LIVERMORE AMADOR VALLEY TRANSIT AUTHORITY

STAFF REPORT

SUBJECT: Transportation Development Act (TDA) Triennial Performance Audit for the Livermore Amador Valley Transit Authority (LAVTA) Prepared for the Metropolitan Transportation Commission for the Fiscal Years 2013 Through 2015

FROM: Beverly Adamo, Director of Administrative Services

DATE: September 12, 2016

Action Requested
Accept the Triennial Performance Audit of the Livermore Amador Valley Transit Authority for the Fiscal Years 2013-2015.

Background
Every three years the Metropolitan Transportation Commission (MTC) must conduct an audit on any transit operator receiving Transportation Development Act (TDA) Article 4 funds. This is to determine whether the operator is in compliance with certain statutory and regulatory requirements, and to assess the efficiency and effectiveness of the operator's services.

This performance audit consists of:

- an assessment of data collection and reporting procedures;
- a review of performance trends in TDA-mandated indicators and component costs;
- a review of compliance with selected state Public Utilities Code (PUC) requirements;
- an evaluation of LAVTA's actions to implement the recommendations from the prior performance audit;
- an evaluation of functional performance indicator trends; and
- findings, conclusions, and recommendations to further improve LAVTA's performance based on the results of the Audit.

Results of the Audit
LAVTA is in compliance with the data collection and reporting requirements for the five TDA statistics for performance indicators; however, the accuracy of reported paratransit statistics does not appear to be consistent for the audit period and potential causes are discussed in the attached Executive Summary.

The report also discusses performance trends for both fixed route and paratransit service, utilizing a six-year analysis period for all indicators and analyzing component operating costs.

LAVTA is in compliance with the section of the Public Utilities Code (PUC) that was reviewed as part of this performance audit. This section included requirements concerning California Highway Patrol (CHP) terminal safety inspections, vehicle staffing, labor contracts, reduced fares, welfare-to-work, revenue sharing and evaluating passenger needs.

The report noted that there were no recommendations made in LAVTA's prior performance audit in 2013.

In the area of functional performance indicator trends, a detailed set of system wide and modal functional area performance indicators were defined and reviewed, the highlights of which are listed in the Executive Summary for System wide, Fixed Route and Paratransit services.

The final section in the Executive Summary contains the following recommendations for LAVTA:

- Ensure that data is collected and reported accurately by the paratransit contractor.
  LAVTA Response: LAVTA's current paratransit contractor implemented a new industry standard paratransit software system as of April 2016 and fully expects the new system to improve data collection and reporting efforts and is monitoring the new system to ensure accuracy of the data reported.

- Examine causes and prepare a plan for improving on-time performance of the fixed route bus service.
  LAVTA Response: LAVVTA has updates the service standards to a more realistic 85% on-time service goal and has just implemented significant route changes as part of the Comprehensive Operational Analysis (COA), by which, all the bus schedules will be updated to more accurately reflect existing running time, improving system wide on-time performance.

Next Steps
Other than the acceptance of this report, no further action is required of LAVTA.

Each year however, Performance Improvement Program (PIP) Topics and projects are submitted to MTC along with the TDA claim. Staff will report on progress regarding the two recommendations through the PIP and claim process.

Recommendation
The Finance and Administration Committee recommend the Board of Directors accept the TDA Performance Audit Report for Fiscal Years 2013-2015.

Attachments:
1. Triennial Performance Audit – Final Audit Report Executive Summary

Approved: _____

Attachment 1

Triennial Performance Audit

of the

Livermore/Amador Valley Transit Authority (LAVTA)

Fiscal Years 2012/13, 2013/14 and 2014/15

FINAL AUDIT REPORT

prepared for the

METROPOLITAN TRANSPORTATION COMMISSION

by

Pierlott & Associates, LLC
Management Consulting

June 2016

EXECUTIVE SUMMARY

This executive summary highlights the findings from the performance audit of the Livermore/Amador Valley Transit Authority (LAVTA). In California, a performance audit must be conducted every three years of any transit operator receiving Transportation Development Act (TDA) Article 4 funds, to determine whether the operator is in compliance with certain statutory and regulatory requirements, and to assess the efficiency and effectiveness of the operator's services. The two service modes operated by LAVTA, bus, and paratransit, are the prime focus of this performance audit. The audit period is Fiscal Years 2013 through 2015 (from July 1, 2012 through June 30, 2015).

Performance Audit and Report Organization

The performance audit is being conducted for MTC in accordance with its established procedures for performance audits. The final audit report consists of these sections:

- An assessment of data collection and reporting procedures;
- A review of performance trends in TDA-mandated indicators and component costs;
- A review of compliance with selected PUC requirements;
- An evaluation of LAVTA's actions to implement the recommendations from the last performance audit;
- An evaluation of functional performance indicator trends; and
- Findings, conclusions, and recommendations to further improve LAVTA's performance based on the results of the previous sections.

Comments received from LAVTA and MTC staff regarding the draft report have been incorporated into this final report. Highlights from the key activities are presented in this executive summary.

Results and Conclusions

Review of TDA Data Collection and Reporting Methods - The purpose of this review is to determine if LAVTA is in compliance with the TDA requirements for data collection and reporting. The review is limited to the five data items needed to calculate the TDA-mandated performance indicators. This review has determined that LAVTA in compliance with the data collection and reporting requirements for these performance indicators; however, the accuracy of reported paratransit statistics does not appear to be consistent for the audit period.

Paratransit vehicle service hours and vehicle service miles exhibit significant irregularities in FY2014 and FY2015. Part of this may be explained by the change in paratransit contractors in FY2014, but LAVTA has acknowledged this discrepancy and is currently working with the contractor to ensure that service statistics are recorded accurately. LAVTA adjusted its FY2015 NTD report for demand response service hours and miles and submitted it for review. The contractor recently has implemented a new software tracking system to improve data collection and reporting. LAVTA will continue to follow up with the contractor, is monitoring the current fiscal year reporting, and indicated they are prepared to make adjustments to the FY2016 NTD reporting when they are satisfied with the results of their monitoring.

Performance Indicators and Trends – LAVTA's performance trends for the five TDA-mandated indicators were analyzed by mode. A six-year analysis period was used for all the indicators. In addition, component operating costs were analyzed.

- Bus Service – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2010 through FY2015:

  – Cost efficiency improved, with an average annual decrease in the operating cost per hour of 1.4 percent, or 3.9 percent in inflation adjusted dollars. The largest annual decrease (5 percent) occurred early in the audit period, in FY2011.

  – The cost per passenger increased on average by 3.8 percent per year, which amounted to an average annual increase of 1.2 percent in constant FY2010 dollars.

  – Passenger productivity showed negative trends, with passengers per vehicle service hour and vehicle service mile both decreasing by about five percent per year overall.

  – Employee productivity increased an average 1.3 percent per year.

  The following is a brief summary of the component operating costs trend highlights for the bus service between FY2010 and FY2015:

  – Overall, total operating costs increased and annual average of 2.7 percent. The most significant change was an average annual increase of about 11 percent in the miscellaneous other costs area.

  – Purchased transportation costs represented the largest portion of the total costs, representing about 65 percent in all six years.

  – In-house labor, fuel/lubricants and casualty/liability costs all showed increases of less than three percent annually, while services increased about four percent annually. Fringe benefits experienced the only cost decrease, averaging four percent annually.

- Paratransit – The following is a brief summary of the TDA performance

trend highlights over the six-year period of FY2010 through FY2015:

- Cost efficiency improved overall, with an average annual decrease in the operating cost per hour of 10.1 percent (12.4 percent in inflation adjusted dollars). A 37.9 percent annual increase occurred in FY2014, which was followed by a 27.7 percent decrease in FY2015, when operating costs increased by 12.5 and 19.4 percent, respectively. At the same time, service hours decreased 18.4 percent in 2014, then rose 65.1 percent the following year.

- The operating cost per passenger averaged an annual increase of 2.7 percent, or 0.1 percent when normalized in FY2010 dollars. Operating costs decreased by about three percent per year over the period, while passenger levels decreased by 5.5 percent per year.

- Passenger productivity declined significantly, with both passengers per hour decreasing 12.5 percent and passengers per mile decreasing 7.5 percent per year on average. Fluctuations in service hours and miles in both FY2014 and FY2015 caused by potential incorrect data reporting by the operating contractor may be partly responsible for the decrease.

The following is a brief summary of the component operating costs trend highlights for paratransit between FY2010 and FY2015:

- Purchased transportation costs, by far the largest component cost category, increased by only 1.3 percent per year on average. Purchased transportation as a percentage of total costs increased from about 75 percent to about 90 percent during this period.

- Significant cost decreases were seen in the fringe benefit (12.2 percent), casualty/liability (51.9 percent) and miscellaneous other costs (33.2 percent), and fuel/lubricants (100 percent), which were incorporated into the purchased transportation category from FY2012 through FY2015.

Compliance with Statutory Requirements – LAVTA is in compliance with the sections of the state PUC that were reviewed as part of this performance audit. These sections included requirements concerning CHP terminal safety inspections, vehicle

staffing, labor contracts, reduced fares, welfare-to-work, revenue sharing, and evaluating passenger needs.

Status of Prior Audit Recommendations – There were no recommendations made in LAVTA's prior performance audit.

Functional Performance Indicator Trends - To further assess LAVTA's performance over the past three years, a detailed set of systemwide and modal functional area performance indicators was defined and reviewed.

- Systemwide – The following is a brief summary of the systemwide functional trend highlights between FY2013 and FY2015:
  - Administrative costs were steady at about one quarter of total operating costs, averaging between $20 and $25 per vehicle service hour.
  - Marketing costs decreased slightly overall compared to total administrative costs, with marketing cost per passenger trip remaining mostly unchanged.
  - The TDA Article 4 operating ratio (including local support) fluctuated between 50 and 65 percent, while the systemwide farebox recovery ratio declined from 18 to 15 percent.
- Bus Service – The following is a brief summary of the bus service functional trend highlights between FY2013 and FY2015:
  - Service Planning results showed a consistent rate of 86 and 91 percent vehicle miles and hours in service, and steady rates of passengers per mile and hour.
  - Operations results showed a six percent increase in the cost per passenger mile, but a decrease in vehicle operations costs per hour.

Schedule adherence remained steady at about 80 percent, while valid complaints decreased and there were almost no missed trips.

- Maintenance results showed vehicle maintenance costs increasing by about five percent, but also a high spare ratio of about 35 percent, which is justified by LAVTA's agreements with BART and ACE rail to provide emergency bus bridge service. The total mechanical failure rate increased about 24 percent in FY2014, but recovered in FY2015 to improve by about three percent overall.

- Safety results showed preventable accidents decreasing significantly in FY2014, then increasing again in FY2015, but still below the FY2013 level.

- Paratransit – The following is a brief summary of the paratransit functional trend highlights between FY2013 and FY2015:

  - Service Planning results showed improvement in vehicle miles in service of about four percent over the period, while hours in service decreased slightly by about two percent. Both passengers per mile and hour showed a significant decrease in FY2015 from the prior years (about 45 and 35 percent, respectively), likely due to the service mile and hour data reporting issues from the contractors.

  - Operations results showed a 45 percent decrease in the cost per passenger mile, and a slight one percent decrease in vehicle operations costs per hour. Again, the service hour and mile reporting issues may have skewed the results of these indicators.

  - Schedule adherence improved to 97 percent over the audit period. Very few valid passenger complaints and missed trips were recorded during the audit period. There were no ADA trip denials reported during the period. Trip cancellations and late trip cancellations increased, but due to trip data for these indicators only being available for two of the three years (and not all the same years), it is difficult to determine an accurate level of increase. Passenger no-shows increased about 20 percent over the audit period.

- Maintenance results showed vehicle maintenance costs decreasing by almost 25 percent, the spare ratio increasing about 36 percent, and significant improvement in the total mechanical failure rate.

- Safety results showed an increase from zero preventable accidents in FY2013 to 1.72 preventable accidents per 100,000 miles in FY2015.

Recommendations

1. ENSURE THAT DATA IS COLLECTED AND REPORTED ACCURATELY BY THE PARATRANSIT CONTRACTOR.
   [Reference Section: II. Review of TDA Data Collection and Reporting Methods; III. TDA Performance Indicators and Trends; and VI. Functional Performance Indicator Trends]

   The review of LAVTA's data collection and reporting methods found that while the data definitions and collection appear to comply with TDA requirements, the actual reporting of the data by the paratransit contractor, Medical Transportation Management, appears to have some potential flaws. As presented in the Review of TDA Data Collection and Reporting Methods section, LAVTA experienced a substantial anomaly in the reporting of vehicle service hours and miles in both FY2014 and FY2015. Vehicle service hours decreased significantly more than service miles in FY2014, followed by a significant increase in vehicle service hours and an even larger increase in miles in FY2015.

   When presented with these anomalies, LAVTA responded that they believed their contractor was not reporting service hour and mile data correctly. As a result, LAVTA resubmitted their FY2015 NTD report with adjusted service hour and mile data for the demand response mode. Another reporting issue is demonstrated in LAVTA's paratransit Functional Indicator review, where indicators in the service planning and operations areas involving service miles and hours showed

fluctuations between FY2014 and FY2015 results. Also, data for paratransit trip cancellations was not reported in FY2014, and late trip cancellation data was not reported for FY2015, making an accurate calculation of actual performance in these indicators difficult to ascertain.

LAVTA should continue to examine the data collection and reporting activities of its paratransit contractor to ensure that operating data are being accurately collected and reported.

In response to this recommendation, LAVTA reported that its current paratransit contractor implemented a new industry standard paratransit software system as of April 2016. LAVTA expects the new system to improve data collection and reporting efforts and is monitoring the new system to ensure accuracy of the data reported.

2. <u>EXAMINE CAUSES AND PREPARE A PLAN FOR IMPROVING ON-TIME PERFORMANCE OF THE FIXED-ROUTE BUS SERVICE.</u>
[Reference Section: VI. Functional Performance Indicator Trends]

The functional indicator performance review shows that LAVTA's fixed-route on-time performance was consistently in the 80 percent range for all three years of the audit period. LAVTA has not achieved its fixed-route on-time performance standard in any year of the current audit period.

LAVTA should examine its fixed-route bus service to determine the cause(s) for the underperforming on-time scheduled bus service and develop a plan for improving the on-time performance of its fixed-route bus service.

In response to this recommendation, LAVTA indicated it has updated its service standards to a more realistic 85% on-time service goal. LAVTA also is in the process of implementing significant route changes as a part of a Comprehensive Operational Analysis (COA). Route changes are scheduled to be implemented in August 2016, and all the bus schedules will be updated to more accurately reflect existing running time, improving system-wide on-time performance.