tbody>
<tr>
<td>MA-96-X013-01</td>
<td>$7,202,661</td>
<td>$5,508,806</td>
<td>$5,508,806</td>
</tr>
<tr>
<td>MA-66-X012-00</td>
<td>720,266</td>
<td>126,893</td>
<td>126,893</td>
</tr>
<tr>
<td><strong>Total</strong></td>
<td><strong>$7,922,927</strong></td>
<td><strong>$5,635,699</strong></td>
<td><strong>$5,635,699</strong></td>
</tr>
</tbody>
</table>
AUDIT SCOPE, OBJECTIVES, AND METHODOLOGY

In accordance with Chapter 11, Section 12, of the Massachusetts General Laws, we have conducted an audit of certain activities of MVRTA for the period July 1, 2009 through September 30, 2011. The objectives of our audit were to obtain and review a listing of the type and amount of all ARRA funds that MVRTA has applied for, plans to receive, or has received and expended; to review and evaluate MVRTA’s internal controls over ARRA expenditures and determine whether ARRA funds are being expended for the intended purposes and in compliance with applicable laws, rules, and regulations; to determine whether MVRTA is complying with ARRA accounting and reporting requirements as well as other grant requirements; and to ensure that MVRTA has identified and reported the number of jobs created/retained with ARRA funds. We also conducted a follow-up review of an audit finding concerning farebox revenue discussed in a prior audit of MVRTA.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require that we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our audit objectives. We believe that the evidence obtained provides a reasonable basis for our finding and conclusions based on our audit objectives.

To achieve our audit objectives, we conducted the following audit procedures:

- Determined whether internal controls were developed to ensure that federal stimulus funds are safeguarded against loss, theft, and misuse.
- Obtained and reviewed a listing of all ARRA grants applied for and awarded.
- Tested internal controls over ARRA expenditures and determined whether ARRA funds are being expended for the intended purposes and in compliance with applicable laws, rules, and regulations.
- Reviewed recordkeeping procedures to determine whether the expenditure of ARRA funds is properly authorized, supported by adequate documentation, and accounted for separately within MVRTA’s accounting records.
- Reviewed ARRA reports and supporting documentation to ensure that MVRTA was in compliance with reporting requirements including identifying the number of jobs created/retained.
- Reviewed any corrective action taken regarding issues with farebox revenue disclosed in our prior audit report (No. 2008-0496-3A).
Based on our review we have concluded that, except for the issue addressed in the Audit Findings section of this report, for the period July 1, 2009 through September 30, 2011, MVRTA maintained adequate management controls and complied with applicable laws, rules, and regulations for the areas tested.
AUDIT FINDINGS

PRIOR AUDIT RESULTS PARTIALLY RESOLVED — AUTOMATED FAREBOXES ARE NOT PROVIDING ADEQUATE CONTROL OVER FIXED BUS ROUTE REVENUE COLLECTIONS

Our prior audit (No. 2008-0496-3A) of the Merrimack Valley Transportation Authority (MVRTA) revealed that automated farebox readings for buses were not in agreement with actual fare revenues collected for the entire 79-week period (July 1, 2006 to December 31, 2007) under review. Specifically, fare revenue collections for 49 weeks were less than the farebox readings by a total of $24,887, whereas fare revenue collections for 30 weeks were greater than the farebox readings by $15,314. MVRTA management explained that the fareboxes in use had been repaired several times, but they were near the end of their useful life of about six years, which likely led to the variances. MVRTA management indicated that replacement fareboxes would cost approximately $12,000 to $15,000 each and that it would therefore cost MVRTA over $600,000 to refit all of its buses. At the conclusion of our prior audit fieldwork, MVRTA was conducting tests of all fareboxes to determine the extent of the problem and possible solutions, including repairing defective boxes. We recommended that in order to improve controls over bus revenue collections, MVRTA should continue testing all bus fareboxes to determine defective versus salvageable fareboxes, and to evaluate whether the fareboxes can be used reliably to establish potential revenue. We also recommended that MVRTA repair and replace fareboxes as necessary and as funds become available. In its written response, MVRTA stated that it will continue to audit individual fareboxes to address variances. MVRTA further stated that it had programmed, within its fiscal year 2009 – 2012 Capital Program, the replacement of the entire farebox system (purchased in 2002) in 2010, in keeping with an eight-year replacement cycle.

Our follow-up review determined that MVRTA took the initial steps to replace all of its 50 fareboxes with new units. In November 2010, MVRTA took part in a joint procurement effort with nine other local Regional Transit Authorities (RTAs) for the replacement of all MVRTA fareboxes. However, due to the complexity of the farebox design, and the involvement of the nine other RTAs, the project’s completion date has been delayed until the first quarter of calendar year 2012. Therefore, as of the completion of our fieldwork on December 14, 2011, MVRTA had not replaced any of the bus fareboxes. Until it can replace all the fareboxes, MVRTA audits each farebox once every 50 days. If the farebox test yields an error rate greater
than 3%, it is removed for repair or immediate replacement. We observed one farebox audit to view the testing procedure and the counting of funds from that individual farebox. We then obtained and reviewed one month’s farebox audit data, including the farebox audit we observed, and noted that all results fell within the 3% error threshold.

**Recommendation**

Until MVRTA can replace all of its bus fareboxes, it should continue routine testing of all bus fareboxes to monitor their effectiveness and repair fareboxes as necessary.

**Auditee’s Response**

*In response to your follow-up review, the new farebox installation program began on Friday, January 27, 2012 and continued until all installs were completed on Sunday, January 29, 2012. The system went live with first pullout on Monday, January 30, 2012.  

Within the first three (3) weeks of service, every bus was audited to test the accuracy of the reporting system. Revenue counted was within 0.6% of what was reported. This auditing process will continue throughout the lifetime of the equipment.*