

# **Triennial Performance Audit**

*of the*

## **Livermore/Amador Valley Transit Authority (LAVTA)**

**Fiscal Years 2018/19, 2019/20 and 2020/21**

**FINAL AUDIT REPORT**

*prepared for the*



*by*



**June 2024**

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*NOTE:*

*All exhibits in this report are presented at the end of the associated discussion in each section.*

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## 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 2019 through 2021 (from July 1, 2018 through June 30, 2021).

### Performance Audit and Report Organization

The performance audit has been 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 the 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 is in compliance with the data collection and reporting requirements for all five TDA statistics as applicable (FTEs are not reported for this contracted operation). In addition, the statistics collected over the six-year review period appear to be consistent with the TDA definitions, and indicate general consistency in terms of the direction and magnitude of the year-to-year changes across the statistics.

However, there were notable inconsistencies between reported paratransit hours and miles in FY2018 and FY2019, which would be expected to trend similarly. LAVTA staff were unable to provide a definitive explanation for these inconsistencies, but noted that LAVTA has since taken significant steps to enhance the accuracy of its performance reporting, including transitioning to a new contractor (County Connection) and implementing a new Trapeze PASS software system.

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 FY2016 through FY2021:

- There was an average annual increase in the operating cost per hour of 9.2 percent, which amounted to a 5.8 percent increase in inflation adjusted dollars.
- The cost per passenger increased on average by 30.2 percent per year, which amounted to an average annual increase of 26.2 percent in constant FY2016 dollars. The trend was specifically influenced by a major drop off in ridership in FY2021, the first full year of the COVID pandemic.
- Passenger productivity showed negative trends, with passengers per vehicle service hour and mile both decreasing by around 15 percent per year overall. Again, this trend was specifically influenced by a major drop off in ridership in FY2021, the first full year of the COVID pandemic.

The following is a brief summary of the component operating costs trend highlights for the bus service between FY2016 and FY2021:

- The most significant change was an average annual increase of 38 percent in the materials/supplies area, though materials/supplies costs consistently accounted for two percent or less of total costs. Fuel/lubricants experienced the most significant cost decrease, going down on average by about 11 percent annually.
- In-house labor costs increased by 0.6 percent annually while fringe benefits expenses went up by 11 percent on average per year, principally reflecting a 41 percent increase in FY2019. That increase was attributed primarily to retirement benefits and the year-end adjustments to comply with GASB 68.
- Purchased transportation costs represented the largest portion of the total costs, with the share between 61 and 66 percent. Most other cost categories showed only minor changes per year on average.

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

trend highlights over the six-year period of FY2016 through FY2021:

- For cost efficiency, there was an average annual increase in the operating cost per hour of 6.8 percent. This amounted to an annual increase of 3.5 percent in inflation adjusted dollars.
- In terms of cost effectiveness, the operating cost per passenger showed a significant increase of 13.2 percent per year on average, when normalized in FY2016 dollars.
- Passenger productivity showed general decline, with passengers per hour decreasing by 8.6 percent annually and passengers per mile decreasing by 5.3 percent.

The following is a brief summary of the component operating costs trend highlights for paratransit between FY2016 and FY2021:

- Purchased transportation costs represented by far the largest portion of the total costs, above 80 percent throughout the review period. At the same time, they decreased by 11.6 percent per year on average.
- In-house labor costs decreased slightly overall, but fringe benefits costs increased by 8.7 percent. Each of these two cost categories accounted for less than ten percent of the total operating costs.
- Despite some variation from year to year, only relatively minimal expenses were reported for the other component cost categories, and most categories posted net decreases during the period as well.

Compliance with Statutory Requirements – LAVTA is in compliance with all of the seven 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, revenue sharing, welfare-to-work transportation coordination, and evaluating passenger needs.

Status of Prior Audit Recommendations – There was one recommendation in the prior LAVTA audit report. It has been determined that LAVTA has implemented corrective actions for this recommendation. Since the transition of operating contractors to the County Connection/Transdev in April 2021, LAVTA has been able to ensure that data is collected and reported accurately for the paratransit service. As part of this new agreement, LAVTA reports that improvements were made in the reporting of performance data to ensure accurate information was being communicated by contractor staff, including the utilization of Trapeze PASS, and biweekly meetings are held with County Connection and Transdev to discuss operational performance metrics. All data is validated and any inconsistencies are addressed and rectified in a timely manner.

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 FY2019 and FY2021:
  - Administrative costs increased substantially from 29 to 51 percent of total operating costs, and from \$30 to \$80 per vehicle service hour. Both trends reflected significant service changes, especially route suspensions, in response to the COVID pandemic.
  - Marketing costs decreased from 15.7 to 2.5 percent of total administrative costs, while marketing costs per passenger trip remained between \$0.41 and \$0.47.
  - The systemwide farebox recovery ratio decreased from 15 to 6.4 percent, primarily reflecting the negative impact of the COVID pandemic later in the audit period.

- Bus Service – The following is a brief summary of the bus service functional trend highlights between FY2019 and FY2021:
  - Service Planning results displayed a major increase in operating cost per passenger mile, concurrent with significantly reduced passenger miles in the COVID environment. Further, the bus farebox recovery ratio decreased from 15.3 percent to 6.4 percent, while the TDA recovery ratio, reflecting farebox revenue plus local support, decreased less dramatically to 28.1 percent. There were also increases in the rates of vehicle miles and hours in service, reaching 92 and 95 percent, respectively, in FY2021. About one passenger per service mile was carried in FY2019 and FY2020, and 13 per service hour, both followed by decreases in FY2021.
  - Operations results showed the share of total operating costs attributable to vehicle operations decreased from nearly 50 percent to less than 40 percent in FY2021, while vehicle operations costs per service hour increased by six percent to \$64 in FY2021. Schedule adherence improved from 83 to 91 percent, while valid complaints increased from 9.5 to 15 per 100,000 riders, and commendations also increased. There were relatively few missed trips during the audit period.
  - Maintenance results showed total maintenance costs decreasing significantly as a percentage of total operating cost, and maintenance costs per service mile decreasing similarly. Both of these trends reflected reduced service level pricing with the contractor due to the pandemic, plus a credit from the contractor in FY2021 for COVID-related open positions within the maintenance department. The bus spare ratio increased from about 20 percent to 50 percent in the last year, as many fewer buses were needed to provide reduced service during the COVID pandemic. Service reliability showed general improvement, with the mean distance between major failures and all failures both doubling overall.
  - Safety results showed the rate of preventable accidents decreasing overall by over 14 percent during the audit period.
  
- Paratransit – The following is a brief summary of the paratransit functional trend highlights between FY2019 and FY2021:



- Service Planning results displayed a major increase in operating cost per passenger mile, concurrent with significantly reduced passenger miles in the COVID environment. Further, the paratransit farebox recovery ratio decreased from 11.5 percent to 5.2 percent, while the TDA recovery ratio, reflecting farebox revenue plus local support, decreased less dramatically to 52 percent. Vehicle miles traveled in service remained at 92 to 94 percent in all three audit years, and vehicle hours in service at 95 to 97 percent. About 0.1 passengers per service mile was carried in each year, and 1.2 passengers per service hour.
- Operations results showed the share of total operating costs attributable to vehicle operations decreased from 56 percent to 39 percent in the last two years, while vehicle operations costs per service hour increased by more than 50 percent to \$33 in FY2021. Schedule adherence improved overall from 94 to 97 percent, while valid complaints increased from 0.93 to 1.27 per 100,000 riders, and commendations also increased. There were almost no missed trips and no ADA trip denials reported during the period. The rate of trip cancellations increased noticeably in each year, up by 43 percent overall during the period, but much of this trend reflects conditions during the pandemic, when a large portion of trips (many subscription) were cancelled as passengers only made essential trips. The incidence of late trip cancellations went up more than six-fold, but still remained at less than three percent of total ADA trips. Passenger no-shows decreased overall, from two percent of total ADA trips in the first two years to one percent in FY2021.
- Maintenance results showed total maintenance costs increasing significantly to 21 percent of total operating cost in the last two years, and maintenance costs per service mile increasing substantially to \$1.35 in FY2021. The vehicle spare ratio increased from about 15 percent to 61 percent in the last year, as fewer vehicles were needed to provide reduced service during the COVID pandemic. Service reliability generally declined, with the mean distance between major failures down from about 76,000 miles in FY2019 to 20,000 miles in FY2021, and the mean distance between all failures dropping from about 35,000 miles to less than 15,000 miles in FY2021. However, with the new paratransit MOU with County Connection, LAVTA

reports marked subsequent improvements in service reliability. Several strategies have enabled LAVTA to identify and address potential issues before they result in major failures. These efforts have led to a significant increase in the mean distance between both major and minor failures, and over the last 12 months there were no reported mechanical failures for the paratransit service.

- Safety results showed the rate of preventable accidents at 0.2 per 100,000 vehicle miles in both FY2019 and FY2020, based on a single reported accident in each year, with no preventable accidents reported in FY2021.

### Recommendations

No recommendations are suggested for LAVTA at this time based on the results of this triennial performance audit.

It is noted here that many cost efficiency, cost effectiveness and functional indicators fluctuated by wide margins compared to their past trends. Further, it is recognized here that during this audit period policy, planning and operational decisions were made under unusual conditions of local, regional and national health pandemic. LAVTA, like other transit agencies in the Bay Area, faced issues related to employee availability and retention; deployment of vehicles based on declining demand due to remote working; forced reduction in acceptable vehicle occupancy due to social distancing guidelines. For these reasons no recommendations are made to reexamine the past performance.

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## I. INTRODUCTION

Public Utilities Code (PUC) Section 99246 requires that a performance audit be conducted every three years of each public transit operator in California. The audit requirement pertains to recipients of Transportation Development Act (TDA) funds, and is intended to assure that the funds are being used efficiently. The substance and process of the performance audit is defined by the Regional Transportation Planning Agency (RTPA).

In the San Francisco Bay Area, the Metropolitan Transportation Commission (MTC) has been designated the RTPA and has this responsibility. By statute, the audit must be conducted in accordance with the U.S. Comptroller General's "Standards for Audit of Governmental Organizations, Programs, Activities, and Functions" (the "yellow book"). The performance audit is a systematic review to determine the extent to which a transit operator has complied with pertinent laws and regulations, and conducted operations in an efficient and economical manner. Relative to system compliance testing, all findings are reported regardless of materiality.

This report has been prepared as part of the performance audit of the Livermore-Amador Valley Transit Authority (LAVTA). LAVTA operates bus service under the banner of WHEELS, as well as providing ADA complementary paratransit service. The audit period is Fiscal Years 2019 through 2021 (from July 1, 2018 through June 30, 2021).

An overview of LAVTA is provided in Exhibit 1. This is followed by organization charts in Exhibits 2.1 and 2.2, which reflect the basic organizational structure during the audit period.

### Performance Audit and Report Organization

This performance audit of LAVTA has been conducted for MTC in accordance with its established procedures for performance audits. The audit consisted of two discrete steps:

1. Compliance Audit - Activities in this phase included:
  - An overview of data collection and reporting procedures for the five TDA performance indicators;
  - Analysis of the TDA indicators; and
  - A review of compliance with selected state Public Utilities Code (PUC) requirements.
  
2. Functional Review - Activities in this phase included:
  - A review of actions to implement the recommendations from the prior performance audit;
  - Calculation and evaluation of performance indicator trends; and
  - Findings, conclusions, and the formulation of recommendations.

This report presents the findings from both phases. Comments received from LAVTA and MTC staff on the draft report have been incorporated into this final report.

## Exhibit 1: System Overview

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<b>Location</b>	Headquarters: 1362 Rutan Court, Livermore, CA 94551
<b>Establishment</b>	The Cities of Dublin, Livermore and Pleasanton, and the County of Alameda created the Livermore/Amador Valley Transit Authority (LAVTA) in 1985 through a Joint Powers Agreement. LAVTA began service in 1986 under the WHEELS name. LAVTA serves the Cities of Dublin, Livermore and Pleasanton, and adjacent areas of Alameda County.
<b>Board</b>	LAVTA is governed by a seven-member Board of Directors consisting of two elected officials from each of the three member cities and one director from the Alameda County Board of Supervisors. The board is divided into two committees: the Finance and Administration Committee and the Projects and Services Committee. The committees meet regularly to discuss issues under their purview.
<b>Facilities</b>	The LAVTA Maintenance, Operations and Administration facility is the central base of operations for WHEELS. It houses both agency staff and contractor employees. The Livermore Transit Center (LTC) is a hub for LAVTA's Livermore routes and includes a parking structure for transit users and the general public. The LTC provides direct access to the adjacent Altamont Commuter Express (ACE) train station. In 2013, LAVTA completed construction of the Atlantis Operations and Maintenance Facility, a secured parking facility with bus wash and fueling functions.
<b>Service Data</b>	<p>LAVTA operates fixed-route bus service (WHEELS) that serves the communities of Dublin, Livermore and Pleasanton and some unincorporated areas of surrounding Alameda County. Contracting the operation and maintenance for this service to MV Transportation, Inc., LAVTA provides 15 mainline routes, and 15 supplemental "school-tripper" routes. The mainline routes provide connections between transit hubs - such as BART stations and the LTC, and major employment and retail centers. Seven of the mainline routes operate throughout the day and on weekends, while the remainder are limited to weekday commute hours. LAVTA provides at least some service 365 days a year. LAVTA's 15 supplemental routes are designed to serve area middle schools and high schools, but also are available to the general public. The supplemental service is limited to school days, with most routes providing one inbound trip in the morning and one outbound trip in the afternoon. The fixed-route adult base fare is \$2.00. The discounted fare for senior and disabled riders is \$1.00.</p> <p>Paratransit service for ADA-certified riders is provided through WHEELS' Dial-A-Ride service. WHEELS paratransit services were operated by a contractor, Medical Transportation Management (MTM). Beginning in April of 2021 LAVTA began contracting this service to County Connection</p>



(CCCTA). Dial-A-Ride provides door-to-door service throughout the entire LAVTA service area. LAVTA also has a cooperative service agreement with Pleasanton Paratransit, which provides door to door local trips for eligible Pleasanton residents. LAVTA provides Dial-A-Ride services in Pleasanton during Pleasanton Paratransit's non-operating hours and covers any overflow service needed in Pleasanton. The paratransit fare was \$3.50 until January 2019 when it increased to \$3.75. LAVTA also participates in a Para-Taxi Program that provides same day paratransit service, primarily as a more convenient alternative for non-mobility impaired riders who are ADA certified. Riders submit their taxi receipts to LAVTA and are reimbursed 85 percent of the cost, up to \$20 per trip.

LAVTA also provides an on-demand service in Dublin CA, called Go Tri-Valley. The program is a partnership with Transportation Network Companies (TNCs). Individuals that request a ride on Lyft or Uber in LAVTA's service area, and their end destination is within the service area as well, are eligible for a 50 percent fare subsidy up to \$5. This program was redesigned and renamed Go Tri-Valley at the start of the COVID pandemic and now serves the entire service area. TDA Article 4 funding is used for this program, but it is only included in this audit by reference, as statistics are unavailable from Uber or Lyft.

LAVTA's current operating fleet consists of a total of 60 standard 29 to 40-foot transit buses used for fixed-route service. MTM and County Connection use their own and subcontracted fleets of vehicles for the Dial-A-Ride services.

#### **Recent Changes**

LAVTA completed a comprehensive operations analysis (COA) of the entire fixed route system in 2016. The study, named *Wheels Forward*, evaluated existing service, demographics, and key employment areas, leading to a short-term service plan that was implemented in the fall of 2016.

LAVTA replaced twenty 40' buses in 2016 and twenty 40' buses in 2017, with a mix of 29', 35' and 40' diesel hybrid buses. In 2023 LAVTA replaced another 16 fixed route vehicles with new Gillig buses.

In January 2019 LAVTA implemented a new Fare Policy. This policy eliminated paper transfers and paper "farebuster" tickets (individual tickets sold in sheets of 10). LAVTA created a new Clipper based youth fare of \$1.60 and increased paratransit fares to \$3.75. With the elimination of transfers LAVTA also added a Day Pass option of \$3.75 for youth and adults, and \$1.75 for seniors and those with disabilities. This Day Pass matches the one provided on the Clipper Card.

LAVTA made significant service changes, especially route suspensions, in response to the COVID pandemic, starting in March 2020. LAVTA suspended a number of low production routes to align with the current need.

**Planned Changes** LAVTA will continue to monitor ridership post COVID in order to determine which of the suspended routes should be reinstated and when.

LAVTA's planned capital projects include facility improvements and maintenance over the next ten years, fixed-route fleet engine, transmission overhauls and replacements, battery replacements on the Hybrid buses and support vehicle replacements.

**Staff** During the audit period, LAVTA's contractor, MV Transportation, employed about 100-120 full- and part-time employees to operate and maintain WHEELS services. LAVTA currently has 15 full-time staff members (up from 14 during the audit period) and two part-time interns. During the audit period LAVTA combined the positions of the Director of Planning and Operations and the Marketing Manager into the Director of Planning and Marketing and then added a Director of Operations and Innovation. The breakdown of LAVTA's in-house staff for the audit period was:

- Executive Director – 1
- Finance /Administrative Services – 4
- Planning & Marketing – 3
- Operations - 6

**Exhibit 2.1: Organization Chart 2020**

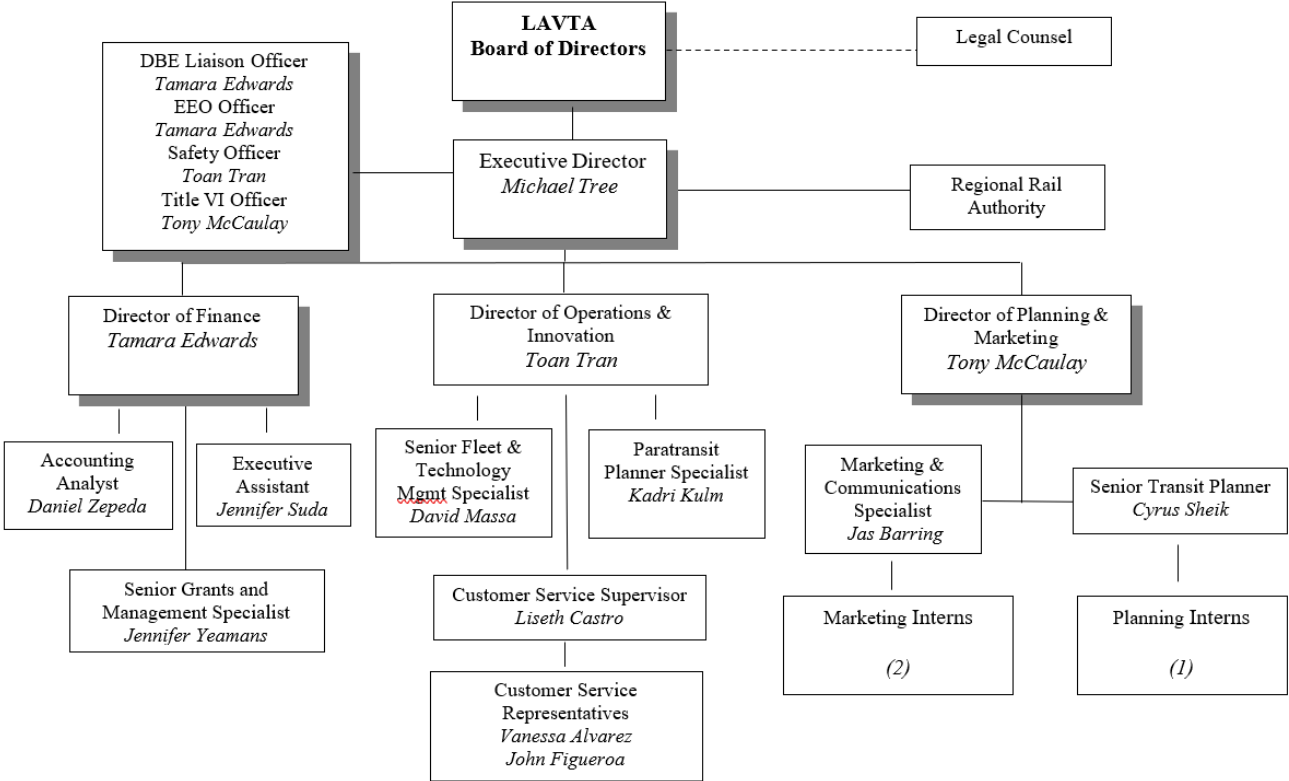
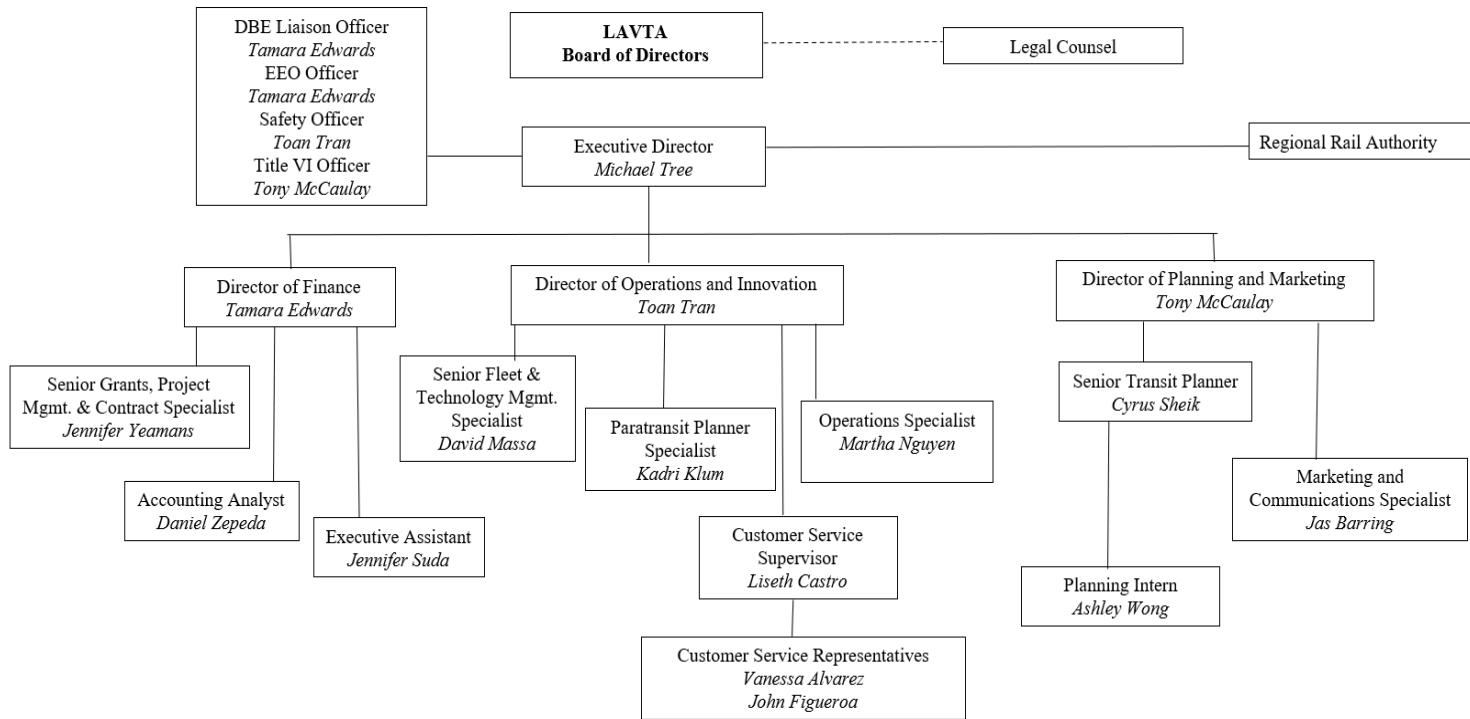


Exhibit 2.2: Organization Chart 2021



## II. REVIEW OF TDA DATA COLLECTION AND REPORTING METHODS

This section focuses on the five performance indicators required by TDA law. These indicators have been defined by the state PUC to evaluate the transit operator's efficiency, effectiveness and economy. The purpose of this review is to determine if LAVTA is compliance with the data collection and reporting requirements necessary to calculate the TDA performance indicators. The review is limited to the data items needed to calculate the indicators:

- Operating costs
- Vehicle service hours
- Vehicle service miles
- Unlinked passengers
- Employees (full-time equivalents)

The TDA indicator analysis is based on these operating and financial statistics in the National Transit Database (NTD) reports submitted annually to the Federal Transit Administration (FTA). The information reported by LAVTA covering the audit period has been reviewed. LAVTA's NTD reports include its bus and paratransit services. However, consistent with FTA reporting requirements, LAVTA does not submit employee hour information for purchased transportation service to the NTD. Responsibility for sufficient staffing and employee productivity is borne by the operations contractor and therefore, employee full-time equivalent (FTE) data is not used in this audit report.

### Compliance with Requirements

To support this review, LAVTA provided information to confirm and/or update its data collection and reporting procedures as described in the prior performance audit. There were only minor changes. The staff indicated that the definitions and procedures used to derive the TDA indicator statistics generally are consistent with those used for the NTD reporting system.

Based on the information provided, as shown in Exhibit 3.1, LAVTA is in compliance with the data collection and reporting requirements for all five TDA statistics.

### Consistency of the Reported Statistics

The TDA statistics for LAVTA's bus and paratransit services are presented in Exhibits 3.2 and 3.3, respectively. Included are statistics covering each fiscal year of the three-year audit period, plus the immediately preceding three fiscal years, resulting in a six-year trend. The statistics collected over the period appear to be consistent with the TDA definitions. Further, they indicate general consistency in terms of the direction and magnitude of the year-to-year changes across the statistics. For example, increases or decreases in annual operating costs are relatively proportional to increases or decreases in annual vehicle service hours and miles.

However, as can be seen in Exhibit 3.3, there were notable inconsistencies between reported paratransit hours and miles in FY2018 and FY2019. Vehicle service hours increased by 5.9 percent and 23.9 percent, respectively, compared to the previous year, while corresponding vehicle service miles decreased by 3.0 percent in FY2018 and posted a very small increase in FY2019. LAVTA staff was unable to provide a definitive

explanation for these inconsistencies, but noted that they occurred earlier in the review period and LAVTA has since taken significant steps to enhance the accuracy of its performance reporting, including transitioning to a new contractor (County Connection) and implementing a new Trapeze PASS software system.

### Exhibit 3.1: Compliance with TDA Data Collection and Reporting Requirements

TDA Statistic	TDA Definition	Compliance Finding	Verification Information
Operating Cost	"Operating cost" means all costs in the operating expense object classes exclusive of the costs in the depreciation and amortization expense object class of the uniform system of accounts and records adopted by the Controller pursuant to Section 99243, and exclusive of all subsidies for commuter rail services operated under the jurisdiction of the Interstate Commerce Commission and of all direct costs for providing charter services, and exclusive of all vehicle lease costs.	In Compliance	<ul style="list-style-type: none"> <li>LAVTA divides operating costs into six categories: Board of Directors, Executive Director, Finance, transit planning, marketing and operations.</li> <li>Total operating expenses include internal costs plus the cost of purchased transportation provided by the contract operator.</li> <li>Operating costs reported to external agencies are based on LAVTA's audited financial statements.</li> </ul>
Vehicle Service Hours	"Vehicle service hours" means the total number of hours that each transit vehicle is in revenue service, including layover time.	In Compliance	<ul style="list-style-type: none"> <li>LAVTA calculates fixed route service hours based on 1) fixed-route service schedules and 2) any variations in service, as reported by the operations contractor and reviewed by agency oversight staff, consistent with TDA definitions.</li> <li>Dial a Ride service hours are calculated based on the actual times reported by the drivers, using the contractor's proprietary software. The actual pickup and drop-off times are recorded per trip and reported to LAVTA monthly.</li> </ul>
Vehicle Service Miles	"Vehicle service miles" means the total number of miles that each transit vehicle is in revenue service.	In Compliance	<ul style="list-style-type: none"> <li>LAVTA calculates fixed route service miles based on the current fixed route schedule and taking into account service variations, consistent with TDA definitions.</li> <li>Paratransit miles are based on miles between the pickup of the first passenger and then drop off of the last passenger, subtracting break times -- using the contractor's proprietary mapping software. The contractor submits monthly reports to LAVTA.</li> </ul>



TDA Statistic	TDA Definition	Compliance Finding	Verification Information
Unlinked Passengers	"Unlinked passengers" means the number of boarding passengers, whether revenue producing or not, carried by the public transportation system.	In Compliance	<ul style="list-style-type: none"> <li>• Fixed-route passengers are manually counted by bus operators on electronic fareboxes; data is downloaded from fareboxes daily, and is included in weekly and monthly reports to LAVTA.</li> <li>• Dial-A-Ride passenger counts are tracked by the contractor's proprietary software. The driver confirms the number of passengers on the trip reservation (both the passenger type and count) at the beginning of each trip. Monthly reports are submitted to LAVTA.</li> <li>• LAVTA includes all categories of boarding/traveling passengers, regardless of fare payment or payment method - as required by TDA guidelines.</li> </ul>
Employee Full-Time Equivalents	2,000 person-hours of work in one year constitute one employee.	In Compliance	<ul style="list-style-type: none"> <li>• Definition corresponds with TDA definition.</li> <li>• Fixed Route service is contracted out to private operator; contractor reports its FTEs to LAVTA.</li> <li>• Paratransit service is contracted out to private operator that subcontracts; no FTE reporting.</li> </ul>

**Exhibit 3.2: TDA Statistics – Bus Service**

<b>TDA Statistic</b>	<b>FY2016</b>	<b>FY2017</b>	<b>FY2018</b>	<b>FY2019</b>	<b>FY2020</b>	<b>FY2021</b>
Operating Cost (Actual \$)	\$13,555,486	\$13,646,760	\$13,643,794	\$15,253,896	\$15,439,888	\$12,904,948
<i>Annual Change</i>	- -	0.7%	0.0%	11.8%	1.2%	-16.4%
Vehicle Service Hours	125,604	122,825	125,619	125,799	112,412	77,053
<i>Annual Change</i>	- -	-2.2%	2.3%	0.1%	-10.6%	-31.5%
Vehicle Service Miles	1,780,948	1,726,726	1,748,817	1,723,369	1,518,836	998,047
<i>Annual Change</i>	- -	-3.0%	1.3%	-1.5%	-11.9%	-34.3%
Unlinked Passengers	1,648,811	1,536,084	1,647,002	1,660,443	1,406,245	420,226
<i>Annual Change</i>	- -	-6.8%	7.2%	0.8%	-15.3%	-70.1%
Employee Full-Time Equivalent	(a)	(a)	(a)	(a)	(a)	(a)
<i>Annual Change</i>	- -	- -	- -	- -	- -	- -

(a) - Not applicable as LAVTA service is provided by a private contractor

Sources: FY2016 through FY2018 - Prior Performance Audit Report  
 FY2019 through FY2021 - NTD Reports

**Exhibit 3.3: TDA Statistics – Paratransit Service**

<b>TDA Statistic</b>	<b>FY2016</b>	<b>FY2017</b>	<b>FY2018</b>	<b>FY2019</b>	<b>FY2020</b>	<b>FY2021</b>
Operating Cost (Actual \$)	\$1,842,854	\$1,707,058	\$1,703,128	\$1,692,058	\$1,492,324	\$1,091,519
<i>Annual Change</i>	- -	-7.4%	-0.2%	-0.6%	-11.8%	-26.9%
Vehicle Service Hours	29,859	29,474	31,219	38,684	27,833	12,747
<i>Annual Change</i>	- -	-1.3%	5.9%	23.9%	-28.1%	-54.2%
Vehicle Service Miles	421,306	424,072	411,459	417,558	329,784	150,703
<i>Annual Change</i>	- -	0.7%	-3.0%	1.5%	-21.0%	-54.3%
Unlinked Passengers	54,975	54,121	48,872	46,108	36,378	14,960
<i>Annual Change</i>	- -	-1.6%	-9.7%	-5.7%	-21.1%	-58.9%
Employee Full-Time Equivalent	(a)	(a)	(a)	(a)	(a)	(a)
<i>Annual Change</i>	- -	- -	- -	- -	- -	- -

(a) - Not applicable as LAVTA service is provided by a private contractor

Sources: FY2016 through FY2018 - Prior Performance Audit Report  
 FY2019 through FY2021 - NTD Reports

### III. TDA PERFORMANCE INDICATORS AND TRENDS

The performance trends for the LAVTA's bus and paratransit service modes are presented in this section. Performance is discussed for each of the five TDA-mandated performance indicators:

- operating cost per vehicle service hour
- passengers per vehicle service hour
- passengers per vehicle service mile
- operating cost per passenger
- vehicle service hours per full-time equivalent employee (FTE)

Most of the performance results in these indicators were developed from the information in the NTD reports filed with the FTA for the three years of the audit period. LAVTA's NTD reports were the source of all operating and financial statistics except for contractor FTEs. As noted previously, LAVTA contracts for all of its transit services, and does not report FTE data in its NTD reports. The operating contractor is responsible for staffing and employee productivity, therefore, FTE data and results are not included as part of this audit report.

In addition to presenting performance for the three years of the audit period (FY2019 through FY2021), this analysis features two enhancements:

- Six-Year Time Period – While the performance audit focuses on the three fiscal years of the audit period, six-year trend lines have been constructed for LAVTA's service to provide a longer perspective on performance and to clearly present the direction and magnitude of the performance trends. In this analysis, the FY2019 to FY2021 trend lines have been combined with those from the prior audit period (FY2016 through FY2018) to define a six-year period of performance.

- Normalized Cost Indicators for Inflation – Two financial performance indicators (cost per hour and cost per passenger) are presented in both constant and current dollars to illustrate the impact of inflation in the Bay Area. The inflation adjustment relies on the All Urban Consumer Price Index for Urban Wage Earners and Clerical Workers (CPI-W) for the San Francisco Metropolitan Area. The average CPI-W percent change for each fiscal year has been calculated based on the bi-monthly results reported on the U.S. Department of Labor – Bureau of Labor Statistics website. The CPI-W is used since labor is the largest component of operating cost in transit. Since labor costs are typically controlled through labor contracts, changes in normalized costs largely reflect those factors that are within the day-to-day control of the transit system.

The following discussion is organized to present an overview of LAVTA’s performance trends in each of the five TDA performance indicators. The discussion is organized by service mode -- bus service is discussed first, followed by paratransit. The analysis is expanded to include a breakdown of the various component costs that contributed to the total and hourly operating costs during the six-year period.

#### Bus Service Performance Trends

This section provides an overview of the performance of LAVTA’s bus service over the past six years. The trends in the TDA indicators and input statistics are presented in Exhibit 4. The six-year trends are illustrated in Exhibits 4.1 through 4.3.

- Operating Cost Per Vehicle Service Hour (Exhibit 4.1)
  - Operating cost per vehicle service hour, a key indicator of cost efficiency, increased an average of 9.2 percent annually, as operating costs decreased on average by one percent annually, but service hours decreased by more than nine percent.
  - The cost per hour increased in every year except FY2018, when it decreased by about two percent. There were significant increases in each of the last three years.

- In FY2016 constant dollars, there was an average annual increase in this indicator of 5.8 percent.
- Passengers per Vehicle Service Hour (Exhibit 4.2)
  - An indicator of passenger productivity, passengers per hour decreased an average of 16.1 percent annually during the six-year period.
  - The largest decrease by far was 56.4 percent in FY2021, the first full year of the COVID pandemic. This reflects a 70 percent reduction in passengers combined with just a 31 percent reduction in service hours.
  - Passengers per hour decreased overall from about 13 in the first five years to only 5.5 in FY2021.
- Passengers per Vehicle Service Mile (Exhibit 4.2)
  - Another passenger productivity indicator, the six-year trend in this indicator was similar to the above, decreasing by 14.6 percent annually on average.
  - The largest decrease by far was 54.5 percent in FY2021, the first full year of the COVID pandemic. This reflects a 70 percent reduction in passengers combined with just a 34 percent reduction in service miles.
  - There were about 0.9 passengers per mile in the first five years, decreasing to 0.42 in FY2021.
- Operating Cost per Passenger (Exhibit 4.3)
  - A measure of cost effectiveness, LAVTA's bus cost per passenger increased on average by 30.2 percent annually during the six-year period.
  - The cost per passenger remained at about \$9.00 in the first four years, then was greatly impacted by the loss of riders accompanying the COVID pandemic (beginning in March 2020). The cost per passenger increased to \$10.98 in FY2020, and then nearly tripled to \$30.71 in FY2021.

- With the impact of inflation removed from the cost side (normalization), the six-year result was an average annual increase of 26.2 percent in the cost per passenger.

\* \* \* \* \*

The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2016 through FY2021:

- There was an average annual increase in the operating cost per hour of 9.2 percent, which amounted to a 5.8 percent increase in inflation adjusted dollars.
- The cost per passenger increased on average by 30.2 percent per year, which amounted to an average annual increase of 26.2 percent in constant FY2016 dollars. The trend was specifically influenced by a major drop off in ridership in FY2021, the first full year of the COVID pandemic.
- Passenger productivity showed negative trends, with passengers per vehicle service hour and mile both decreasing by around 15 percent per year overall. Again, this trend was specifically influenced by a major drop off in ridership in FY2021, the first full year of the COVID pandemic.

### Exhibit 4: TDA Indicator Performance – Bus Service

	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	Av. Ann. Chg.
<b>Performance Indicators</b>							
Op. Cost per Vehicle Svc. Hour (Actual \$)	\$107.92	\$111.11	\$108.61	\$121.26	\$137.35	\$167.48	- -
<i>Annual Change</i>	- -	3.0%	-2.2%	11.6%	13.3%	21.9%	9.2%
Op. Cost per Vehicle Svc. Hour (Constant \$)	\$107.92	\$107.61	\$101.17	\$109.67	\$122.60	\$143.34	- -
<i>Annual Change</i>	- -	-0.3%	-6.0%	8.4%	11.8%	16.9%	5.8%
Passengers per Vehicle Service Hour	13.1	12.5	13.1	13.2	12.5	5.5	- -
<i>Annual Change</i>	- -	-4.7%	4.8%	0.7%	-5.2%	-56.4%	-16.1%
Passengers per Vehicle Service Mile	0.93	0.89	0.94	0.96	0.93	0.42	- -
<i>Annual Change</i>	- -	-3.9%	5.9%	2.3%	-3.9%	-54.5%	-14.6%
Op. Cost per Passenger (Actual \$)	\$8.22	\$8.88	\$8.28	\$9.19	\$10.98	\$30.71	- -
<i>Annual Change</i>	- -	8.1%	-6.8%	10.9%	19.5%	179.7%	30.2%
Op. Cost per Passenger (Constant \$)	\$8.22	\$8.60	\$7.72	\$8.31	\$9.80	\$26.28	- -
<i>Annual Change</i>	- -	4.7%	-10.3%	7.7%	17.9%	168.2%	26.2%
Vehicle Service Hours per FTE	(a)	(a)	(a)	(a)	(a)	(a)	- -
<i>Annual Change</i>	- -	- -	- -	- -	- -	- -	- -
<b>Input Data</b>							
Operating Cost (Actual \$)	\$13,555,486	\$13,646,760	\$13,643,794	\$15,253,896	\$15,439,888	\$12,904,948	- -
<i>Annual Change</i>	- -	0.7%	0.0%	11.8%	1.2%	-16.4%	-1.0%
Operating Cost (Constant \$)	\$13,555,486	\$13,216,811	\$12,708,853	\$13,796,910	\$13,781,798	\$11,045,020	- -
<i>Annual Change</i>	- -	-2.5%	-3.8%	8.6%	-0.1%	-19.9%	-4.0%
Vehicle Service Hours	125,604	122,825	125,619	125,799	112,412	77,053	- -
<i>Annual Change</i>	- -	-2.2%	2.3%	0.1%	-10.6%	-31.5%	-9.3%
Vehicle Service Miles	1,780,948	1,726,726	1,748,817	1,723,369	1,518,836	998,047	- -
<i>Annual Change</i>	- -	-3.0%	1.3%	-1.5%	-11.9%	-34.3%	-10.9%
Unlinked Passengers	1,648,811	1,536,084	1,647,002	1,660,443	1,406,245	420,226	- -
<i>Annual Change</i>	- -	-6.8%	7.2%	0.8%	-15.3%	-70.1%	-23.9%
Employee Full-Time Equivalents	(a)	(a)	(a)	(a)	(a)	(a)	- -
<i>Annual Change</i>	- -	- -	- -	- -	- -	- -	- -
Bay Area CPI - Annual Change	- -	3.3%	4.0%	3.0%	1.3%	4.3%	- -
- Cumulative Change	- -	3.3%	7.4%	10.6%	12.0%	16.8%	3.2%

(a) Not applicable as LAVTA service is provided by a private contractor

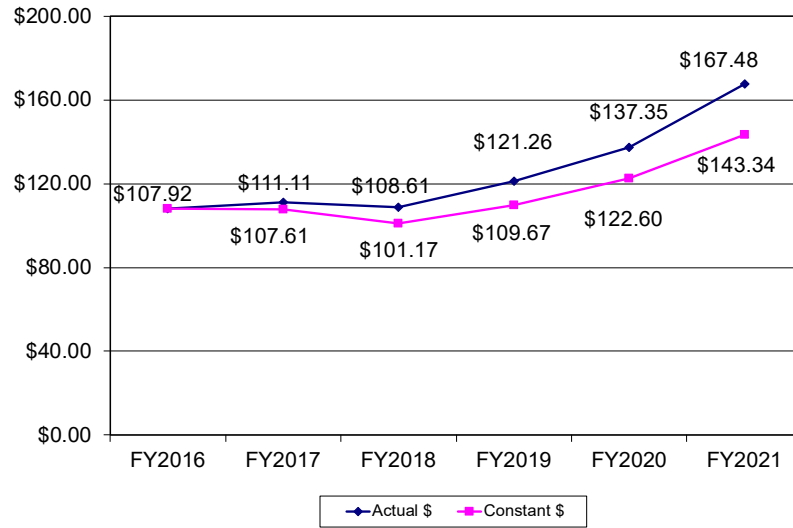
Sources: FY2016 through FY2018 - Prior Performance Audit Report

FY2019 through FY2021 - NTD Reports

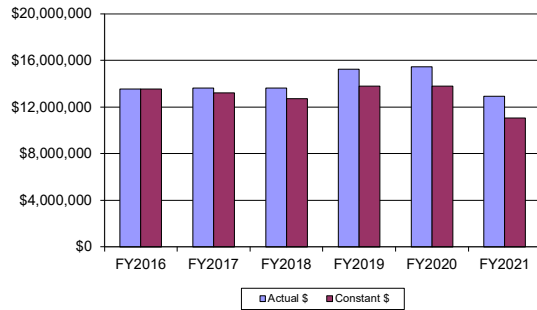
CPI Data - U.S. Department of Labor, Bureau of Labor Statistics



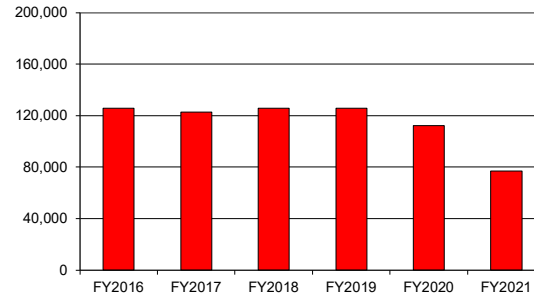
**Exhibit 4.1: Operating Cost per Vehicle Service Hour – Bus Service**



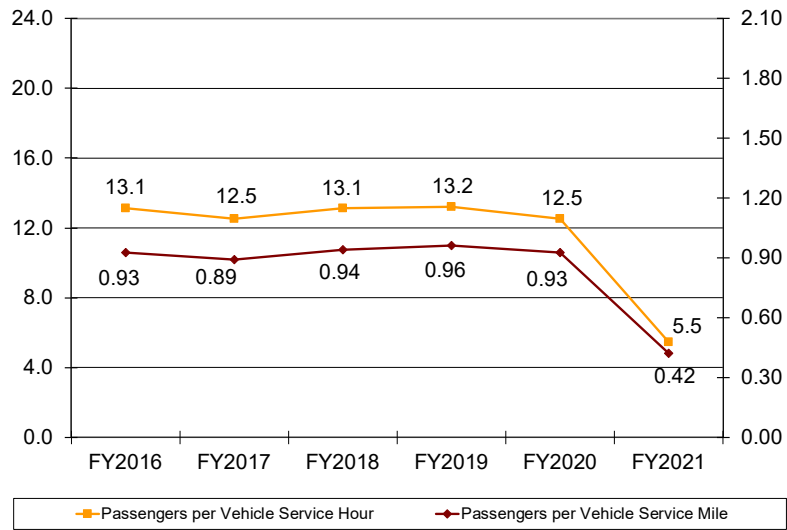
**Operating Cost**



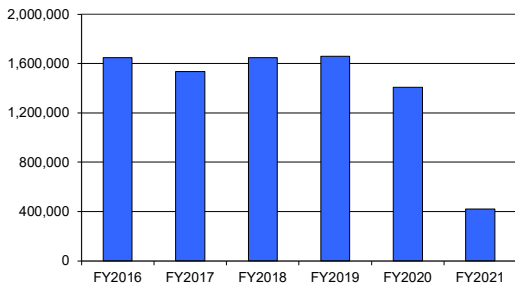
**Vehicle Service Hours**



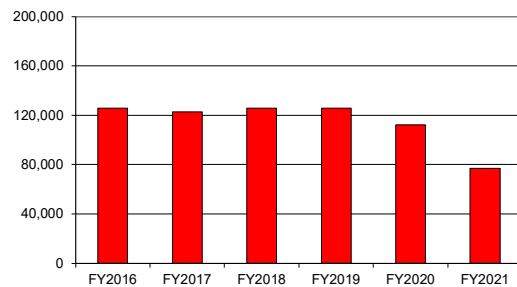
**Exhibit 4.2: Passengers per Hour and per Mile – Bus Service**



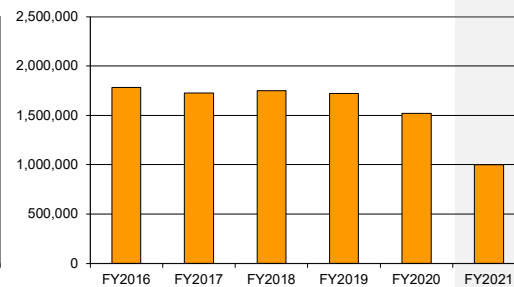
**Unlinked Passengers**



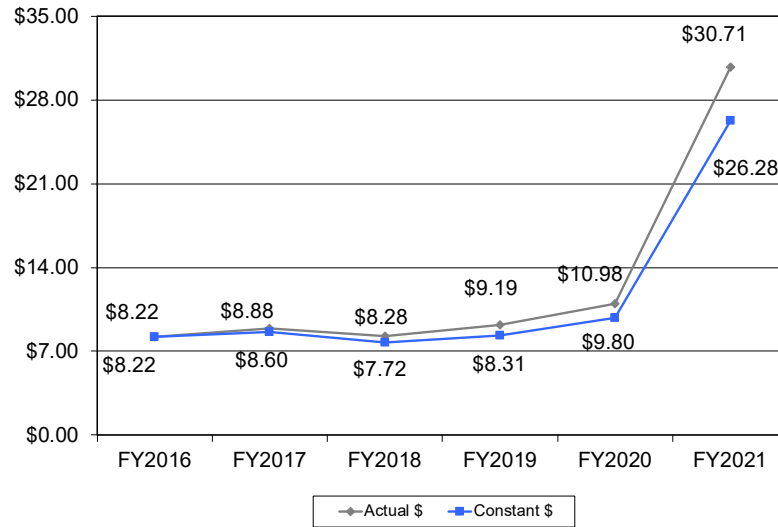
**Vehicle Service Hours**



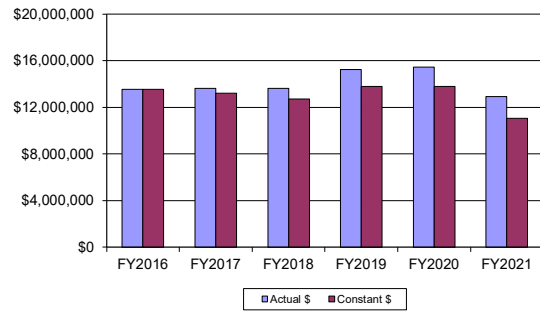
**Vehicle Service Miles**



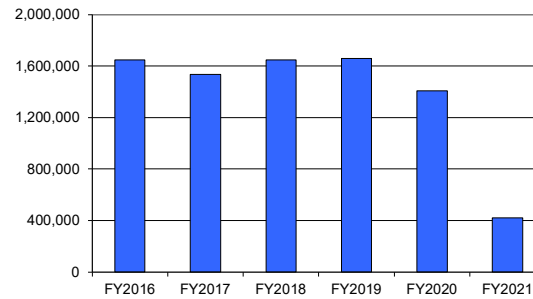
**Exhibit 4.3: Operating Cost per Passenger – Bus Service**



**Operating Cost**



**Unlinked Passengers**



### Bus Service Component Costs

Year-to-year changes in selected operating cost categories over the past six years are presented in Exhibits 4.4 and 4.5. Examining components of operating costs (e.g., labor, fringes, fuel, and casualty/liability) may determine what particular components had the most significant impacts on the operating costs. Exhibit 4.4 also shows the concurrent changes in vehicle service hours and Exhibit 4.5 illustrates the portion of the cost per bus service hour that can be attributed to each included cost component.

- The most significant change in the six-year period was an average annual increase of 38 percent in the materials/supplies area. In particular, materials/supplies costs increased substantially earlier in the period, reportedly driven by increased printing costs in FY2017 and added facility costs instituted by a new facilities manager in FY2018. However, materials/supplies costs accounted for two percent or less of total costs throughout the period.
- In-house labor costs increased by only 0.6 percent annually, while varying between eight and ten percent of total costs from year to year.
- At the same time, fringe benefits expenses went up by 11 percent on average per year, principally reflecting a 41 percent increase in FY2019 compared with FY2018. The increase in FY2019 has been attributed primarily to retirement benefits and the year-end adjustments to comply with GASB 68. In FY2018 that adjustment was -\$85,692 and in FY2019 it was \$172,198, for a difference of \$257,890. The rest of the increase reportedly reflects increases in insurance and labor costs that affect some of the benefit costs.
- The portion of total costs attributed to fringe benefits increased steadily through the period, from 3.7 percent in FY2016 to 6.7 percent by FY2021.
- Not surprisingly with a contracted service, purchased transportation costs represented the largest portion of the total costs, with the share between 61 and 66 percent in all six years. Purchased transportation costs experienced an average annual decrease of two percent over the period.

- Fuel/lubricants experienced the most significant cost decrease, going down on average by about 11 percent annually. These costs also decreased from nearly six percent of total costs in the earlier years, to 3.3 percent by FY2021.
- The services, casualty/liability and “miscellaneous” cost categories showed only minor changes per year on average, and together comprised about 15 percent of total operating costs in each year.

\* \* \* \* \*

The following is a brief summary of the component operating costs trend highlights between FY2016 and FY2021:

- The most significant change was an average annual increase of 38 percent in the materials/supplies area, though materials/supplies costs consistently accounted for two percent or less of total costs. Fuel/lubricants experienced the most significant cost decrease, going down on average by about 11 percent annually.
- In-house labor costs increased by 0.6 percent annually while fringe benefits expenses went up by 11 percent on average per year, principally reflecting a 41 percent increase in FY2019. That increase was attributed primarily to retirement benefits and the year-end adjustments to comply with GASB 68.
- Purchased transportation costs represented the largest portion of the total costs, with the share between 61 and 66 percent. Most other cost categories showed only minor changes per year on average.

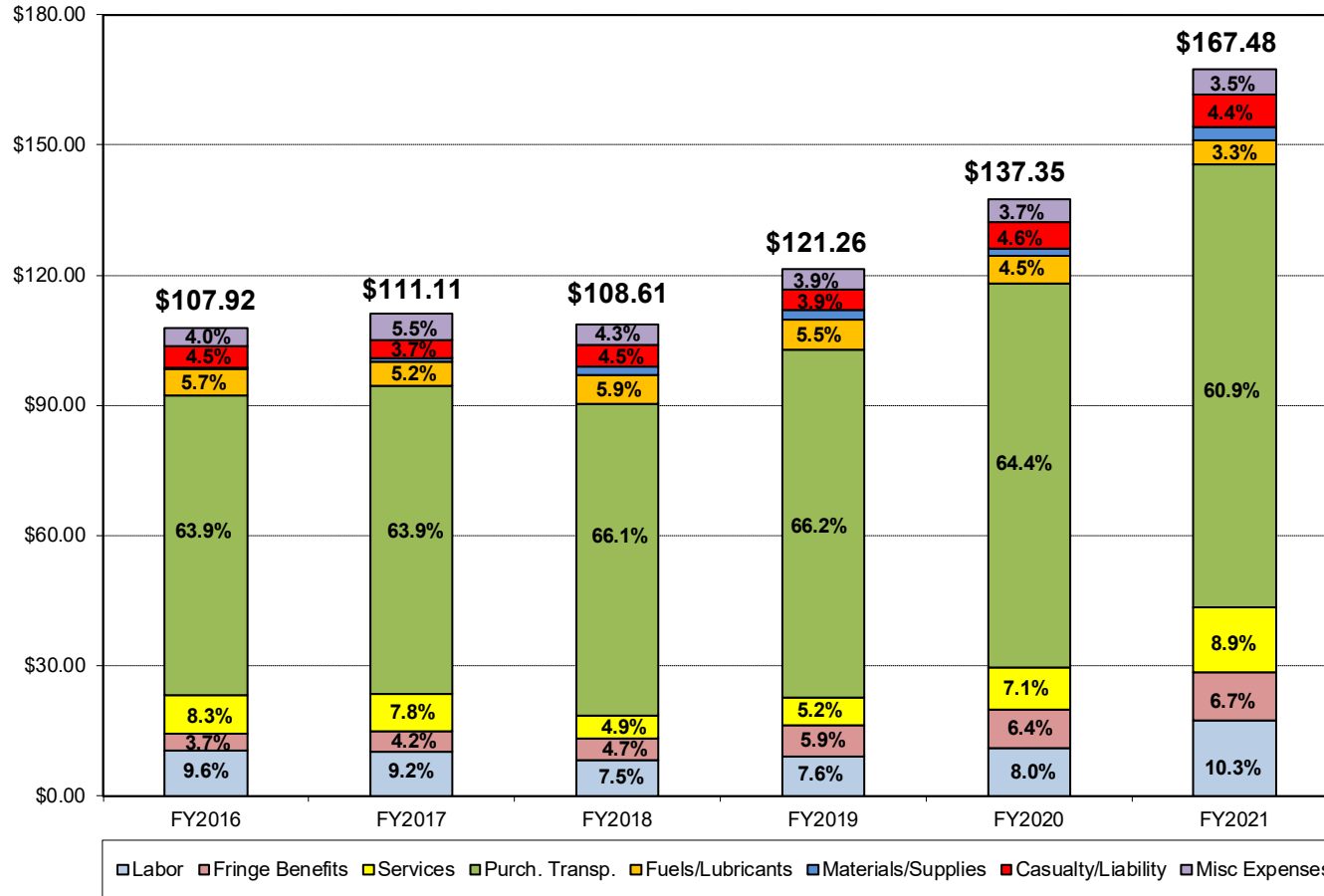
**Exhibit 4.4: TDA Component Costs Trends – Bus Service**

	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	Av. Ann. Chg.
<b>COST CATEGORIES</b>							
Labor (Salaries, Wages)	\$1,294,884	\$1,252,115	\$1,026,387	\$1,154,300	\$1,241,991	\$1,332,098	--
<i>Annual Change</i>	--	-3.3%	-18.0%	12.5%	7.6%	7.3%	0.6%
Fringe Benefits (a)	\$503,239	\$568,893	\$640,376	\$905,948	\$986,323	\$861,266	--
<i>Annual Change</i>	--	13.0%	12.6%	41.5%	8.9%	-12.7%	11.3%
Services	\$1,120,177	\$1,057,868	\$667,815	\$788,162	\$1,101,612	\$1,150,440	--
<i>Annual Change</i>	--	-5.6%	-36.9%	18.0%	39.8%	4.4%	0.5%
Purchased Transportation	\$8,661,419	\$8,714,347	\$9,021,116	\$10,101,677	\$9,947,927	\$7,864,560	--
<i>Annual Change</i>	--	0.6%	3.5%	12.0%	-1.5%	-20.9%	-1.9%
Fuels/Lubricants	\$769,474	\$708,343	\$811,707	\$845,721	\$701,573	\$426,882	--
<i>Annual Change</i>	--	-7.9%	14.6%	4.2%	-17.0%	-39.2%	-11.1%
Materials/Supplies (b)	\$49,701	\$93,829	\$275,171	\$277,790	\$192,701	\$248,712	--
<i>Annual Change</i>	--	88.8%	193.3%	1.0%	-30.6%	29.1%	38.0%
Casualty/Liability	\$608,600	\$503,795	\$608,182	\$587,907	\$703,337	\$568,157	--
<i>Annual Change</i>	--	-17.2%	20.7%	-3.3%	19.6%	-19.2%	-1.4%
Misc. Expenses (c)	\$547,992	\$747,570	\$593,040	\$592,391	\$564,424	\$452,833	--
<i>Annual Change</i>	--	36.4%	-20.7%	-0.1%	-4.7%	-19.8%	-3.7%
<b>Total</b>	\$13,555,486	\$13,646,760	\$13,643,794	\$15,253,896	\$15,439,888	\$12,904,948	--
<i>Annual Change</i>	--	0.7%	0.0%	11.8%	1.2%	-16.4%	-1.0%
<b>OPERATING STATISTICS</b>							
Vehicle Service Hours	125,604	122,825	125,619	125,799	112,412	77,053	--
<i>Annual Change</i>	--	-2.2%	2.3%	0.1%	-10.6%	-31.5%	-9.3%

Sources: FY2016 through FY2018 - Prior Performance Audit Report; FY2019 through FY2021 - NTD Reports

- (a) Also includes Paid Absences (as reported separately in NTD Reports since FY2018)
- (b) Includes Other Materials and Supplies
- (c) Includes Tires/Tubes, Utilities, Taxes and Miscellaneous Expenses

**Exhibit 4.5: Distribution of Component Costs – Bus Service**  
*Operating Cost per Vehicle Service Hour*



## Paratransit Performance Trends

This section provides an overview of the performance of LAVTA's paratransit service over the six year analysis period. The trends in the TDA indicators and input data are presented in Exhibit 5. The six-year trends are illustrated in Exhibits 5.1 through 5.3.

- Operating Cost per Vehicle Service Hour (Exhibit 5.1)
  - LAVTA's paratransit cost per hour decreased in every year through FY2019 (from \$61.72 to \$43.74).
  - This was followed by major increases in FY2020 (22.6 percent) and especially FY2021 (nearly 60 percent), for a period-high cost per hour of \$85.63 in the last year.
  - Results in the last two years are reflective of major service adjustments to meet changing demand during the COVID pandemic.
  - Overall, the cost per hour increased an average of 6.8 percent per year over the six years.
  - With the effects of inflation removed, cost per hour exhibited an average annual increase of 3.5 percent.
  
- Passengers per Vehicle Service Hour (Exhibit 5.2)
  - Passengers per vehicle service hour decreased in all years of the review period except FY2020, for a general decrease from 1.8 passengers down to 1.2 (the latter impacted by the COVID pandemic).
  - The trend amounted to an average annual decrease of 8.6 percent, as overall annual passenger levels declined by 23 percent while corresponding service hours dropped by just 16 percent.
  
- Passengers per Vehicle Service Mile (Exhibit 5.2)



- Performance in passengers per vehicle service mile was negative overall, dropping from 0.13 to 0.10, and with losses in every year of the review period.
  - The largest annual change was a ten percent decline in FY2021 (the last year of the period and the first full year of COVID).
  - Passengers per mile posted an average annual decrease of 5.3 percent over the six-years.
- Operating Cost per Passenger (Exhibit 5.3)
    - Cost effectiveness worsened, by 16.8 percent per year on average through the review period.
    - The cost per paratransit passenger was \$33.52 in the first year, followed by a decrease in FY2017 but increases in every year subsequently.
    - The cost per passenger reached the period high of \$72.96 in the last year (FY2021), at which time ridership dropped off precipitously during the first full year of the COVID pandemic.
    - With the impact of inflation removed from the cost side, the six-year result was an average annual increase of 13.2 percent in the cost per passenger.

\* \* \* \* \*

The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2016 through FY2021:

- For cost efficiency, there was an average annual increase in the operating cost per hour of 6.8 percent. This amounted to an annual increase of 3.5 percent in inflation adjusted dollars.
- In terms of cost effectiveness, the operating cost per passenger showed a significant increase of 13.2 percent per year on average, when normalized in FY2016 dollars.

- Passenger productivity showed general decline, with passengers per hour decreasing by 8.6 percent annually and passengers per mile decreasing by 5.3 percent.

**Exhibit 5: TDA Indicator Performance – Paratransit**

	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	Av. Ann. Chg.
<b>Performance Indicators</b>							
Op. Cost per Vehicle Svc. Hour (Actual \$)	\$61.72	\$57.92	\$54.55	\$43.74	\$53.62	\$85.63	- -
<i>Annual Change</i>	- -	-6.2%	-5.8%	-19.8%	22.6%	59.7%	6.8%
Op. Cost per Vehicle Svc. Hour (Constant \$)	\$61.72	\$56.09	\$50.82	\$39.56	\$47.86	\$73.29	- -
<i>Annual Change</i>	- -	-9.1%	-9.4%	-22.1%	21.0%	53.1%	3.5%
Passengers per Vehicle Service Hour	1.8	1.8	1.6	1.2	1.3	1.2	- -
<i>Annual Change</i>	- -	-0.3%	-14.7%	-23.9%	9.7%	-10.2%	-8.6%
Passengers per Vehicle Service Mile	0.13	0.13	0.12	0.11	0.11	0.10	- -
<i>Annual Change</i>	- -	-2.2%	-6.9%	-7.0%	-0.1%	-10.0%	-5.3%
Op. Cost per Passenger (Actual \$)	\$33.52	\$31.54	\$34.85	\$36.70	\$41.02	\$72.96	- -
<i>Annual Change</i>	- -	-5.9%	10.5%	5.3%	11.8%	77.9%	16.8%
Op. Cost per Passenger (Constant \$)	\$33.52	\$30.55	\$32.46	\$33.19	\$36.62	\$62.45	- -
<i>Annual Change</i>	- -	-8.9%	6.3%	2.3%	10.3%	70.5%	13.2%
Vehicle Service Hours per FTE	(a)	(a)	(a)	(a)	(a)	(a)	- -
<i>Annual Change</i>	- -	- -	- -	- -	- -	- -	- -
<b>Input Data</b>							
Operating Cost (Actual \$)	\$1,842,854	\$1,707,058	\$1,703,128	\$1,692,058	\$1,492,324	\$1,091,519	- -
<i>Annual Change</i>	- -	-7.4%	-0.2%	-0.6%	-11.8%	-26.9%	-9.9%
Operating Cost (Constant \$)	\$1,842,854	\$1,653,276	\$1,586,421	\$1,530,440	\$1,332,063	\$934,204	- -
<i>Annual Change</i>	- -	-10.3%	-4.0%	-3.5%	-13.0%	-29.9%	-12.7%
Vehicle Service Hours	29,859	29,474	31,219	38,684	27,833	12,747	- -
<i>Annual Change</i>	- -	-1.3%	5.9%	23.9%	-28.1%	-54.2%	-15.7%
Vehicle Service Miles	421,306	424,072	411,459	417,558	329,784	150,703	- -
<i>Annual Change</i>	- -	0.7%	-3.0%	1.5%	-21.0%	-54.3%	-18.6%
Unlinked Passengers	54,975	54,121	48,872	46,108	36,378	14,960	- -
<i>Annual Change</i>	- -	-1.6%	-9.7%	-5.7%	-21.1%	-58.9%	-22.9%
Employee Full-Time Equivalents	(a)	(a)	(a)	(a)	(a)	(a)	- -
<i>Annual Change</i>	- -	- -	- -	- -	- -	- -	- -
Bay Area CPI - Annual Change	- -	3.3%	4.0%	3.0%	1.3%	4.3%	- -
- Cumulative Change	- -	3.3%	7.4%	10.6%	12.0%	16.8%	3.2%

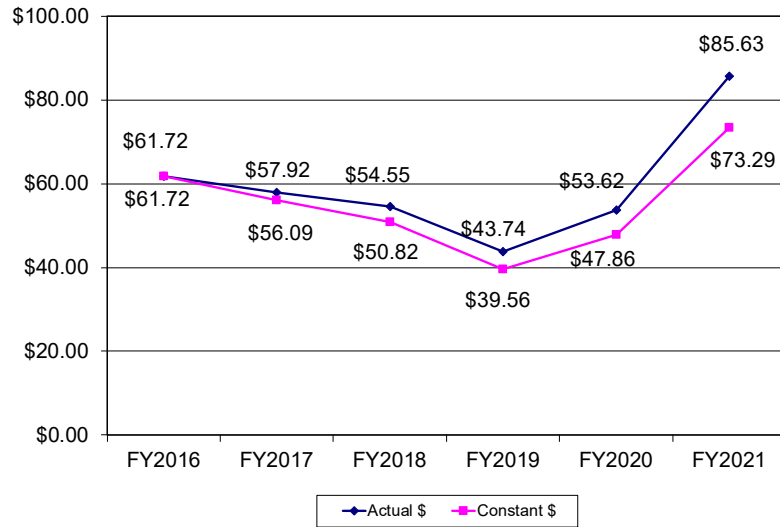
(a) Not applicable as LAVTA service is provided by a private contractor

Sources: FY2016 through FY2018 - Prior Performance Audit Report

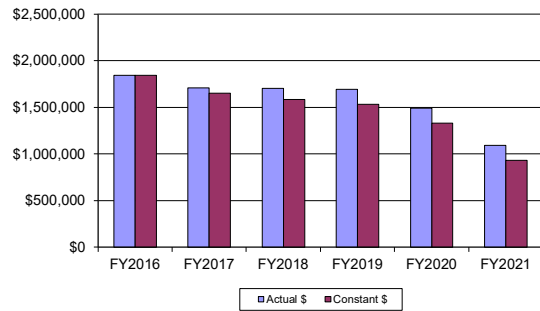
FY2019 through FY2021 - NTD Reports

CPI Data - U.S. Department of Labor, Bureau of Labor Statistics

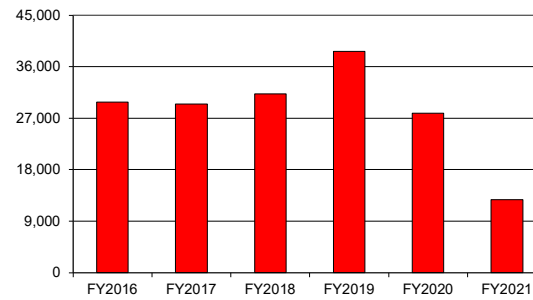
**Exhibit 5.1: Operating Cost per Vehicle Service Hour – Paratransit**



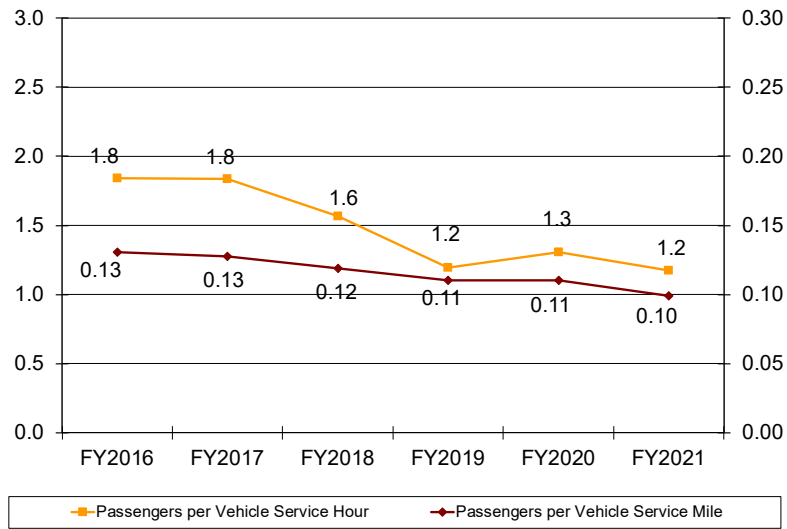
**Operating Cost**



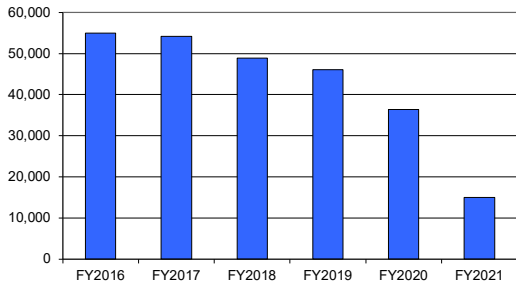
**Vehicle Service Hours**



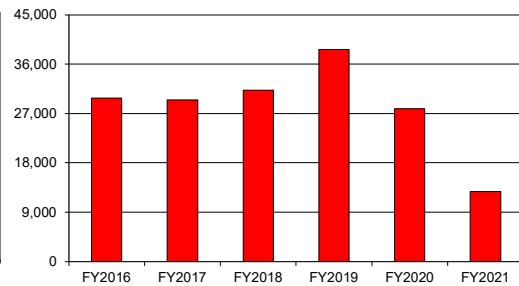
**Exhibit 5.2: TDA Indicator Performance – Paratransit**  
*Passengers per Hour and per Mile*



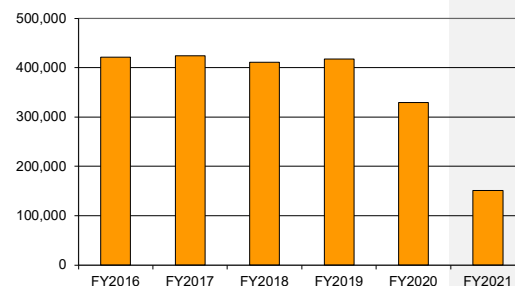
**Unlinked Passengers**



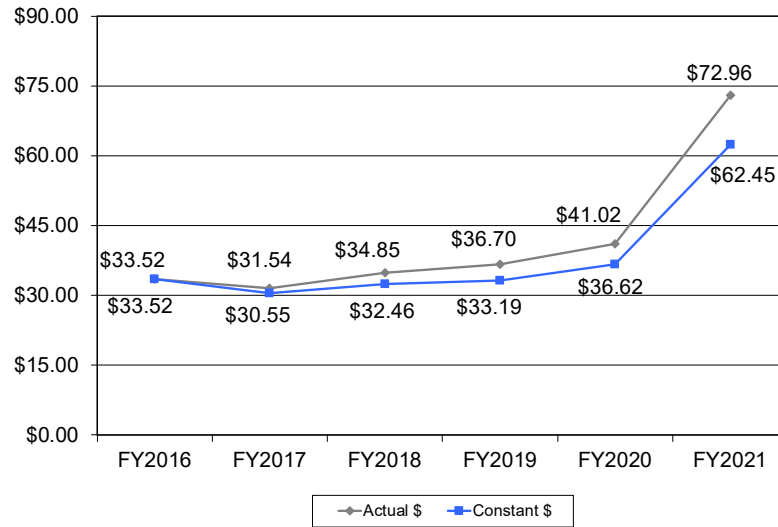
**Vehicle Service Hours**



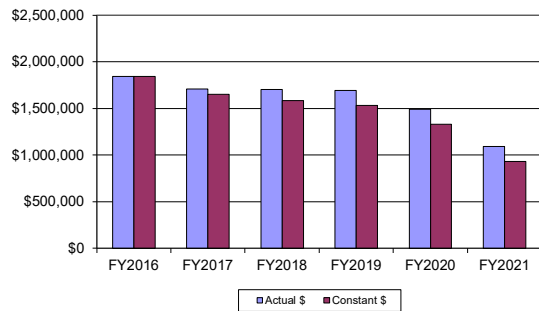
**Vehicle Service Miles**



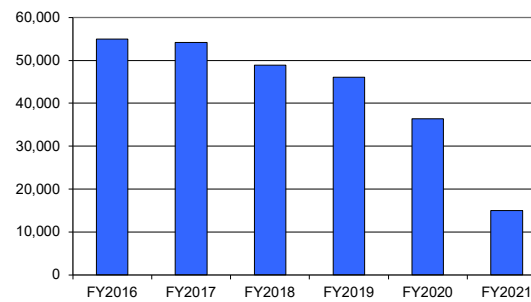
**Exhibit 5.3: Operating Cost per Passenger – Paratransit**



**Operating Cost**



**Unlinked Passengers**



### Paratransit Component Costs

The year-to-year changes in selected operating cost categories over the current audit period are presented in Exhibit 5.4, along with the concurrent changes in vehicle service hours. The portions of the cost per vehicle service hour that can be attributed to each included cost component are shown in Exhibit 5.5.

- In-house labor costs decreased slightly overall, by one percent on average per year, even as they increased from about six percent to nine percent of total operating costs during the period.
- At the same time, fringe benefits costs increased by 8.7 percent, and increased from about two percent to four percent of total operating costs.
- Not surprisingly for a contracted service, purchased transportation accounted for the largest category of costs (86 percent or higher in the first four years, and 82 percent in FY2020 and FY2021), though they decreased on average by 11.6 percent per year overall.
- Despite some variation from year to year, services, materials/supplies and casualty/liability costs all posted net decreases, ranging between nine and four percent on average per year. They also remained relatively minimal in terms of dollar amounts.
- “Miscellaneous expenses” (including utilities) showed the largest annual change, with a 36 percent increase overall, but constituted two percent or less of total expenses throughout the period.

\* \* \* \* \*

The following is a brief summary of the component operating costs trend highlights between FY2016 and FY2021:

- Purchased transportation costs represented by far the largest portion of the total costs, above 80 percent throughout the review period. At the same time, they decreased by 11.6 percent per year on average.
- In-house labor costs decreased slightly overall, but fringe benefits costs increased by 8.7 percent. Each of these two cost categories accounted for less than ten percent of the total operating costs.
- Despite some variation from year to year, only relatively minimal expenses were reported for the other component cost categories, and most categories posted net decreases during the period as well.



**Exhibit 5.4: TDA Component Costs Trends – Paratransit**

	FY2016	FY2017	FY2018	FY2019	FY2020	FY2021	Av. Ann. Chg.
<b>COST CATEGORIES</b>							
Labor (Salaries, Wages)	\$106,654	\$104,784	\$96,334	\$122,696	\$141,754	\$101,669	--
<i>Annual Change</i>	--	-1.8%	-8.1%	27.4%	15.5%	-28.3%	-1.0%
Fringe Benefits (a)	\$30,003	\$28,686	\$46,103	\$48,080	\$62,835	\$45,591	--
<i>Annual Change</i>	--	-4.4%	60.7%	4.3%	30.7%	-27.4%	8.7%
Services	\$43,540	\$91,946	\$75,437	\$55,452	\$25,216	\$26,438	--
<i>Annual Change</i>	--	111.2%	-18.0%	-26.5%	-54.5%	4.8%	-9.5%
Purchased Transportation	\$1,654,054	\$1,468,134	\$1,474,484	\$1,453,276	\$1,224,381	\$892,566	--
<i>Annual Change</i>	--	-11.2%	0.4%	-1.4%	-15.8%	-27.1%	-11.6%
Materials/Supplies (b)	\$1,593	\$4,244	\$2,691	\$1,762	\$1,169	\$1,276	--
<i>Annual Change</i>	--	166.4%	-36.6%	-34.5%	-33.7%	9.2%	-4.3%
Casualty/Liability	\$2,254	\$2,313	\$1,523	\$1,464	\$7,122	\$1,553	--
<i>Annual Change</i>	--	2.6%	-34.2%	-3.9%	386.5%	-78.2%	-7.2%
Misc. Expenses (c)	\$4,756	\$6,951	\$6,556	\$9,328	\$29,847	\$22,426	--
<i>Annual Change</i>	--	46.2%	-5.7%	42.3%	220.0%	-24.9%	36.4%
<b>Total</b>	\$1,842,854	\$1,707,058	\$1,703,128	\$1,692,058	\$1,492,324	\$1,091,519	--
<i>Annual Change</i>	--	-7.4%	-0.2%	-0.6%	-11.8%	-26.9%	-9.9%
<b>OPERATING STATISTICS</b>							
Vehicle Service Hours	29,859	29,474	31,219	38,684	27,833	12,747	--
<i>Annual Change</i>	--	-1.3%	5.9%	23.9%	-28.1%	-54.2%	-15.7%

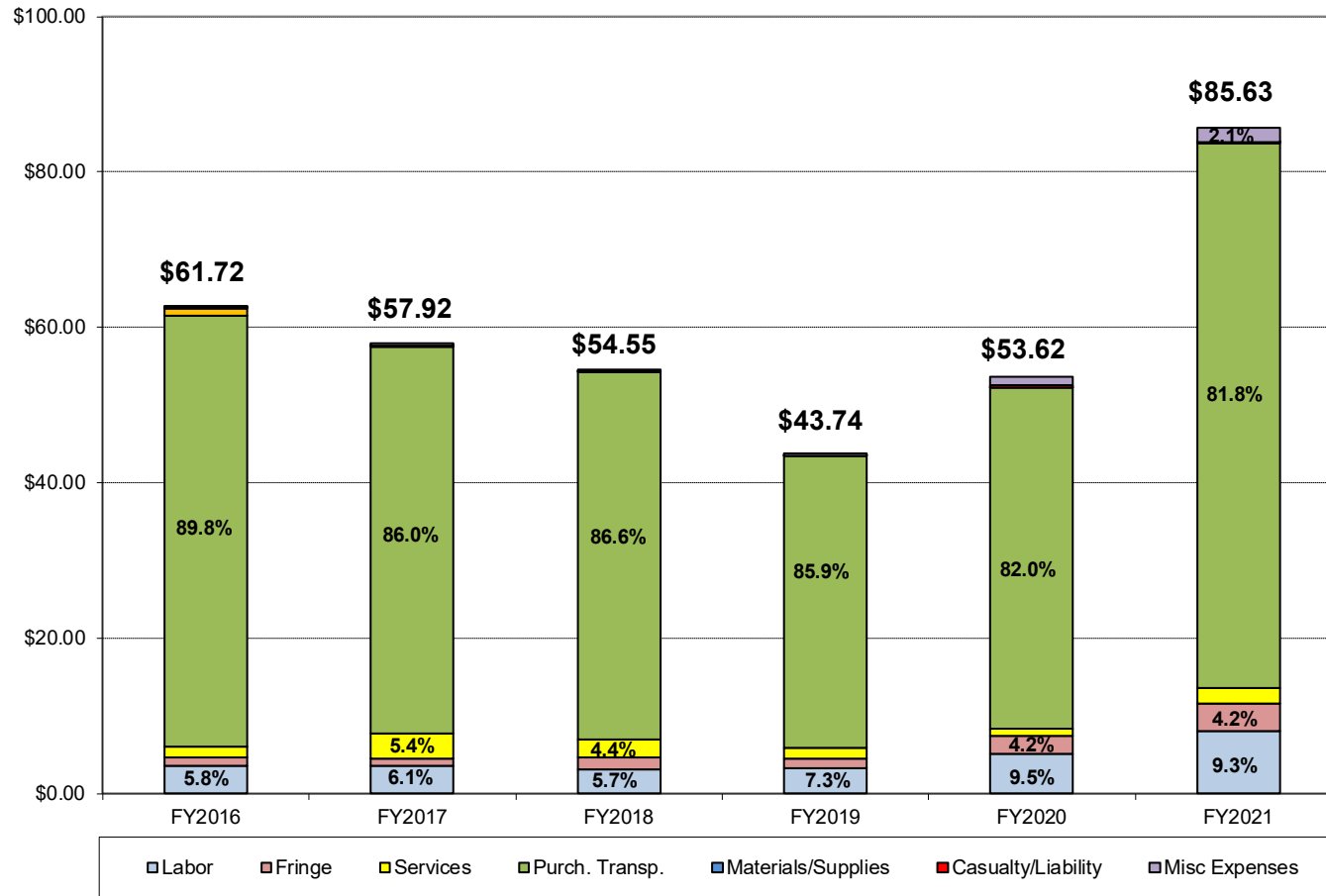
Sources: FY2016 through FY2018 - Prior Performance Audit Report; FY2019 through FY2021 - NTD Reports

(a) Also includes Paid Absences (as reported separately in NTD Reports since FY2018)

(b) Includes Other Materials and Supplies

(c) Includes Utilities and Miscellaneous Expenses

**Exhibit 5.5: Distribution of Component Costs – Paratransit**  
*Operating Cost per Vehicle Service Hour*



#### **IV. COMPLIANCE WITH PUC REQUIREMENTS**

An assessment of LAVTA's compliance with selected sections of the state Public Utilities Code (PUC) has been performed. The compliance areas included in this review are those that MTC has identified for inclusion in the triennial performance audit. Other statutory and regulatory compliance requirements are reviewed by MTC in conjunction with its annual review of LAVTA's TDA-STA claim application.

The results from this review are detailed by individual requirement in Exhibit 6. LAVTA is in compliance with all of the seven 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, revenue sharing, welfare-to-work transportation coordination, and evaluating passenger needs.

### Exhibit 6: Compliance with State PUC Requirements

Code Reference	Operator Compliance Requirements	Compliance Finding	Verification Information
PUC99251	<u>CHP Certification</u> - 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 following a CHP inspection of the operator's terminal	In Compliance	Satisfactory Inspections: <ul style="list-style-type: none"> <li>• FY2019: 01/17/2019</li> <li>• FY2020: 01/28/2020</li> <li>• FY2021: 07/29/2021</li> </ul>
PUC99264	<u>Operator-to-Vehicle Staffing</u> - The operator does not routinely staff with two or more persons public transportation vehicles designed to be operated by one person	In Compliance	<ul style="list-style-type: none"> <li>• No provision for excess fixed-route service staffing in Agreement with MV Transportation, Inc. 5/3/2018, and in subsequent Coronavirus Pandemic Payment Agreements/Extensions.</li> <li>• No provision for excess paratransit service staffing in Agreement with Medical Transportation Management, Inc., 5/1/2014, and in subsequent contract modifications.</li> </ul>
PUC99314.5 (e)(1)(2)	<u>Part Time Drivers</u> - Operators receiving STA funds are not precluded by contract from employing part-time drivers or from contracting with common carriers	In Compliance	<ul style="list-style-type: none"> <li>• All applicable LAVTA services are contractor operated.</li> </ul>
PUC99155	<u>Reduced Fare Eligibility</u> - For any operator who received TDA Article 4 funds, if the operator offers reduced fares to senior citizens and disabled persons, applicant will honor the federal Medicare identification card, the California Department of Motor Vehicles disability ID card, the Regional Transit Connection Discount Card, or any other current identification card issued by another transit operator that is valid for the type of transportation service or discount requested; and if the operator offers reduced fares to senior citizens, it also offers the same reduced fare to disabled patrons	In Compliance	Fare information in public information material: <ul style="list-style-type: none"> <li>• LAVTA web site (www.wheelsbus.com/fares)</li> </ul>

Code Reference	Operator Compliance Requirements	Compliance Finding	Verification Information
PUC99155.1 (a)(1)(2)	<u>Welfare to Work Coordination</u> - Operators must coordinates with county welfare departments in order to ensure that transportation moneys available for purposes of assisting recipients of aid are expended efficiently for the benefit of that population; if a recipient of CalWORKs program funds by the county, the operator shall give priority to the enhancement of public transportation services for welfare-to-work purposes and to the enhancement of transportation alternatives, such as, but not limited to, subsidies or vouchers, van pools, and contract paratransit operations, in order to promote welfare-to-work purposes	In Compliance	<ul style="list-style-type: none"> <li>LAVTA sells bus passes to Alameda County for distribution to qualified recipients by County agencies.</li> <li>LAVTA is a stakeholder in the MTC Coordinated Public Transit-Human Services Transportation Plan, directed by MTC as the RTAP and MPO for the Bay Area.</li> </ul>
PUC99314.7, Govt Code 66516, MTC Res. Nos. 3837, 4073	<u>Joint Revenue Sharing Agreement</u> - The operator has current joint fare revenue sharing agreements in place with transit operators in the MTC region with which its service connects, and submitted copies of agreements to MTC	In Compliance	<ul style="list-style-type: none"> <li>Clipper Agreement (with AC Transit, BART, CCCTA, GGBHTD, SFMTA, SamTrans, Caltrain, FAST, Petaluma, ECCTA, MCTD, NVTA, SolTrans, SCT, SMART, Vacaville, VTA, WCCTA, WETA, Santa Rosa, Union City).</li> <li>Regional Transit Discount Card Agreement - 8/28/2013 (with MTC, AC Transit, BART, CCCTA, ECCTA, Golden Gate Transit, SFMTA, Rio Vista, SamTrans, Santa Rosa Transit, Sonoma Transit and VTA); and RTC Amendment 1 – 12/2/2020.</li> </ul>
PUC99246(d)	<u>Process for Evaluation of Passenger Needs</u> - The operator has an established process in place for evaluating the needs and types of passengers being served	In Compliance	<ul style="list-style-type: none"> <li>LAVTA Public Hearing Policies and Procedures Summary</li> <li>LAVTA Short Range Transit Plans</li> <li>Recent fixed-route and dial-a-ride Passenger Satisfaction Surveys</li> <li>Numerous customer outreach efforts and events</li> </ul>

## V. PRIOR AUDIT RECOMMENDATIONS

LAVTA's prior performance audit was completed in June 2019. Generally, MTC has used the audit recommendations as the basis for developing the Productivity Improvement Program (PIP) projects the operator is required to complete. MTC tracks PIP project implementation as part of its annual review of the operator's TDA-STA claim application. This section provides an assessment of actions taken by TDA-STA recipients toward implementing the recommendations advanced in the prior audit. This assessment provides continuity between the current and prior audits, which allows MTC to fulfill its obligations where the recommendations were advanced as PIP projects.

This review addresses LAVTA's responses to the recommendations made in the prior performance audit, and whether LAVTA made reasonable progress toward their implementation. There was one recommendation made in LAVTA's prior audit. A summary of the recommendation and the actions taken by LAVTA in response is presented in Exhibit 7. A determination of the status of the recommendation also is provided, using one of the following four evaluation categories:

- Implemented – appropriate actions have been taken and the issue has been sufficiently addressed.
- Implementation in Progress – actions have been taken to address the issue, but the recommendation remains open until further actions are completed.
- Not Implemented – no actions have been taken to address the issue, and the recommendation remains open.
- Closed – no actions have been taken to address the issue, but changes in circumstances have impacted the need to implement the recommendation.

It has been determined that LAVTA has implemented corrective actions for the recommendation from the prior audit. Since the transition of operating contractors to the County Connection/Transdev in April 2021, LAVTA has been able to ensure that data is collected and reported accurately for the paratransit service. As part of this new agreement, LAVTA reports that improvements were made in the reporting of performance data to ensure accurate information was being communicated by contractor staff, including the utilization of Trapeze PASS, and biweekly meetings are held with County Connection and Transdev to discuss operational performance metrics. All data is validated and any inconsistencies are addressed and rectified in a timely manner.

### Exhibit 7: Status of Prior Audit Recommendations

Recommendation	Actions Taken	Evaluation
<p>1. Continue to ensure that data is collected and reported accurately for paratransit service.</p> <p><i>LAVTA's TDA audit completed in June 2016 found deficiencies in the collection and reporting of performance data, mostly due to LAVTA's contractor not reporting service data correctly. The review of LAVTA's data collection and reporting methods in the prior audit (June 2019) found there were still apparent reporting anomalies, mostly on the paratransit side.</i></p> <p><i>It was recommended that LAVTA continue to examine the data collection and reporting activities of its paratransit contractor to ensure that operating data is being accurately collected and reported. This would allow LAVTA to determine if data collection and reporting changes implemented since the last TDA audit have resulted in more consistent and accurate results.</i></p>	<p>WHEELS paratransit services were operated by a contractor, Medical Transportation Management (MTM), until April of 2021. At that time, LAVTA entered into a new O&amp;M agreement with the Central Contra Costa Transit Authority (County Connection), for the provision of paratransit services. In turn, County Connection subcontracts with Transdev. As part of this new agreement, LAVTA reports that improvements were made in the reporting of performance data to ensure accurate information was being communicated by contractor staff, including the utilization of Trapeze PASS, which is an advanced scheduling and dispatching application specifically designed for paratransit operations and collecting operational performance data.</p> <p>Furthermore, LAVTA staff meets biweekly with County Connection and Transdev, to discuss operational performance metrics, including on-time performance, passengers per trip, staffing levels, etc. All data is validated and any inconsistencies are addressed and rectified in a timely manner.</p> <p>While notable inconsistencies were still found during the current audit between reported paratransit hours and miles, these occurred in FY2018 and FY2019, prior to the transition to the new contractor (County Connection).</p>	<p>Implemented</p>



## VI. FUNCTIONAL PERFORMANCE

To further assess LAVTA's performance over the past three years, a detailed set of functional area performance indicators was defined. This assessment consists of a three-year trend analysis of the functions in each of the following areas:

- Management, Administration and Marketing
- Service Planning
- Operations
- Maintenance
- Safety

The indicators selected for this analysis were primarily those that were tracked regularly by LAVTA or for which input data were maintained by LAVTA on an on-going basis, such as performance reports, contractor reports, annual financial reports and NTD reports. As such, there may be some overlap with the TDA indicators examined earlier in the audit process, but most indicators will be different. Some indicators were selected from the California Department of Transportation's Performance Audit Guidebook for Transit Operators and Regional Transportation Planning Entities as being appropriate for this evaluation.

The trends in performance are presented over the three-year audit period to give an indication of which direction performance is moving for these indicators. The remainder of this section presents the findings from this review. The discussion presents the highlights of performance by mode (Systemwide, Bus Service and Paratransit), each followed by an exhibit illustrating the indicators by function as applicable.

## Systemwide

For the purposes of this review, LAVTA's functional indicators relating to Management, Administration and Marketing have been included on a systemwide basis. Audit period performance is discussed below and presented in Exhibit 8.

- Administrative costs increased from 29 percent of total operating costs in FY2019 to 51 percent in FY2021, as LAVTA made significant service changes, especially route suspensions, in response to the COVID pandemic starting in March 2020.
- Similarly, administrative costs per vehicle service hour increased over the audit period from about \$30 to \$80. The overall three-year trend was up by 164 percent.
- The portion of administrative costs attributed to marketing activities decreased steadily from 15.7 percent to 2.5 percent. However, in terms of passenger trips, marketing costs remained relatively constant in a range of \$0.41 to \$0.47 over the period.
- The systemwide farebox recovery ratio decreased precipitously from 15 percent in FY2019 to 6.4 percent in FY2021, primarily reflecting the negative impact of the COVID pandemic on ridership and associated fare revenue (especially when fare collection was suspended).

\* \* \* \* \*

The following is a brief summary of the systemwide functional trend highlights between FY2019 and FY2021:

- Administrative costs increased substantially from 29 to 51 percent of total operating costs, and from \$30 to \$80 per vehicle service hour. Both trends reflected significant service changes, especially route suspensions, in response to the COVID pandemic.

- Marketing costs decreased from 15.7 to 2.5 percent of total administrative costs, while marketing costs per passenger trip remained between \$0.41 and \$0.47.
- The systemwide farebox recovery ratio decreased from 15 to 6.4 percent, primarily reflecting the negative impact of the COVID pandemic later in the audit period.

**Exhibit 8: Functional Performance Trends – Systemwide (All Modes)**

FUNCTION/Indicator	Actual Performance		
	FY2019	FY2020	FY2021
<b>MANAGEMENT, ADMINISTRATION &amp; MARKETING</b>			
Administrative Cost/Total Operating Cost	29.2%	38.9%	51.0%
<i>Annual Percent Change</i>	--	33.2%	31.2%
<i>Three Year Percent Change</i>	--	--	74.8%
Administrative Cost/Vehicle Service Hour	\$30.05	\$46.91	\$79.47
<i>Annual Percent Change</i>	--	56.1%	69.4%
<i>Three Year Percent Change</i>	--	--	164.4%
Marketing Cost/Total Administrative Cost	15.7%	10.4%	2.5%
<i>Annual Percent Change</i>	--	-34.1%	-75.8%
<i>Three Year Percent Change</i>	--	--	-84.1%
Marketing Cost/Unlinked Passenger Trip	\$0.46	\$0.47	\$0.41
<i>Annual Percent Change</i>	--	3.8%	-13.2%
<i>Three Year Percent Change</i>	--	--	-9.9%
Farebox Recovery Ratio (Farebox Rev./Oper. Cost)	15.0%	12.2%	6.4%
<i>Annual Percent Change</i>	--	-18.3%	-48.0%
<i>Three Year Percent Change</i>	--	--	-57.5%

## Bus Service

LAVTA's bus service functional area trends represent areas of cost efficiency, safety, productivity and service reliability. Audit period performance is discussed below and presented in Exhibit 9.

- Service Planning
  - The total operating cost per passenger mile increased from \$1.99 to \$2.58 (30 percent) between FY 2019 and FY2020, and then nearly tripled to \$7.20 in FY2021, mostly due to significantly reduced passenger miles in the COVID environment.
  - Similar to the systemwide results discussed previously, LAVTA's bus farebox recovery ratio decreased from 15.3 percent to 6.4 percent over the three years. Meanwhile the TDA recovery ratio, reflecting farebox revenue plus local support, decreased as well, but less dramatically (down from 34.9 to 28.1 percent).
  - Vehicle miles traveled in service increased from about 87 percent in the first two years to 92 percent in FY2021. There was a similar gain in vehicle hours in service, from about 92 percent in the first two years to 95 percent in FY2021.
  - About one passenger per service mile was carried in FY2019 and FY2020, down to 0.4 by FY2021. At the same time, there were about 13 passengers carried per service hour in the first two years, but just 5.5 in FY2021.
  
- Operations
  - The share of total operating costs attributable to vehicle operations decreased from nearly 50 percent in FY2019 to less than 40 percent in FY2021.
  - Vehicle operations costs per service hour remained at \$60 in the first two years, followed by a six percent increase to \$64 in FY2021.

- Schedule adherence improved in each year, from approximately 83 to 91 percent over the period.
- The incidence of valid complaints per 100,000 passenger trips increased from 9.5 to 15, while commendations also increased (from 0.8 to 2.1 per 100,000 riders).
- Missed trips as percentage of total trips remained very low throughout the period, accounting for less than one-tenth of one percent each year.

- Maintenance

- The total maintenance costs share of operating costs decreased from 21.7 percent in FY2019 to 9.7 percent in FY2021, reflecting reduced service and maintenance requirements with the COVID pandemic. Similarly, vehicle maintenance costs per service mile decreased over the audit period, from \$1.53 in FY2019 to \$0.72 in FY2021 (more than 50 percent). LAVTA reported that the service level pricing with the contractor was dropped to the 60 percent tier in August 2020 due to the pandemic. This change increased the cost per service hour but decreased the monthly management fee. Maintenance is a large part of the monthly management fee, as there are more staff in maintenance than management. Additionally, in FY2021 there were four months where LAVTA received a credit from the contractor for COVID-related open positions within the maintenance department.
- LAVTA increased its vehicle spare ratio from about 20 percent in the first two years to 50 percent in the last year. Many fewer buses were needed to provide the reduced service offered during the COVID pandemic in FY2021.
- Service reliability showed general improvement over the audit period. The mean distance between major failures doubled overall, from about 15,000 miles in FY2019 to 30,000 miles in FY2021. At the same time, the mean distance between all failures doubled, from about 10,000 miles in the first two years to more than 20,000 miles in FY2021.

- Safety

- The rate of preventable accidents decreased overall by over 14 percent during the period, from 0.9 accidents per 100,000 miles in FY2019 to 0.7 accidents in the last year.

\* \* \* \* \*

The following is a brief summary of the bus service functional trend highlights between FY2019 and FY2021:

- Service Planning results displayed a major increase in operating cost per passenger mile, concurrent with significantly reduced passenger miles in the COVID environment. Further, the bus farebox recovery ratio decreased from 15.3 percent to 6.4 percent, while the TDA recovery ratio, reflecting farebox revenue plus local support, decreased less dramatically to 28.1 percent. There were also increases in the rates of vehicle miles and hours in service, reaching 92 and 95 percent, respectively, in FY2021. About one passenger per service mile was carried in FY2019 and FY2020, and 13 per service hour, both followed by decreases in FY2021.
- Operations results showed the share of total operating costs attributable to vehicle operations decreased from nearly 50 percent to less than 40 percent in FY2021, while vehicle operations costs per service hour increased by six percent to \$64 in FY2021. Schedule adherence improved from 83 to 91 percent, while valid complaints increased from 9.5 to 15 per 100,000 riders, and commendations also increased. There were relatively few missed trips during the audit period.
- Maintenance results showed total maintenance costs decreasing significantly as a percentage of total operating cost, and maintenance costs per service mile decreasing similarly. Both of these trends reflected reduced service level pricing with the contractor due to the pandemic, plus a credit from the contractor in FY2021 for COVID-related open positions within the maintenance department. The bus spare ratio increased from about 20 percent to 50 percent in the last year, as many fewer buses were needed to provide reduced service during the COVID pandemic. Service reliability

showed general improvement, with the mean distance between major failures and all failures both doubling overall.

- Safety results showed the rate of preventable accidents decreasing overall by over 14 percent during the audit period.

**Exhibit 9: Functional Performance Trends – Bus Service**

FUNCTION/Indicator	Actual Performance		
	FY2019	FY2020	FY2021
<b>SERVICE PLANNING</b>			
Total Operating Cost/Passenger Mile	\$1.99	\$2.58	\$7.20
<i>Annual Percent Change</i>	--	29.5%	179.0%
<i>Three Year Percent Change</i>	--	--	261.3%
Farebox Recovery Ratio (Farebox Rev./Oper. Cost)	15.3%	12.5%	6.4%
<i>Annual Percent Change</i>	--	-18.6%	-48.4%
<i>Three Year Percent Change</i>	--	--	-58.0%
TDA Recovery Ratio (a)	34.9%	32.2%	28.1%
<i>Annual Percent Change</i>	--	-7.6%	-12.9%
<i>Three Year Percent Change</i>	--	--	-19.5%
Vehicle Service Miles/Total Miles	86.9%	87.8%	91.8%
<i>Annual Percent Change</i>	--	1.1%	4.5%
<i>Three Year Percent Change</i>	--	--	5.7%
Vehicle Service Hours/Total Hours	91.7%	92.2%	94.8%
<i>Annual Percent Change</i>	--	0.5%	2.8%
<i>Three Year Percent Change</i>	--	--	3.4%
Passengers/Vehicle Service Mile	1.0	0.9	0.4
<i>Annual Percent Change</i>	--	-3.9%	-54.5%
<i>Three Year Percent Change</i>	--	--	-56.3%
Passengers/Vehicle Service Hour	13.2	12.5	5.5
<i>Annual Percent Change</i>	--	-5.2%	-56.4%
<i>Three Year Percent Change</i>	--	--	-58.7%
<b>OPERATIONS</b>			
Vehicle Operations Cost/Total Operating Cost	49.6%	43.9%	38.4%
<i>Annual Percent Change</i>	--	-11.5%	-12.6%
<i>Three Year Percent Change</i>	--	--	-22.6%
Vehicle Operations Cost/Vehicle Service Hour	\$60.20	\$60.34	\$64.34
<i>Annual Percent Change</i>	--	0.2%	6.6%
<i>Three Year Percent Change</i>	--	--	6.9%
On-Time Percentage	82.6%	85.4%	91.3%
<i>Annual Percent Change</i>	--	3.4%	7.0%
<i>Three Year Percent Change</i>	--	--	10.6%
Valid Complaints/100,000 Unlinked Passenger Trips	9.5	10.0	15.0
<i>Annual Percent Change</i>	--	5.3%	50.6%
<i>Three Year Percent Change</i>	--	--	58.6%
Commendations/100,000 Unlinked Passenger Trips	0.8	1.8	2.1
<i>Annual Percent Change</i>	--	110.9%	20.5%
<i>Three Year Percent Change</i>	--	--	154.0%
Missed Trips/Total Trips	0.05%	0.15%	0.11%
<i>Annual Percent Change</i>	--	173.6%	-24.5%
<i>Three Year Percent Change</i>	--	--	106.4%



FUNCTION/Indicator	Actual Performance		
	FY2019	FY2020	FY2021
<b>MAINTENANCE</b>			
Vehicle + Non-Veh. Maint. Cost/Total Operating Cost	21.7%	17.2%	9.7%
<i>Annual Percent Change</i>	--	-20.8%	-43.6%
<i>Three Year Percent Change</i>	--	--	-55.3%
Vehicle Maintenance Cost/Vehicle Service Mile	\$1.53	\$1.33	\$0.72
<i>Annual Percent Change</i>	--	-12.7%	-46.0%
<i>Three Year Percent Change</i>	--	--	-52.9%
Spare Vehicles/Total Vehicles	18.3%	21.2%	50.0%
<i>Annual Percent Change</i>	--	15.7%	135.7%
<i>Three Year Percent Change</i>	--	--	172.7%
Mean Distance between Major Failures (Miles)	15,260	23,056	30,194
<i>Annual Percent Change</i>	--	51.1%	31.0%
<i>Three Year Percent Change</i>	--	--	97.9%
Mean Distance between All Failures (Miles)	10,724	10,355	21,740
<i>Annual Percent Change</i>	--	-3.4%	110.0%
<i>Three Year Percent Change</i>	--	--	102.7%
<b>SAFETY</b>			
Preventable Accidents/100,000 Vehicle Miles	0.9	1.0	0.7
<i>Annual Percent Change</i>	--	21.5%	-29.3%
<i>Three Year Percent Change</i>	--	--	-14.1%

(a) - Farebox Revenue plus Local Support/Operating Cost less TDA Allowable Exclusions

## Paratransit

LAVTA's paratransit functional area trends represent mostly similar areas to the bus service. Audit period performance is discussed below and presented in Exhibit 10.

- Service Planning
  - Total operating cost per passenger mile increased from \$5.99 to \$7.07 (18 percent) between FY 2019 and FY2020, and then more than doubled to \$15.34 in FY2021, mostly due to significantly reduced passenger miles in the COVID environment.
  - LAVTA's paratransit farebox recovery ratio decreased from 11.5 percent to 5.2 percent over the three years. Meanwhile the TDA recovery ratio, reflecting farebox revenue plus local support, increased from about 45 percent in FY2019 and FY2020 to 52 percent in FY2021.
  - Vehicle miles traveled in service remained at 92 to 94 percent in all three audit years. There was a similar trend in vehicle hours in service, at 95 to 97 percent.
  - About 0.1 paratransit passengers per service mile and 1.2 passengers per service hour were carried throughout the audit period.
  
- Operations
  - The share of total operating costs attributable to vehicle operations decreased from 56 percent in FY2019 to about 39 percent in the last two years.
  - Vehicle operations costs per service hour was reduced from \$25 to \$21 in the first two years, followed by an increase of more than 50 percent to \$33 in FY2021.
  - Schedule adherence improved overall, from 94 to 97 percent over the period, despite an interim reduction to 91 percent in FY2020.

- The incidence of valid complaints per 100,000 passenger trips increased from 0.93 to 1.27, while commendations also increased (from 0.02 to 0.13 per 100,000 riders).
- Missed trips as percentage of total trips remained very low throughout the period, reflecting just one missed trip in each of the first two years and none in FY2021.
- There were no ADA trip denials reported.
- The rate of trip cancellations increased noticeably in each year, and was up by 43 percent overall during the period, to 36 percent of total ADA trips in FY2021. LAVTA noted that during the pandemic a large portion of trips were cancelled as passengers only made essential trips. The cancelled trips included subscription trips (previously about half of all scheduled trips), many of which were to adult day care programs that were cancelled due to shelter in place orders during the pandemic. Further, reported cancellations during the audit period reflected all cancellations for all reasons lumped together, but LAVTA's new operations contractor uses Trapeze PASS software which tracks different types of cancellations and no-shows separately, for a more meaningful picture.
- The incidence of late trip cancellations went up more than six-fold, but still remained at less than three percent of total ADA trips.
- Passenger no-shows decreased overall, from two percent of total ADA trips in the first two years to one percent in FY2021.

- Maintenance

- The total maintenance costs share of operating costs increased from nine percent in FY2019 to 21 percent in both FY2020 and FY2021, primarily reflecting a sharp increase in reported vehicle maintenance costs after FY2019.
- Similarly, vehicle maintenance costs per service mile increased substantially over the audit period, from \$0.31 in FY2019 to \$1.35 in FY2021 (more than 300 percent).

Commented [CW1]: Are scheduled trips 1/2 of the cancelled trips, or 1/2 of the total daily trips?

Commented [KK2R1]: Subscription trips are close to half of scheduled trips.

- LAVTA increased its paratransit vehicle spare ratio from about 15 percent in the first two years to 61 percent in the last year. Many fewer vehicles were needed to provide the reduced service required during the COVID pandemic in FY2021.
- Service reliability generally declined over the audit period. The mean distance between major failures went down from about 76,000 miles in FY2019 to 20,000 miles in FY2021. At the same time, the mean distance between all failures dropped from about 35,000 miles to less than 15,000 miles in FY2021. However, with the new paratransit MOU with County Connection, LAVTA reports marked subsequent improvements in service reliability. Several strategies have enabled LAVTA to identify and address potential issues before they result in major failures. These efforts have led to a significant increase in the mean distance between both major and minor failures, and over the last 12 months there were no reported mechanical failures for the paratransit service.

- Safety

- The rate of preventable accidents was relatively steady at 0.2 per 100,000 vehicle miles in both FY2019 and FY2020, based on a single reported accident in each year. There were no preventable accidents reported in FY2021.

\* \* \* \* \*

The following is a brief summary of the paratransit functional trend highlights between FY2019 and FY2021:

- Service Planning results displayed a major increase in operating cost per passenger mile, concurrent with significantly reduced passenger miles in the COVID environment. Further, the paratransit farebox recovery ratio decreased from 11.5 percent to 5.2 percent, while the TDA recovery ratio, reflecting farebox revenue plus local support, decreased less dramatically to 52 percent. Vehicle miles traveled in service remained at 92 to 94 percent in all three audit years, and vehicle hours in service at 95 to 97 percent.

About 0.1 passengers per service mile was carried in each year, and 1.2 passengers per service hour.

- Operations results showed the share of total operating costs attributable to vehicle operations decreased from 56 percent to 39 percent in the last two years, while vehicle operations costs per service hour increased by more than 50 percent to \$33 in FY2021. Schedule adherence improved overall from 94 to 97 percent, while valid complaints increased from 0.93 to 1.27 per 100,000 riders, and commendations also increased. There were almost no missed trips and no ADA trip denials reported during the period. The rate of trip cancellations increased noticeably in each year, up by 43 percent overall during the period, but much of this trend reflects conditions during the pandemic, when a large portion of trips (many subscription) were cancelled as passengers only made essential trips. The incidence of late trip cancellations went up more than six-fold, but still remained at less than three percent of total ADA trips. Passenger no-shows decreased overall, from two percent of total ADA trips in the first two years to one percent in FY2021.
- Maintenance results showed total maintenance costs increasing significantly to 21 percent of total operating cost in the last two years, and maintenance costs per service mile increasing substantially to \$1.35 in FY2021. The vehicle spare ratio increased from about 15 percent to 61 percent in the last year, as fewer vehicles were needed to provide reduced service during the COVID pandemic. Service reliability generally declined, with the mean distance between major failures down from about 76,000 miles in FY2019 to 20,000 miles in FY2021, and the mean distance between all failures dropping from about 35,000 miles to less than 15,000 miles in FY2021. However, LAVTA reports marked subsequent improvements in service reliability, with a significant increase in the mean distance between both major and minor failures, and over the last 12 months there were no reported mechanical failures for the paratransit service.
- Safety results showed the rate of preventable accidents at 0.2 per 100,000 vehicle miles in both FY2019 and FY2020, based on a single reported accident in each year, with no preventable accidents reported in FY2021.

**Exhibit 10: Functional Performance Trends – Paratransit**

FUNCTION/Indicator	Actual Performance		
	FY2019	FY2020	FY2021
<b>SERVICE PLANNING</b>			
Total Operating Cost/Passenger Mile	\$5.99	\$7.07	\$15.34
<i>Annual Percent Change</i>	--	18.0%	117.1%
<i>Three Year Percent Change</i>	--	--	156.1%
Farebox Recovery Ratio (Farebox Rev./Oper. Cost)	11.5%	9.5%	5.2%
<i>Annual Percent Change</i>	--	-17.5%	-45.1%
<i>Three Year Percent Change</i>	--	--	-54.7%
TDA Recovery Ratio (a)	45.4%	45.6%	51.9%
<i>Annual Percent Change</i>	--	0.5%	13.9%
<i>Three Year Percent Change</i>	--	--	14.4%
Vehicle Service Miles/Total Miles	91.5%	93.9%	92.7%
<i>Annual Percent Change</i>	--	2.7%	-1.3%
<i>Three Year Percent Change</i>	--	--	1.3%
Vehicle Service Hours/Total Hours	96.9%	97.4%	95.6%
<i>Annual Percent Change</i>	--	0.5%	-1.9%
<i>Three Year Percent Change</i>	--	--	-1.4%
Passengers/Vehicle Service Mile	0.11	0.11	0.10
<i>Annual Percent Change</i>	--	-4.7%	-5.6%
<i>Three Year Percent Change</i>	--	--	-10.1%
Passengers/Vehicle Service Hour	1.19	1.25	1.17
<i>Annual Percent Change</i>	--	4.6%	-5.8%
<i>Three Year Percent Change</i>	--	--	-1.5%
<b>OPERATIONS</b>			
Vehicle Operations Cost/Total Operating Cost	56.6%	39.5%	38.5%
<i>Annual Percent Change</i>	--	-30.3%	-2.4%
<i>Three Year Percent Change</i>	--	--	-32.0%
Vehicle Operations Cost/Vehicle Service Hour	\$24.75	\$21.15	\$32.97
<i>Annual Percent Change</i>	--	-14.5%	55.8%
<i>Three Year Percent Change</i>	--	--	33.2%
On-Time Percentage	94.0%	91.0%	96.6%
<i>Annual Percent Change</i>	--	-3.2%	6.1%
<i>Three Year Percent Change</i>	--	--	2.8%
Valid Complaints/1,000 Unlinked Passenger Trips	0.93	1.04	1.27
<i>Annual Percent Change</i>	--	11.3%	22.4%
<i>Three Year Percent Change</i>	--	--	36.2%
Commedations/1,000 Unlinked Passenger Trips	0.02	0.03	0.13
<i>Annual Percent Change</i>	--	32.9%	363.7%
<i>Three Year Percent Change</i>	--	--	516.4%
Missed Trips/Total Trips	0.002%	0.003%	0.000%
<i>Annual Percent Change</i>	--	--	-100.0%
<i>Three Year Percent Change</i>	--	--	-100.0%

FUNCTION/Indicator	Actual Performance		
	FY2019	FY2020	FY2021
<b>OPERATIONS, continued</b>			
ADA Trip Denials/Total ADA Trips	0.0%	0.0%	0.0%
Annual Percent Change	--	--	--
Three Year Percent Change	--	--	--
Trip Cancellations/Total ADA Trips	25.3%	30.7%	36.2%
Annual Percent Change	--	21.3%	17.8%
Three Year Percent Change	--	--	42.9%
Late Trip Cancellations/Total ADA Trips	0.4%	0.9%	2.8%
Annual Percent Change	--	123.1%	221.6%
Three Year Percent Change	--	--	617.6%
No-Shows/Total ADA Trips	1.9%	2.0%	0.9%
Annual Percent Change	--	5.1%	-57.4%
Three Year Percent Change	--	--	-55.3%
<b>MAINTENANCE</b>			
Vehicle + Non-Veh. Maint. Cost/Total Operating Cost	9.3%	21.6%	21.0%
Annual Percent Change	--	133.4%	-3.0%
Three Year Percent Change	--	--	126.5%
Vehicle Maintenance Cost/Vehicle Service Mile	\$0.31	\$0.90	\$1.35
Annual Percent Change	--	194.9%	49.9%
Three Year Percent Change	--	--	342.2%
Spare Vehicles/Total Vehicles	14.3%	15.0%	61.1%
Annual Percent Change	--	5.0%	307.4%
Three Year Percent Change	--	--	327.8%
Mean Dist. betw. Major Failures (Miles)	76,059	31,918	20,321
Annual Percent Change	--	-58.0%	-36.3%
Three Year Percent Change	--	--	-73.3%
Mean Dist. betw. All Failures (Miles)	35,104	21,944	14,779
Annual Percent Change	--	-37.5%	-32.6%
Three Year Percent Change	--	--	-57.9%
<b>SAFETY</b>			
Preventable Accidents/100,000 Vehicle Miles	0.22	0.28	0.00
Annual Percent Change	--	30.0%	-100.0%
Three Year Percent Change	--	--	-100.0%

(a) Farebox Revenue plus Local Support/Operating Cost Less TDA Allowable Exclusions

## VII. CONCLUSIONS AND RECOMMENDATIONS

This report has presented the findings of the performance audit of LAVTA's transit service performance during the three-year period of FY2019 through FY2021 (July 1, 2018 through June 30, 2021). It has focused on TDA compliance issues including trends in TDA-mandated performance indicators and compliance with selected sections of the state Public Utilities Code (PUC). It also provided the findings from an overview of LAVTA's data collection activities to support the TDA indicators, actions taken to implement recommendations from the prior performance audit, and a review of selected key functional performance results.

### Conclusions

The key findings and conclusions from the individual sections of this performance audit are summarized below:

- Data Collection – LAVTA is in compliance with the data collection and reporting requirements for all five TDA statistics as applicable (FTEs are not reported for this contracted operation). In addition, the statistics collected over the six-year review period appear to be consistent with the TDA definitions, and indicate general consistency in terms of the direction and magnitude of the year-to-year changes across the statistics.

However, there were notable inconsistencies between reported paratransit hours and miles in FY2018 and FY2019, which would be expected to trend similarly. LAVTA staff were unable to provide a definitive explanation for these inconsistencies, but noted that LAVTA has since taken significant steps to enhance the accuracy of its performance reporting, including transitioning to a new contractor (County Connection) and implementing a new Trapeze PASS software system.



- TDA Performance 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 for the current audit period.

Bus Service – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2016 through FY2021:

- There was an average annual increase in the operating cost per hour of 9.2 percent, which amounted to a 5.8 percent increase in inflation adjusted dollars.
- The cost per passenger increased on average by 30.2 percent per year, which amounted to an average annual increase of 26.2 percent in constant FY2016 dollars. The trend was specifically influenced by a major drop off in ridership in FY2021, the first full year of the COVID pandemic.
- Passenger productivity showed negative trends, with passengers per vehicle service hour and mile both decreasing by around 15 percent per year overall. Again, this trend was specifically influenced by a major drop off in ridership in FY2021, the first full year of the COVID pandemic.

The following is a brief summary of the component operating costs trend highlights for the bus service between FY2016 and FY2021:

- The most significant change was an average annual increase of 38 percent in the materials/supplies area, though materials/supplies costs consistently accounted for two percent or less of total costs. Fuel/lubricants experienced the most significant cost decrease, going down on average by about 11 percent annually.
- In-house labor costs increased by 0.6 percent annually while fringe benefits expenses went up by 11 percent on average per year, principally reflecting a 41 percent increase in FY2019. That increase

was attributed primarily to retirement benefits and the year-end adjustments to comply with GASB 68.

- Purchased transportation costs represented the largest portion of the total costs, with the share between 61 and 66 percent. Most other cost categories showed only minor changes per year on average.

Paratransit Service – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2016 through FY2021:

- For cost efficiency, there was an average annual increase in the operating cost per hour of 6.8 percent. This amounted to an annual increase of 3.5 percent in inflation adjusted dollars.
- In terms of cost effectiveness, the operating cost per passenger showed a significant increase of 13.2 percent per year on average, when normalized in FY2016 dollars.
- Passenger productivity showed general decline, with passengers per hour decreasing by 8.6 percent annually and passengers per mile decreasing by 5.3 percent.

The following is a brief summary of the component operating costs trend highlights for paratransit between FY2016 and FY2021:

- Purchased transportation costs represented by far the largest portion of the total costs, above 80 percent throughout the review period. At the same time, they decreased by 11.6 percent per year on average.
- In-house labor costs decreased slightly overall, but fringe benefits costs increased by 8.7 percent. Each of these two cost categories accounted for less than ten percent of the total operating costs.
- Despite some variation from year to year, only relatively minimal expenses were reported for the other component cost categories, and most categories posted net decreases during the period as well.

- PUC Compliance – LAVTA is in compliance with all of the seven 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, revenue sharing, welfare-to-work transportation coordination, and evaluating passenger needs.
- Status of Prior Audit Recommendations – There was one recommendation in the prior LAVTA audit report. It has been determined that LAVTA has implemented corrective actions for this recommendation. Since the transition of operating contractors to the County Connection/Transdev in April 2021, LAVTA has been able to ensure that data is collected and reported accurately for the paratransit service. As part of this new agreement, LAVTA reports that improvements were made in the reporting of performance data to ensure accurate information was being communicated by contractor staff, including the utilization of Trapeze PASS, and biweekly meetings are held with County Connection and Transdev to discuss operational performance metrics. All data is validated and any inconsistencies are addressed and rectified in a timely manner.
- 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 FY2019 and FY2021:

- Administrative costs increased substantially from 29 to 51 percent of total operating costs, and from \$30 to \$80 per vehicle service hour. Both trends reflected significant service changes, especially route suspensions, in response to the COVID pandemic.

- Marketing costs decreased from 15.7 to 2.5 percent of total administrative costs, while marketing costs per passenger trip remained between \$0.41 and \$0.47.
- The systemwide farebox recovery ratio decreased from 15 to 6.4 percent, primarily reflecting the negative impact of the COVID pandemic later in the audit period.

Bus Service – The following is a brief summary of the bus service functional trend highlights between FY2019 and FY2021:

- Service Planning results displayed a major increase in operating cost per passenger mile, concurrent with significantly reduced passenger miles in the COVID environment. Further, the bus farebox recovery ratio decreased from 15.3 percent to 6.4 percent, while the TDA recovery ratio, reflecting farebox revenue plus local support, decreased less dramatically to 28.1 percent. There were also increases in the rates of vehicle miles and hours in service, reaching 92 and 95 percent, respectively, in FY2021. About one passenger per service mile was carried in FY2019 and FY2020, and 13 per service hour, both followed by decreases in FY2021.
- Operations results showed the share of total operating costs attributable to vehicle operations decreased from nearly 50 percent to less than 40 percent in FY2021, while vehicle operations costs per service hour increased by six percent to \$64 in FY2021. Schedule adherence improved from 83 to 91 percent, while valid complaints increased from 9.5 to 15 per 100,000 riders, and commendations also increased. There were relatively few missed trips during the audit period.
- Maintenance results showed total maintenance costs decreasing significantly as a percentage of total operating cost, and maintenance costs per service mile decreasing similarly. Both of these trends reflected reduced service level pricing with the contractor due to the pandemic, plus a credit from the contractor in FY2021 for COVID-related open positions within the maintenance department. The bus spare ratio increased from about 20 percent to 50 percent in the last year, as many fewer buses were needed to provide reduced service during the COVID pandemic. Service reliability showed general

improvement, with the mean distance between major failures and all failures both doubling overall.

- Safety results showed the rate of preventable accidents decreasing overall by over 14 percent during the audit period.

Paratransit – The following is a brief summary of the paratransit functional trend highlights between FY2019 and FY2021:

- Service Planning results displayed a major increase in operating cost per passenger mile, concurrent with significantly reduced passenger miles in the COVID environment. Further, the paratransit farebox recovery ratio decreased from 11.5 percent to 5.2 percent, while the TDA recovery ratio, reflecting farebox revenue plus local support, decreased less dramatically to 52 percent. Vehicle miles traveled in service remained at 92 to 94 percent in all three audit years, and vehicle hours in service at 95 to 97 percent. About 0.1 passengers per service mile was carried in each year, and 1.2 passengers per service hour.
- Operations results showed the share of total operating costs attributable to vehicle operations decreased from 56 percent to 39 percent in the last two years, while vehicle operations costs per service hour increased by more than 50 percent to \$33 in FY2021. Schedule adherence improved overall from 94 to 97 percent, while valid complaints increased from 0.93 to 1.27 per 100,000 riders, and commendations also increased. There were almost no missed trips and no ADA trip denials reported during the period. The rate of trip cancellations increased noticeably in each year, up by 43 percent overall during the period, but much of this trend reflects conditions during the pandemic, when a large portion of trips (many subscription) were cancelled as passengers only made essential trips. The incidence of late trip cancellations went up more than six-fold, but still remained at less than three percent of total ADA trips. Passenger no-shows decreased overall, from two percent of total ADA trips in the first two years to one percent in FY2021.
- Maintenance results showed total maintenance costs increasing significantly to 21 percent of total operating cost in the last two years, and maintenance costs per service mile increasing substantially to

\$1.35 in FY2021. The vehicle spare ratio increased from about 15 percent to 61 percent in the last year, as fewer vehicles were needed to provide reduced service during the COVID pandemic. Service reliability generally declined, with the mean distance between major failures down from about 76,000 miles in FY2019 to 20,000 miles in FY2021, and the mean distance between all failures dropping from about 35,000 miles to less than 15,000 miles in FY2021. However, with the new paratransit MOU with County Connection, LAVTA reports marked subsequent improvements in service reliability. Several strategies have enabled LAVTA to identify and address potential issues before they result in major failures. These efforts have led to a significant increase in the mean distance between both major and minor failures, and over the last 12 months there were no reported mechanical failures for the paratransit service.

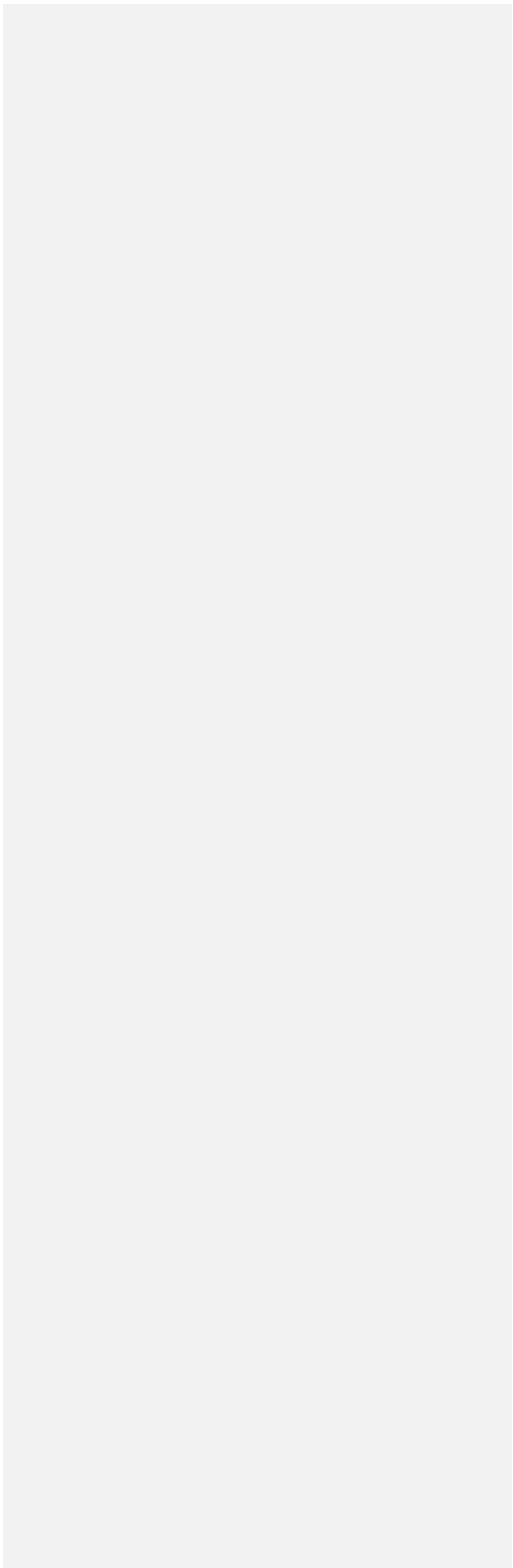
- Safety results showed the rate of preventable accidents at 0.2 per 100,000 vehicle miles in both FY2019 and FY2020, based on a single reported accident in each year, with no preventable accidents reported in FY2021.

### Recommendations

No recommendations are suggested for LAVTA at this time based on the results of this triennial performance audit.

It is noted here that many cost efficiency, cost effectiveness and functional indicators fluctuated by wide margins compared to their past trends. Further, it is recognized here that during this audit period policy, planning and operational decisions were made under unusual conditions of local, regional and national health pandemic. LAVTA, like other transit agencies in the Bay Area, faced issues related to employee availability and retention; deployment of vehicles based on declining demand due to remote working; forced reduction in acceptable vehicle occupancy due to social

distancing guidelines. For these reasons no recommendations are made to reexamine the past performance.



**APPENDIX A:  
INPUT STATISTICS FOR  
FUNCTIONAL PERFORMANCE MEASURES**

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### Functional Performance Inputs - Systemwide (All Modes)

Data Item	FY2019	FY2020	FY2021	Source
Total Operating Costs	\$16,945,954	\$16,932,212	\$13,996,467	NTD F-40
Administrative Costs	\$4,942,998	\$6,579,215	\$7,136,309	NTD F-40
Vehicle Service Hours	164,483	140,245	89,800	NTD S-10 MB + DR
Marketing Costs	\$777,227	\$681,431	\$178,649	LAVTA CAFR Finl Trends
Unlinked Passenger Trips	1,706,551	1,440,932	435,186	NTD S-10 MB + DR
Farebox Revenue (All Modes)	\$2,535,311	\$2,070,034	\$889,319	NTD F-10

## Functional Performance Inputs – Bus Service

Data Item	FY2019	FY2020	FY2021	Source
Vehicle Service Miles	1,723,369	1,518,836	998,047	NTD S-10 MB
Total Vehicle Miles	1,983,852	1,729,227	1,086,990	NTD S-10 MB
Vehicle Service Hours	125,799	112,412	77,053	NTD S-10 MB
Total Vehicle Hours	137,234	121,980	81,313	NTD S-10 MB
Unlinked Passenger Trips	1,660,443	1,406,245	420,226	NTD S-10 MB
Farebox Revenue	\$2,339,944	\$1,927,922	\$832,209	NTD F-10
Total Operating Costs	\$15,253,896	\$15,439,888	\$12,904,948	NTD F-30 MB
Passenger Miles	7,656,299	5,984,100	1,792,593	NTD S-10 MB
Vehicle Operations Costs	\$7,572,827	\$6,783,037	\$4,957,601	NTD F-30 MB
Local Support (TDA Article 4 services only) (a)	\$2,976,930	\$3,044,741	\$2,789,528	ACFR
TDA Oper. Cost Exclusions - PUC 99247 (b)	\$0	\$0	\$0	LAVTA Staff
TDA Oper. Cost Exclusions - PUC 99268.17 (c)	\$0	\$0	\$0	LAVTA Staff
Trips On-Time	726,062	669,762	468,614	Agency Board Stats
Total Trips	878,979	784,505	513,112	Agency Internal Stats
Total Complaints	394	318	130	Cust. Comments Database
Valid Complaints	157	140	63	Cust. Comments Database
Compliments	14	25	9	Cust. Comments Database
Missed Trips	469	1144	565	Agency Internal Stats
Vehicle Maintenance Costs	\$2,632,226	\$2,024,450	\$718,660	NTD F-30 MB
Non-Vehicle Maintenance Costs	\$683,844	\$634,342	\$534,817	NTD F-30 DR
Spare Vehicles (Total less Maximum Service)	11	14	33	NTD S-10 MB
Total Vehicles	60	66	66	NTD S-10 MB
Revenue Vehicle Mechanical System Failures - Total	185	167	50	NTD R-20
Revenue Vehicle Mechanical System Failures - Major	130	75	36	NTD R-20
Preventable Accidents	17	18	8	Monthly Board Stats

(a) Local Support includes the following (USOA revenue class in parentheses):

- Auxiliary transportation revenue (406)
- Taxes directly levied (408)
- Local cash grants and reimbursements (409)
- Local special fare assistance (410)
- Subsidy from other sectors of operation (440)

(b) Operating expense object classes exclusive of the following pursuant to PUC Section 99247:

- depreciation and amortization expenses
- subsidies for commuter rail services operated on railroad lines under the jurisdiction of the Federal Railroad Administration
- costs for providing charter services
- vehicle lease costs
- principal and interest payments on capital projects funded with certificates of participation

(c) Operating expense object class exclusions pursuant to PUC Section 99268.17:

- additional operating costs for federally required ADA paratransit service that exceed prior year costs (CPI adjusted)
- cost increases beyond the CPI change for: fuel; alternative fuel programs; power (including electricity);
- insurance premiums/liability claims payouts; state and federal mandates
- start-up costs for new services (not more than two years)

## Functional Performance Inputs – Paratransit

Data Item	FY2019	FY2020	FY2021	Source
Vehicle Service Miles	417,558	329,784	150,703	NTD S-10 DR
Total Vehicle Miles	456,356	351,096	162,569	NTD S-10 DR
Vehicle Service Hours	38,684	27,833	12,747	NTD S-10 DR
Total Vehicle Hours	39,915	28,570	13,336	NTD S-10 DR
Unlinked Passenger Trips	46,108	34,687	14,960	NTD S-10 DR
Farebox Revenue	\$195,367	\$142,112	\$57,110	NTD F-10
Total Operating Costs	\$1,692,058	\$1,492,324	\$1,091,519	NTD F-30 DR
Passenger Miles	282,421	211,159	71,134	NTD S-10 DR
Vehicle Operations Costs	\$957,473	\$588,807	\$420,266	NTD F-30 DR
Local Support (TDA Article 4 services only) (a)	\$572,180	\$538,099	\$509,329	ACFR
TDA Oper. Cost Exclusions - PUC 99247 (b)	\$0	\$0	\$0	LAVTA Staff
TDA Oper. Cost Exclusions - PUC 99268.17 (c)	\$0	\$0	\$0	LAVTA Staff
Trips On-Time	94.0%	91.0%	96.6%	Novus Trip Counts
Total Trips	46,123	34,687	14,960	Novus Trip Counts
Total Complaints	82	63	38	Monthly Board Stats
Valid Complaints	43	36	19	Monthly Board Stats
Compliments	1	1	2	Monthly Board Stats
Missed Trips	1	1	0	Novus Trip Counts
Total ADA Trips	46,123	34,687	14,960	Novus Trip Counts
ADA Trip Denials	0	0	0	Novus Trip Counts
Trip Cancellations	11,677	10,654	5,412	Novus Trip Counts
Late Trip Cancellations	177	297	412	Novus Trip Counts
No Shows	896	708	130	Novus Trip Counts
Vehicle Maintenance Costs	\$127,662	\$297,370	\$203,737	NTD F-30 DR
Non-Vehicle (Facility) Maintenance Costs	\$28,924	\$24,991	\$25,077	NTD F-30 DR
Spare Vehicles (Total less Maximum Service)	3	3	11	NTD S-10 DR
Total Vehicles	21	20	18	NTD S-10 DR
Revenue Vehicle Mechanical System Failures - Total	13	16	11	NTD R-20
Revenue Vehicle Mechanical System Failures - Major	6	11	8	NTD R-20
Preventable Accidents	1	1	0	Monthly Board Stats

(a) Local Support includes the following (USOA revenue class in parentheses):

- Auxiliary transportation revenue (406)
- Taxes directly levied (408)
- Local cash grants and reimbursements (409)
- Local special fare assistance (410)
- Subsidy from other sectors of operation (440)
- Data for FY2017 is estimated

(b) Operating expense object classes exclusive of the following pursuant to PUC Section 99247:

- depreciation and amortization expenses
- subsidies for commuter rail services operated on railroad lines under the jurisdiction of the Federal Railroad Administration
- costs for providing charter services
- vehicle lease costs
- principal and interest payments on capital projects funded with certificates of participation

(c) Operating expense object class exclusions pursuant to PUC Section 99268.17:

- additional operating costs for federally required ADA paratransit service that exceed prior year costs (CPI adjusted)
- cost increases beyond the CPI change for: fuel; alternative fuel programs; power (including electricity); insurance premiums/liability claims payouts; state and federal mandates
- start-up costs for new services (not more than two years)