

# Metropolitan Transportation Commission Programming and Allocations Committee

November 13, 2019

Agenda Item 5b

## Transportation Development Act (TDA) Triennial Audit Update

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**Subject:** A presentation on the findings from TDA Triennial Performance Audits of San Francisco Municipal Transportation Agency, Santa Clara Valley Transportation Authority, Fairfield and Suisun Transit, Livermore-Amador Valley Transportation Authority, and City of Union City Transit.

**Background:** The Transportation Development Act (TDA) requires that MTC administer triennial performance audits of the region’s transit operators. Operators are divided into three groups, with one group audited each year on a three-year cycle. The audits are conducted under contract by an independent auditing firm, currently Pierlott and Associates, LLC.

The attached presentation summarizes findings for the recently completed audits, focusing on each operator’s three-year trends for certain performance indicators, including cost per hour, cost per passenger and passengers per hour. All but one operator was successful in reducing or keeping their cost per hour growth to within inflationary adjustments. That said, steady and increased service levels did not increase cost productivity or ridership for three of the five operators audited. In summary, service effectiveness (ridership) and cost efficiency trends (productivity) were mixed but generally declining, between FY2015-16 and FY2017-18 as shown below:

Agency	Productivity	Ridership	Notes
SFMTA	↔	↑	Steady service levels and ridership increases
VTA	↓	↓	Steady service levels and decrease in ridership
FAST	↓	↓	Steady service levels and decrease in ridership
LAVTA	↔	↔	Steady service levels and ridership
Union City	↓	↓	Service level increases and decrease in ridership

MTC staff is working with researchers from UCLA to conduct a study of the factors affecting changes in transit system ridership in the Bay Area that is expected to be completed at the end of the year. MTC staff are also participating in the TDA Task Force to revise performance standards for transit operators. This work is considering more customer-oriented performance standards to replace farebox recovery as the primary performance standard. When this work is completed sometime next year, it could revise the performance audit process.

**Issues:** While transit operators in this audit cycle appear to be doing a better job at controlling cost growth, system productivity and ridership are significant challenges for most operators.

**Recommendation:** Information. No action required.

**Attachments:** Transportation Development Act (TDA) Triennial Audit Presentation

  
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Therese W. McMillan



**METROPOLITAN  
TRANSPORTATION  
COMMISSION**



**FY2019  
TDA**

**Operator Performance Audits**

**Programming & Allocations Committee  
November 13, 2019**

# Presentation Overview

## TDA Performance Audits

- Triennial compliance audits are focused on multi-year trends and performance measures
- Current audit round: SFMTA, VTA, FAST, LAVTA, and Union City.

## TDA Performance Metrics

- Cost Per Vehicle Service Hour
- Cost Per Passenger
- Passengers Per Vehicle Service Hour
- Passengers Per Vehicle Service Mile
- Vehicle Service Hours Per Employee



# **FY2019 TDA Performance Audits – Audit Plan**

## Audit Period

- FYs 2015-16, 2016-17 and 2017-18

## Audit Activities

- Review data collection, management and reporting methods.
- TDA performance indicator trend analysis.
- Compliance with statutory and regulatory requirements.
- Review actions to implement prior audit recommendations.
- Functional area performance review.
- Conclusions, commentary and recommendations.

# Operator Profiles – All Modes



## Statistics

- Annual Operating Expense: \$859 M
- Annual Passenger Trips: 225 M
- Vehicle Service Hours : 3.8 M
- Cost/Hour : \$227

## Highlights

- Development of a 5-year Strategic Plan;
- Muni Forward route changes and service improvements;
- Expanded Free Muni program

## Planned Activities

- Central Subway project construction;
- BRT projects on Van Ness and Geary;
- Bus and Light Rail fleet replacements,
- Continuation of Muni Forward



## Statistics

- Annual Operating Expense: \$410 M
- Annual Passenger Trips: 37.5 M
- Vehicle Service Hours : 1.9 M
- Cost/Hour : \$213

## Highlights

- Completion of Alum Rock Santa Clara BRT;
- Express Bus service improvements;
- Transit Sustainability Project policy and service design changes

## Planned Activities

- Eastridge to BART regional connector;
- Fast Transit Program;
- Light Rail Efficiency, Speed, & Safety Enhancements
- VTA System Redesign (New Network)



Annual Operating Expense: \$14.3 M  
Annual Passenger Trips: 1,695,874  
Vehicle Service Hours: 156,838  
Cost Per Hour: \$98

Highlights:

- Completed Comprehensive Operations Analysis in FY2016;
- Beginning development of short- and long-range plans with implementation in FY2020;
- Created GoDublin partnership with transportation network companies.



Annual Operating Expense: \$11.3 M  
Annual Passenger Trips: 991,273  
Vehicle Service Hours: 96,781  
Cost Per Hour: \$117

Highlights:

- Recent Route additions – Routes 9 and 40; realignments to Routes 2 and 4;
- Purchased 9 MCI motor coaches;
- Conducting Comprehensive Operations Analysis in FY2020.



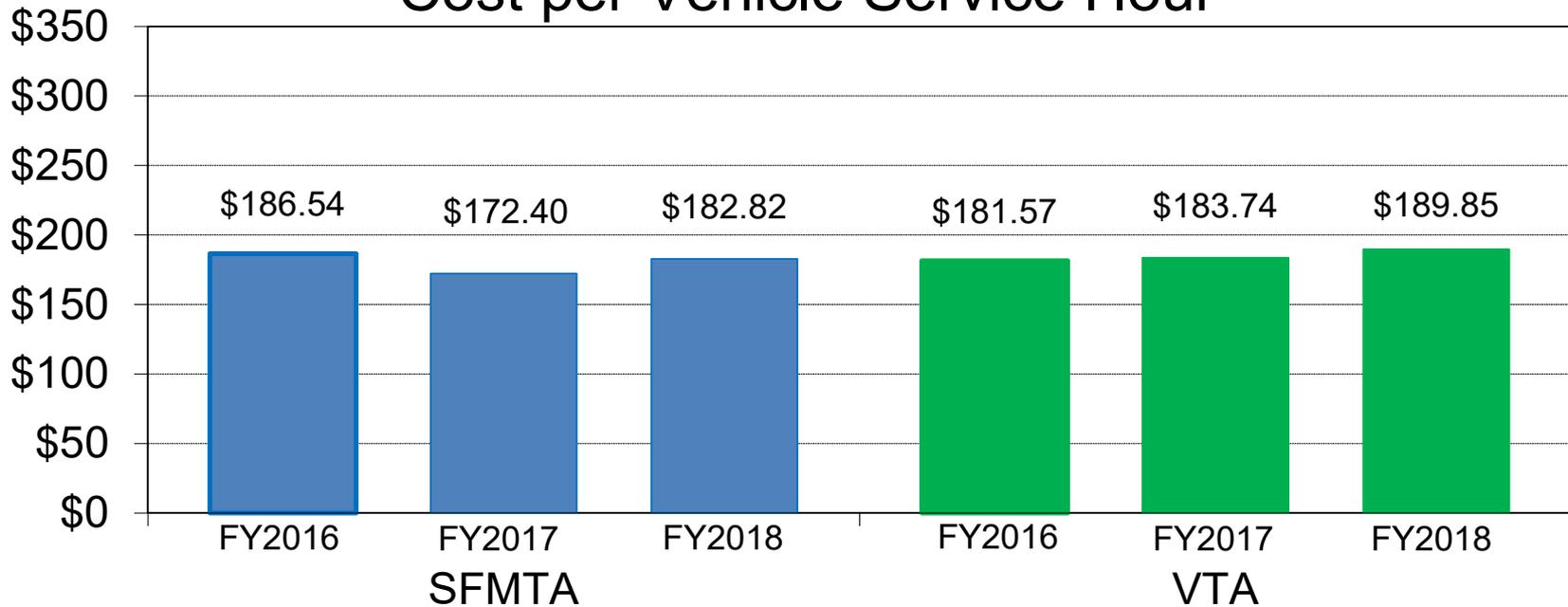
Annual Operating Expense: \$4.8 M  
Annual Passenger Trips: 296,745  
Vehicle Service Hours: 49,831  
Cost Per Hour: \$97

Highlights:

- Service adjustments made in 2015 to improve ridership service and productivity;
- FY2019 SRTP will include streamlined routes along truck corridors;
- AVL system, vehicle replacements, and micro-transit pilot program.

# Fixed-Route Bus – Larger Operators

## Cost per Vehicle Service Hour

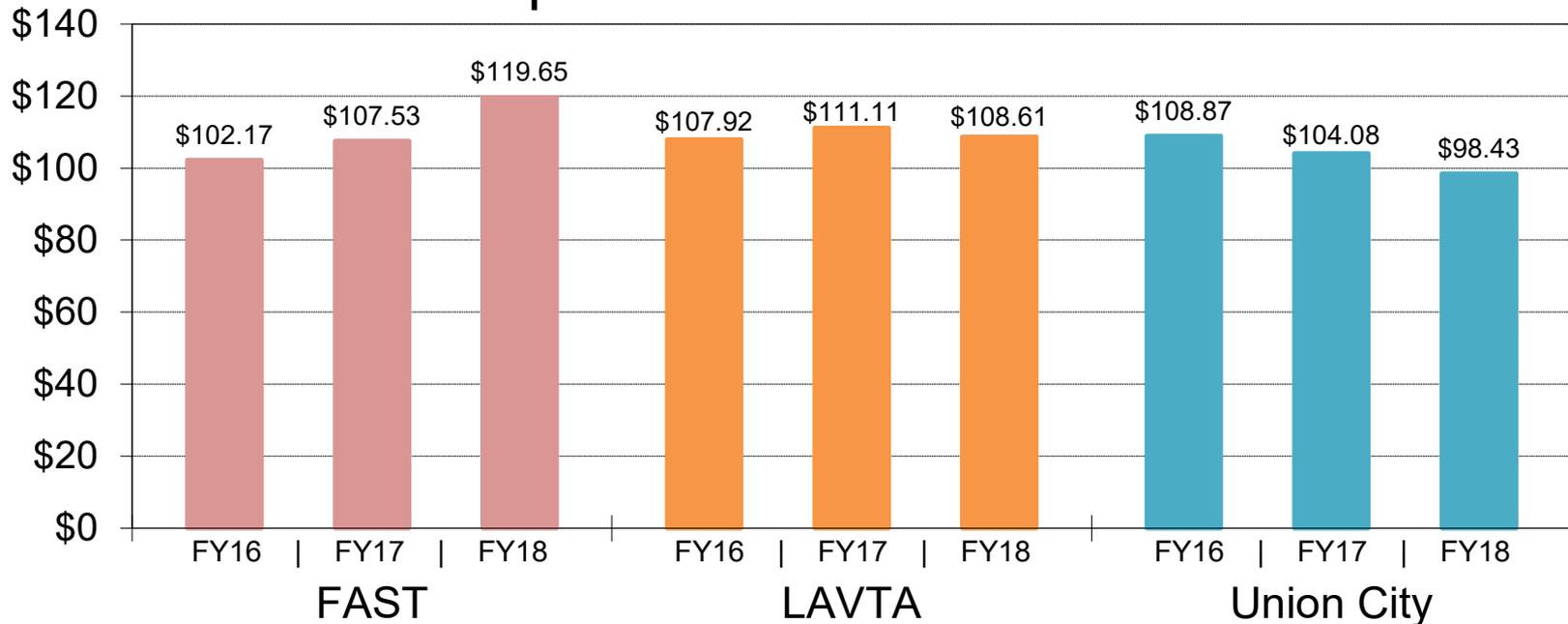


FY2016-FY2018 Average Annual Change (CPI = 3.6%)	
<span style="color: blue;">■</span> SFMTA -1.0%	<span style="color: green;">■</span> VTA 2.3%

- While SFMTA’s operating costs increased an average of 4.7% per year, service hours increased by an even greater rate of 5.8% per year.
- VTA’s operating costs increased an average of 3.2% per year, while service hours increased less than one percent per year. This was attributed to the mid-life overhaul of the light rail fleet, which VTA completed with in-house labor after determining it was the most cost-effective way to complete the project.

# Fixed-Route Bus – Smaller Operators

## Cost per Vehicle Service Hour



### FY2016-FY2018 Average Annual Change (CPI = 3.6%)

<span style="color: #C8513D;">■</span> FAST 8.2%	<span style="color: #E67E22;">■</span> LAVTA 0.3%	<span style="color: #3498DB;">■</span> Union City -4.9%
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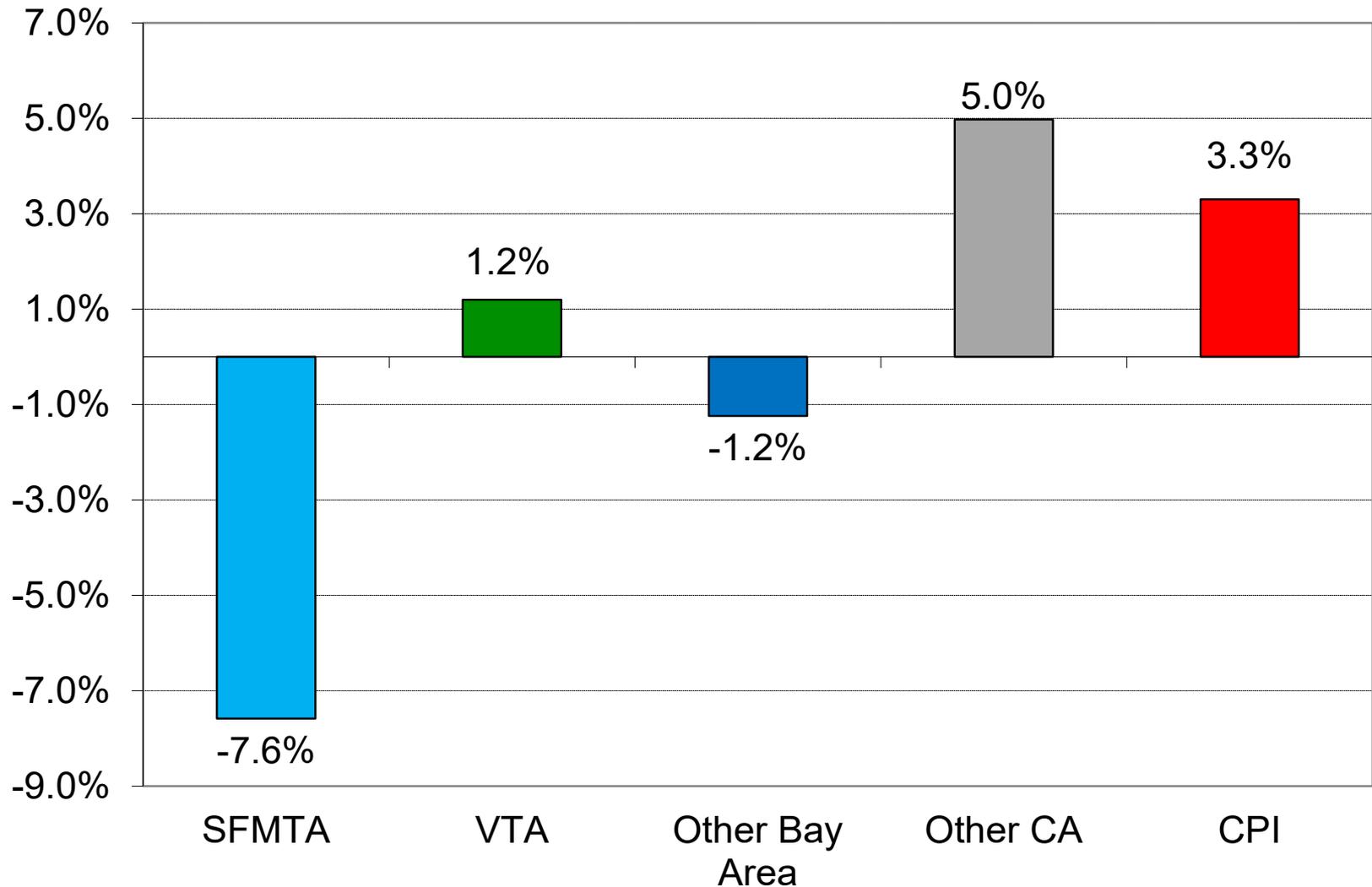
- FAST's operating costs increased substantially due to contract negotiations in FY18, while service hours remained steady.
- LAVTA's operating costs and service hours increased moderately throughout the audit period, resulting in very little change to cost per service hour.
- Union City's average growth of 1.1% per year in operating costs coupled with a 6.4% per year increase in service hours resulted in a decreasing trend in cost per service hour.

# Passengers per Vehicle Service Hour and Ridership Trends

## FY2016 through FY2018

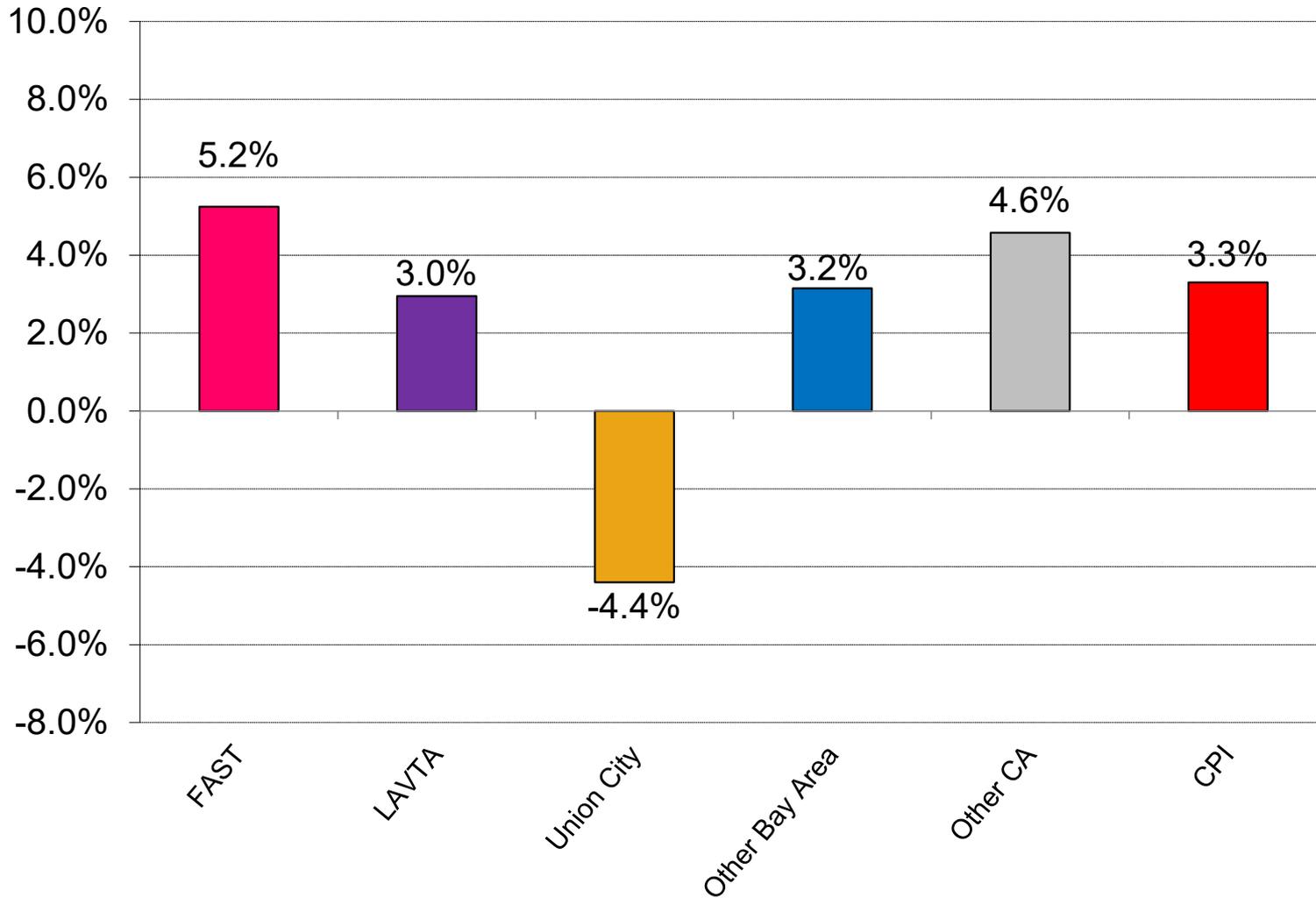
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### Comparison of Average Annual Change in Cost per Vehicle Service Hour for Larger Operators Fixed-Route Bus - FY2016 to FY2017



“Other Bay Area”: AC Transit, SamTrans, GGBHTD, and CCCTA

## Comparison of Average Annual Change in Cost per Vehicle Service Hour for Smaller Operators Fixed-Route Bus - FY2016 to FY2017



“Other Bay Area”: WestCAT, Tri Delta, SCT, Santa Rosa, NVTA, Vacaville, Dixon, Petaluma, and Rio Vista.

# Audit Recommendations

Basis for recommendations may include one or more of the following:

- Results of the TDA performance indicator trend analysis.
- Results of the review of compliance with statutory and regulatory requirements.
- Progress towards implementing prior audit recommendations.
- Results of the functional performance review.

The following summarizes the recommendations by operator.

# **Audit Recommendations, *continued***

- SFMTA – continue efforts toward obtaining accurate results from automatic passenger counters.
- VTA – address the significant increase in casualty/liability costs for the fixed-route bus and light rail service, and examine the increase in lost days due to industrial accidents for the fixed-route bus service.
- FAST – examine maintenance activities and address the recently increasing mechanical failure rates on the bus and paratransit services.
- LAVTA – continue to ensure that data is collected and reported accurately for paratransit service.
- Union City – ensure that operating and performance data is collected and reported accurately, especially by the contract operator.