

Triennial Performance Audit

of the

Eastern Contra Costa Transit Authority (ECCTA, or Tri Delta Transit)

Fiscal Years 2014/15, 2015/16 and 2016/17

FINAL AUDIT REPORT

prepared for the



**METROPOLITAN
TRANSPORTATION
COMMISSION**

by



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May 2018

NOTE:

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

EXECUTIVE SUMMARY

This executive summary highlights the findings from the performance audit of the Eastern Contra Costa Transit Authority (ECCTA), also known as Tri Delta Transit. 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 Tri Delta Transit, bus and paratransit, are the focus of this performance audit. The audit period is Fiscal Years 2015 through 2017 (from July 1, 2014 through June 30, 2017).

Performance Audit and Report Organization

The performance audit was 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 Tri Delta Transit'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 Tri Delta Transit's performance based on the results of the previous sections.

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

Results and Conclusions

Review of TDA Data Collection and Reporting Methods - The purpose of this review is to determine if Tri Delta Transit 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 Tri Delta Transit is in compliance with the data collection and reporting requirements for all five TDA statistics. 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.

There was one anomaly noted for FY2017 paratransit statistic reporting. There was a 14.4 percent decrease in operating costs and a 16.3 percent decrease in vehicle service hours reported. However, vehicle service miles only experienced a 3.1 percent decrease that same year. Vehicle service miles and hours usually move together in tandem, without such a wide discrepancy in performance.

Tri Delta staff explained the decrease in service hours is the result of efforts to improve scheduling, thereby increasing operational and cost efficiency. Increased efficiency leads to fewer service hours, which in turn reduces the hourly operating cost charges for service paid to the contractor. The increased scheduling efficiency has a greater effect on reducing service hours than service miles. This anomaly did not significantly impact Tri Delta's paratransit service provision, however, demonstrated by

the fact that the paratransit average operating speed only increased by two miles an hour between FY2016 (12.3 mph) and FY2017 (14.3 mph).

Performance Indicators and Trends – Tri Delta Transit’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 FY2012 through FY2017:
 - There was an average annual increase in the operating cost per hour of 1.4 percent, which amounted to a 1.2 percent decrease in inflation adjusted dollars.
 - The cost per passenger also was relatively flat, increasing on average by 1.1 percent per year, resulting in an average annual decrease of 1.5 percent in constant FY2012 dollars.
 - Passenger productivity showed a slight improvement, with passengers per vehicle service hour increasing by 0.3 percent per year overall, and passengers per vehicle service mile increasing by 0.4 percent annually.
 - Employee productivity increased an average 0.5 percent per year.

The following is a brief summary of the component operating costs trend highlights for the bus service between FY2012 and FY2017:

- Purchased transportation costs went up just over three percent per year, remaining the largest component cost area at about 50 percent of total costs. Purchased transportation costs increased in the last year (FY2017) by over nine percent, more than double the rate of any previous year.

- In-house labor and fringe benefit costs both decreased about one percent overall, with each of these categories comprising about ten percent of total operating costs.
 - Fuel/lubricant costs decreased over 13 percent annually, and their overall share of total operating costs decreased from 14 percent to seven percent during the review period. There was also a minor annual decrease in materials/supplies costs each year.
 - There were moderate annual average increases in the remaining component cost categories (services, casualty/liability and other expenses), with each of these components contributing less than five percent of total operating costs.
- Paratransit – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2012 through FY2017:
 - Cost efficiency decreased, with an average annual increase in the operating cost per hour of 2.8 percent. This amounted to a slight average annual increase of 0.2 percent in inflation adjusted dollars.
 - The operating cost per passenger decreased an average of one percent per year, or 3.5 percent annually when expressed as normalized FY2012 dollars.
 - Passenger productivity improved, with passengers per hour increasing 3.8 percent per year on average, while passengers per mile experienced a more modest 0.8 percent annual increase.
 - Employee productivity decreased an annual average of 5.5 percent.

The following is a brief summary of the component operating costs trend highlights for paratransit between FY2012 and FY2017:

- Purchased transportation costs represented by far the largest portion of the total costs, averaging about 75 percent throughout the review period. Purchased transportation costs decreased by 2.4 percent per year on average.

- Labor costs increased an average of 7.6 percent per year, increasing that component cost from about 4.5 percent to seven percent of total operating costs.
- Fringe benefit costs increased an annual average of 9.7 percent, however, this category only accounted for less than five percent of the total costs over the review period.
- Fuel/lubricants costs decreased an average of 5.4 percent annually, with the proportion of fuel costs decreasing from about 12 percent to eight percent of total operating costs.
- Other component cost categories averaged increases of more than 10 percent per year, but each category comprises less than five percent of total operating costs.

PUC Compliance – Tri Delta Transit is in compliance with the sections of the state PUC that were reviewed as part of this performance audit. The sections reviewed included requirements concerning CHP safety inspections, labor contracts, reduced fares, Welfare-to-Work, revenue sharing, and evaluation of passenger needs.

Status of Prior Audit Recommendations – Implementation is in progress for the one recommendation from the prior audit. During the prior two TDA audits, it was found that Tri Delta Transit’s paratransit service was experiencing declines in passenger productivity and cost effectiveness. It was suggested that potential strategies for turning these trends around be explored. Tri Delta Transit has been implementing different strategies to address the issue, and during the current audit period, Tri Delta Transit took additional measures towards meeting this recommendation. As a result of Tri Delta Transit’s efforts, both passenger productivity and cost effectiveness have improved over the current audit period. Tri Delta Transit is continuing its efforts to improve passenger productivity and cost per passenger with a new pilot project partnering with

Transportation Network Companies (TNC), (such as Uber, Lyft, etc.), to reduce demand for traditional paratransit services.

Functional Performance Indicator Trends - To further assess Tri Delta Transit'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 FY2015 and FY2017:
 - Administrative costs increased from 15 percent to 25 percent of total operating costs, and also increased by 69 percent from \$14.71 to \$25.68 per vehicle service hour over the three year period. The increases were attributed to the filling of vacant staff positions in late FY2016 and FY2017, and administrative costs included in the operations contract that took effect in FY2017.
 - Marketing costs decreased overall compared to total administrative costs but increased from \$0.16 to \$0.19 per passenger trip.
 - The systemwide farebox recovery ratio declined slightly from about 16 percent to 14.9 percent by FY2017.

- Bus Service – The following is a brief summary of the bus service functional trend highlights between FY2015 and FY2017:
 - Service Planning results showed the operating cost per passenger mile increasing by 24.2 percent, farebox recovery decreasing from about 18 percent to about 10 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) decreasing from about 25 percent to about 15 percent. Vehicle miles in service and vehicle hours in service were consistently at 85 percent and 90 percent, respectively, and passenger productivity declined by 16 percent.

- Operations results showed vehicle operations costs compared to total costs, and per service hour, decreasing overall, but especially in FY2017. There was a ten percent decrease in schedule adherence between FY2016 and FY2017, due to a change in the on-time measurement definition from within 10 minutes past scheduled departure to within five minutes in FY2017. There were very few incidences of complaints received and missed trips.
- Maintenance results showed maintenance costs steady at 20 percent of total costs but vehicle maintenance costs per service mile up by 7.4 percent. The vehicle spare ratio remained unchanged at 16.1 percent, and an almost 50 percent decrease in the mechanical failure rates, due to the overall advanced age of the Tri Delta Transit fixed-route fleet.
- Safety results showed the rate of preventable accidents about the same in FY2015 and FY2016, before a 15.5 percent improvement in FY2017.
- Paratransit – The following is a brief summary of the paratransit functional trend highlights between FY2015 and FY2017:
 - Service Planning results showed operating cost per passenger mile decreasing by almost 20 percent overall, the farebox recovery ratio slightly increasing from 10.1 to 10.6 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) increasing from 34.3 to 39.3 percent. Vehicle miles in service was consistently in the 83 to 84 percent range, while vehicle hours in service decreased from about 94 percent to 85 percent. Passenger productivity was similar, with passengers per mile remaining relatively steady, while passengers per hour increased from 2.0 to 2.5 over the audit period.
 - Operations results showed decreases in both vehicle operations costs per hour and vehicle costs compared to total costs. Schedule adherence decreased over the audit period from 87 to 81 percent. At the same time there was an overall increase in the rate of complaints, but it remained less than one percent. There were no ADA trip denials and almost no missed trips, the trip cancellation rate

remained unchanged at about 20 percent, and late cancellations were almost nonexistent. Passenger no-shows increased from 5.1 percent to 6.3 percent of ADA trips during the audit period.

- Maintenance results showed total maintenance costs increasing from 12.6 to 17.3 percent of total costs, while vehicle maintenance costs per service mile increased overall from \$0.62 to \$0.81. The spare ratio decreased from 27.6 to 18.8 percent, and there was significant improvement in the mechanical failure rates, particularly in FY2017.
- Safety results showed the rate of preventable accidents per 100,000 miles increased by 6.4 percent overall.

Recommendations

No recommendations are suggested for Tri Delta Transit based on the results of this triennial performance audit.

Table of Contents

	<u>Page No.</u>
Executive Summary	i
Performance Audit and Report Organization	i
Results and Conclusions	ii
Recommendations	ix
I. Introduction	1
Performance Audit and Report Organization	2
II. Review of TDA Data Collection and Reporting Methods	7
Compliance with Requirements	7
Consistency of the Reported Statistics	8
III. TDA Performance Indicators and Trends	14
Bus Service Performance Trends	15
Bus Service Component Costs	23
Paratransit Performance Trends	27
Paratransit Component Costs	35
IV. Compliance with PUC Requirements	39
V. Status of Prior Audit Recommendations	43
VI. Functional Performance Indicator Trends	47
Systemwide	48
Bus Service	51
Paratransit	55
VII. Conclusions and Recommendations	61
Appendix A: Input Statistics for Functional Performance Measures	A-1
Functional Performance Inputs - Systemwide (All Modes)	A-2
Functional Performance Inputs – Bus Service	A-3
Functional Performance Inputs – Paratransit	A-4

List of Exhibits

Page No.

Exhibit 1: System Overview	3
Exhibit 2: Organization Chart.....	6
Exhibit 3.1: Compliance with TDA Data Collection and Reporting Requirements.....	9
Exhibit 3.2: TDA Statistics – Bus Service.....	12
Exhibit 3.3: TDA Statistics – Paratransit.....	13
Exhibit 4: TDA Indicator Performance - Bus Service	18
Exhibit 4.1: Operating Cost per Vehicle Service Hour - Bus Service	19
Exhibit 4.2: Passengers per Hour and per Mile – Bus Service	20
Exhibit 4.3: Operating Cost per Passenger – Bus Service	21
Exhibit 4.4: Vehicle Service Hours per FTE – Bus Service	22
Exhibit 4.5: Component Cost Trends – Bus Service	25
Exhibit 4.6: Distribution of Component Costs – Bus Service	26
Exhibit 5: TDA Indicator Performance – Paratransit	30
Exhibit 5.1: Operating Cost per Vehicle Service Hour – Paratransit	31
Exhibit 5.2: Passengers per Hour and per Mile – Paratransit	32
Exhibit 5.3: Operating Cost per Passenger – Paratransit	33
Exhibit 5.4: Vehicle Service Hours per FTE – Paratransit	34
Exhibit 5.5: Component Costs Trends – Paratransit.....	37
Exhibit 5.6: Distribution of Component Costs – Paratransit	38
Exhibit 6: Compliance with State PUC Requirements	40
Exhibit 7: Status of Prior Audit Recommendations.....	46
Exhibit 8: Functional Performance Trends - Systemwide	50
Exhibit 9: Functional Performance Trends – Bus Service.....	54
Exhibit 10: Functional Performance Trends – Paratransit.....	59

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 Eastern Contra Costa Transit Authority (ECCTA), also known as Tri Delta Transit. The two modes operated by Tri Delta Transit, bus and paratransit, are the focus of this performance audit. The audit period is Fiscal Years 2015 through 2017 (from July 1, 2014 through June 30, 2017).

An overview of Tri Delta Transit is provided in Exhibit 1. This is followed by a recent organization chart in Exhibit 2, which reflects the basic organizational structure during the audit period and beyond.

Performance Audit and Report Organization

This performance audit of Tri Delta Transit is conducted for MTC in accordance with its established procedures for performance audits. The audit consists of two discrete steps:

1. Compliance Audit - Activities in this phase include:
 - 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 include:
 - A review of actions to implement the recommendations from the prior performance audit;
 - Calculation and evaluation of functional performance indicator trends; and
 - Findings, conclusions, and the formulation of recommendations.

This report presents the findings from both phases. Comments received from Tri Delta Transit and MTC staff regarding the draft report have been incorporated into this final report.

Exhibit 1: System Overview

Location	Headquarters: 801 Wilbur Avenue, Antioch, CA 94509
Establishment	The Eastern Contra Costa Transit Authority (ECCTA), commonly known as Tri Delta Transit, was formed in 1977 as a joint powers agency for the purpose of providing local bus service within eastern Contra Costa County and feeder service to BART Express bus routes, and later, directly to BART rail stations. Fixed-route bus service began in June 1977, operating under an agreement with AC Transit. Paratransit service was begun in January 1979 under contract with Community Transit Services (CTS). In 1984, Tri Delta Transit consolidated its fixed-route and paratransit services under a single contract with CTS. The current contractor, First Transit, Inc., (formerly Laidlaw Transit, Inc.) has operated Tri Delta Transit since July 1986. The maintenance function is performed in-house by ECCTA employees in ECCTA facilities.
Board	Tri Delta Transit is governed by an 11-member Board of Directors, consisting of two representatives from each of the four incorporated cities (Antioch, Brentwood, Pittsburg and Oakley), two representatives from the County, and one at-large member appointed by the other members of the Board. Day-to-day operations are the responsibility of the Chief Executive Officer.
Facilities	Tri Delta Transit's maintenance, operations and administration functions are all centrally located at the Wilbur Avenue facility in Antioch. It houses both agency staff and the PT contractor's employee.
Service Data	<p>Tri Delta Transit provides fixed-route and paratransit service within a 225 square mile area in eastern Contra Costa County. The fixed-route system consists of 18 routes: 14 weekday routes and four weekend routes. Twelve routes serve the Pittsburgh/Bay Point BART station; three of which provide weekday express service. Service operates between approximately 3:00 a.m. and 1:00 AM on weekdays. Weekend service runs approximately from 6:00 a.m. to 1:00 a.m. Saturdays and 7:00 a.m. to 1:00 a.m. Sundays.</p> <p>Current local cash fares are \$2.00 for passengers age 6 through 64, and \$0.85 for disabled passengers, and seniors age 65 or over. Children under age six ride free with a paying customer. BART transfers, as well as various discounted day passes, multi-day passes and multi-ride punch-passes are also available. Some are valid on connecting services for regional trips. Express one-way fares are \$2.50; \$1.25 for disabled passengers and seniors.</p> <p>Paratransit service is provided by Tri Delta Transit's Dial-a-Ride, a door-to-door service for both ADA eligible and non-ADA eligible seniors. ADA</p>

Dial-a-Ride service operates during the same hours as the regular fixed-route service. Non-ADA Dial-a-Ride service operates Monday through Friday from 6:30 a.m. to 5:30 p.m. and Saturday from 10:00 a.m. to 5:30 p.m. There is no non-ADA service available on Sundays. Dial-a-Ride fares are \$2.75 anywhere in the regular service area for ADA service and start at \$5.50 for non-ADA/regional trips. Personal care attendants ride free.

Tri Delta Transit's current fixed-route operating fleet consists of a total of 62 buses including 20 Gillig BRT's, 33 low floor Gillig buses, and 9 over-the-road buses. All are equipped with bike racks and are wheelchair accessible. In addition, there are 26 Dial-a-Ride buses and 6 med vans.

Recent Changes

In 2017 a new loop route through downtown Pittsburg to the future eBART station and Los Medanos College was added and a total system redesign was completed in anticipation of service changes when two new eBART stations become operational – the Pittsburg Center Station and the Hillcrest Avenue Station – scheduled for May 2018. Tri Delta Transit partnered with BART in construction of both the Antioch and Pittsburg Center eBART stations on the new line, to better accommodate intermodal activities and passenger connectivity. In anticipation of changing traffic and transit patterns, Tri Delta hired a contractor to completely redesign the Tri Delta Transit routes in the service area. The new routes and schedules will go into effect concurrent with the start of the new eBART service.

ECCTA is taking steps to transform itself from strictly a provider/operator of public transportation service to a mobility manager for the East County. The first pilot project in this transformation was a partnership with two TNCs and a local taxi operator: Uber, Lyft and United Taxi. This demonstration project is exploring the potential for similar public/private partnerships to better meet the transportation needs of the East County rather than traditional paratransit service. The Authority anticipates continuing the service past the two year demonstration project. ECCTA expects the success of this project will open the door to the implementation of other, non-traditional, general public transit services with ECCTA playing a key role, such as the mobility manager for the development of micro-transit operations to meet first/last mile needs of transit patrons.

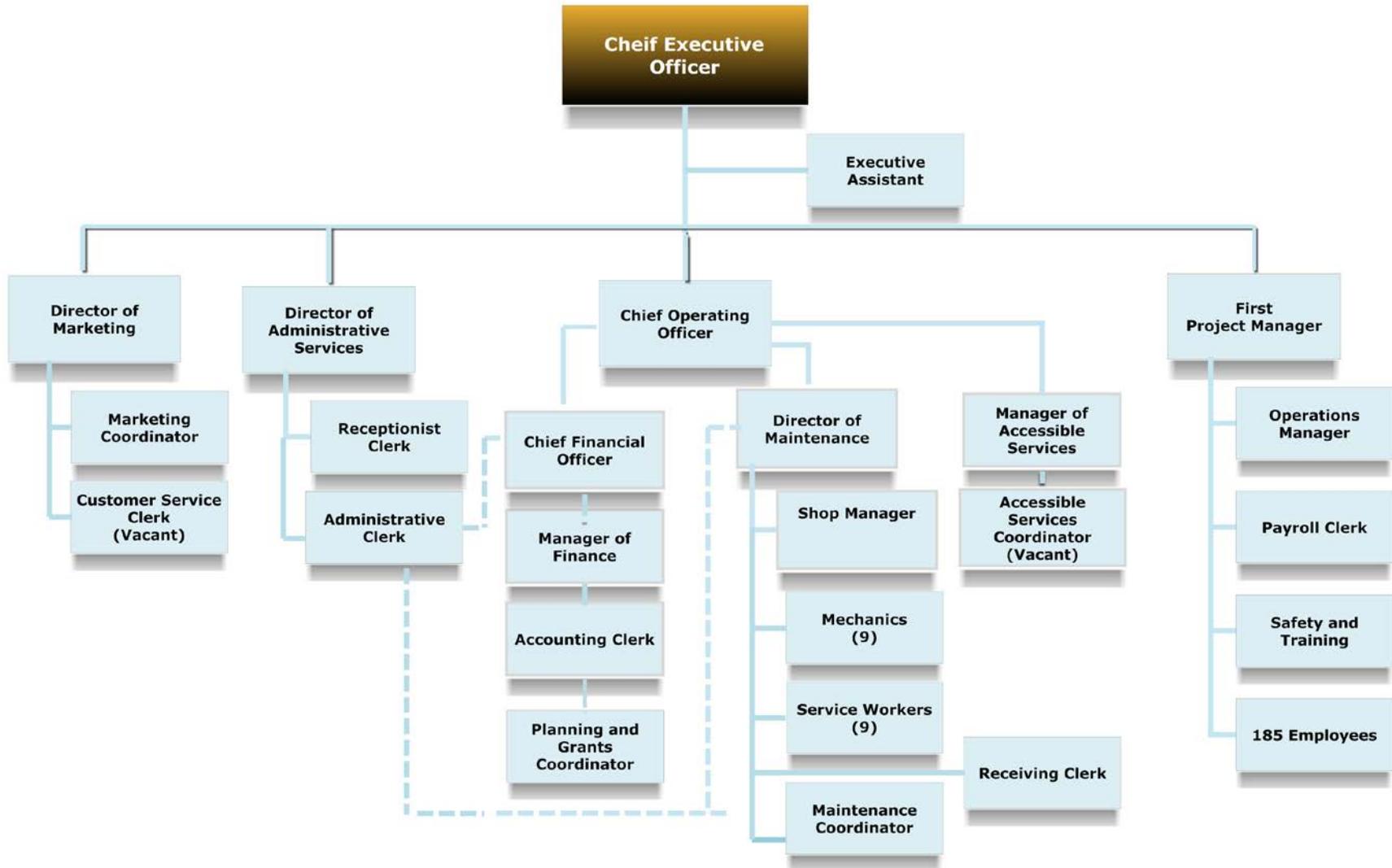
Tri Delta Transit is considering the potential for a series of small, neighborhood park and ride lots as collector points for suburbanites to gain access to Tri Delta Transit local route bus services. This is seen as a potential solution to the physical and fiscal restrictions on the acquisition, development and operation of larger, centrally located park and ride lots. As such, ECCTA has acquired two parcels of land at out-of-the-way locations that are adjacent to major roadways where Tri Delta Transit routes travel and other transportation modes are available nearby. Environmental clearances and Architecture & Engineering for both projects is completed.

They are estimated to cost \$3.2M each, however, no funding has been identified and, due to restrictions on uses of available funds by the fund administering agencies, we are limited to finding funding outside our regular sources to complete these projects.

Planned Changes Tri Delta Transit expects to produce an updated Short Range Transit Plan (SRTP) during the current fiscal year. A route and schedule redesign has been completed and will be incorporated into the upcoming SRTP.

Staff ECCTA has 13 administrative employees and 22 maintenance personnel. The current contract operator, First Transit, has 26 administrative employees and 115 operations employees providing DR and MB service for Tri Delta Transit.

Exhibit 2: Organization Chart



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 Tri Delta Transit is in 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 Tri Delta Transit covering the audit period has been reviewed. Tri Delta Transit's NTD reports include its bus and paratransit services. However, consistent with FTA reporting requirements, Tri Delta Transit does not submit employee hour information for purchased transportation service to the NTD.

Compliance with Requirements

To support this review, Tri Delta Transit staff confirmed that the data collection and reporting procedures remain unchanged from those described in the prior performance audit. Based on the information provided, as shown in Exhibit 3.1, Tri Delta

Transit is in compliance with the data collection and reporting requirements for all five TDA statistics.

Consistency of the Reported Statistics

The resulting TDA statistics for Tri Delta Transit's bus and paratransit services are shown 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.

There was one anomaly noted for FY2017 paratransit statistic reporting. There was a 14.4 percent decrease in operating costs and a 16.3 percent decrease in vehicle service hours reported. However, vehicle service miles only experienced a 3.1 percent decrease that same year. Vehicle service miles and hours usually move together in tandem, without such a wide discrepancy in performance.

Tri Delta staff explained the decrease in service hours is the result of efforts to improve scheduling, thereby increasing operational and cost efficiency, leading to fewer service hours, which reduces the hourly operating cost charges for service paid to the contractor. This has a greater effect on reducing service hours than service miles. The anomaly did not significantly impact Tri Delta's paratransit service provision, however, demonstrated by the fact that the paratransit average operating speed only increased by two miles per hour between FY2016 (12.3 mph) and FY2017 (14.3 mph).

Exhibit 3.1: Compliance with TDA Data Collection and Reporting Requirements

TDA Statistic	TDA Definition	Compliance Finding	Verification Information
Operating Cost	<p>“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. Also excluded are all subsidies for commuter rail services operated on railroad lines under the jurisdiction of the Federal Railroad Administration, all direct costs for providing charter services, all vehicle lease costs, and principal and interest payments on capital projects funded with certificates of participation.</p>	In Compliance	<ul style="list-style-type: none"> • Operating costs are fully allocated costs of the entity. They are reported monthly via the monthly accounting close process. • Costs are directly allocated to the service modes when they can be and allocated via an FTA approved split formula that takes into account a bevy of service factors. • The “splits” are determined monthly in advance based on the prior month’s activity
Vehicle Service Hours	<p>“Vehicle service hours” means the total number of hours that each transit vehicle is in revenue service, including layover time.</p>	In Compliance	<ul style="list-style-type: none"> • These come from the monthly operations report provided by the operator. The reports are monitored/edited and finalized by finance department and (the planning and grants coordinator and the CFO). • Bill hours are based on NTD service hours which are defined as “gate to gate”. This includes all service, deadhead and layover time. • Vehicles Service Hours equal the scheduled hours per route per day, multiplied by the number of days in operation during the month combined with scheduled deadhead hours. For reporting purposes, the scheduled FR revenue hours are adjusted for missed trips based on AVL measurements to arrive at actual service hours

TDA Statistic	TDA Definition	Compliance Finding	Verification Information
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"> • These come from the monthly operations report provided by the operator. The reports are monitored/edited and finalized by finance department and (the planning and grants coordinator and the CFO). • Vehicle Service Miles equal the scheduled miles per route per day, multiplied by the number of days in operation during the month combined with scheduled deadhead miles. For reporting purposes, the scheduled FR revenue miles are adjusted for missed trips based on AVL measurements to arrive at actual service miles.
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"> • All passenger boardings are considered unlinked passenger trips because the system cannot differentiate between linked and unlinked trips. • Unlinked passenger trips on MB service are counted with automatic passenger counters that have been installed as part of the ITS system. The counts have been independently verified to NTD standards. They are accumulated into daily ridership by passenger by day reports. At month end, Tri Delta transit administrative staff adds up the daily riders by type and route. These totals become the basis of all ridership reports • DR passengers, passenger trips, passenger miles, and all hours are determined from an ITS system that tracks these elements in conjunction with scheduling software and operator input on Mobile Data Terminals in each vehicle.

TDA Statistic	TDA Definition	Compliance Finding	Verification Information
Employee Full-Time Equivalents	2,000 person-hours of work in one year constitute one employee.	In Compliance	<ul style="list-style-type: none"> • FTEs are included in the monthly operations report. The CFO inserts the administrative and maintenance data based on actual number of employees in that month. The contractor reports its administrative employees based on actual head count, and operating FTEs are determined by dividing the billing hours for each mode by 2,000 FTE hours per year. • FTEs are allocated between modes the same way that operating costs are: directly to the mode where possible (operations); allocating using the FTA approved formula for those areas that are not (administration and maintenance).

Exhibit 3.2: TDA Statistics – Bus Service

TDA Statistic	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Operating Cost (Actual \$)	\$16,045,646	\$16,495,048	\$15,804,465	\$15,535,463	\$15,415,833	\$16,350,370
<i>Annual Change</i>	- -	2.8%	-4.2%	-1.7%	-0.8%	6.1%
Vehicle Service Hours	152,746	154,578	149,444	146,063	144,692	145,397
<i>Annual Change</i>	- -	1.2%	-3.3%	-2.3%	-0.9%	0.5%
Vehicle Service Miles	2,151,236	2,064,735	2,051,009	2,038,867	2,045,318	2,036,876
<i>Annual Change</i>	- -	-4.0%	-0.7%	-0.6%	0.3%	-0.4%
Unlinked Passengers	2,431,768	2,740,834	2,832,264	2,806,028	2,574,864	2,344,985
<i>Annual Change</i>	- -	12.7%	3.3%	-0.9%	-8.2%	-8.9%
Employee Full-Time Equivalent	142.2	145.1	133.0	130.4	130.9	132.0
<i>Annual Change</i>	- -	2.0%	-8.3%	-2.0%	0.4%	0.8%

Sources: FY2012 through FY2014 - Prior Performance Audit Report

FY2015 through FY2017 - NTD Reports; FY2017 Revision 2, except FTEs - ECCTA Monthly Operating Statistics, Year-End Total

Exhibit 3.3: TDA Statistics – Paratransit

TDA Statistic	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017
Operating Cost (Actual \$)	\$3,995,257	\$4,287,047	\$4,634,314	\$4,571,604	\$4,539,707	\$3,885,139
<i>Annual Change</i>	- -	7.3%	8.1%	-1.4%	-0.7%	-14.4%
Vehicle Service Hours	62,085	67,475	67,413	65,485	62,820	52,570
<i>Annual Change</i>	- -	8.7%	-0.1%	-2.9%	-4.1%	-16.3%
Vehicle Service Miles	765,586	799,424	804,497	796,820	775,428	751,328
<i>Annual Change</i>	- -	4.4%	0.6%	-1.0%	-2.7%	-3.1%
Unlinked Passengers	130,619	128,999	131,476	133,769	131,917	133,406
<i>Annual Change</i>	- -	-1.2%	1.9%	1.7%	-1.4%	1.1%
Employee Full-Time Equivalents	38.0	41.4	47.2	46.3	45.6	42.8
<i>Annual Change</i>	- -	8.9%	14.0%	-1.9%	-1.5%	-6.1%

Sources: FY2012 through FY2014 - Prior Performance Audit Report

FY2015 through FY2017 - NTD Reports; FY2017 Revision 2, except FTEs - ECCTA Monthly Operating Statistics, Year-End Total

III. TDA PERFORMANCE INDICATORS AND TRENDS

The performance trends for Tri Delta Transit'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)

The performance results in these indicators were primarily developed from the information in the NTD reports filed with the FTA for the three years of the audit period. Tri Delta Transit's NTD reports were the source of all operating and financial statistics except for contractor FTEs. Contractor employee FTE data was provided by Tri Delta Transit staff from the contractor's monthly operating statistics.

In addition to presenting performance for the three years of the audit period (FY2015 through FY2017), 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 Tri Delta Transit'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 FY2015 to FY2017 trend lines have been combined with those from the prior audit period (FY2012 through FY2014) 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 Tri Delta Transit'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 also expanded to include a breakdown of the various component costs that contributed to the total and hourly operating costs during the last six years.

Bus Service Performance Trends

This section provides an overview of the performance of Tri Delta Transit'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 4.4.

- Operating Cost Per Vehicle Service Hour (Exhibit 4.1)
 - A key indicator of cost efficiency, the cost per hour of bus service increased an average of 1.4 percent annually during the six-year review period.
 - The cost per hour ranged from a low of \$105.05 in FY2012 to a high of \$112.45 in FY2017. Cost per hour remained steady throughout the review period, with the largest increase (5.5 percent) occurring in FY2017, when operating costs increased 6.1 percent, with service hours remaining almost unchanged.

- In FY2012 constant dollars, there was an average annual decrease in this indicator of 1.2 percent.
- Passengers per Vehicle Service Hour (Exhibit 4.2)
 - A key indicator of passenger productivity, passengers per hour was almost unchanged, increasing an average of 0.3 percent annually during the six-year period.
 - The increase reflects modest overall decreases in both passengers and service hours over the six-year period. Passengers per hour increased during the first half of the review period, before declining in the last three years.
 - Passengers per hour increased overall from 15.9 in FY2012 to 16.1 in FY2017.
- Passengers per Vehicle Service Mile (Exhibit 4.2)
 - Similar to passengers per hour, passengers per mile also increased overall, by 0.4 percent annually on average.
 - Performance in passengers per mile almost exactly matched that of passengers per hour, with an initial increase in the first three years of the review period, followed by a decrease in the last three years.
 - Passengers per mile increased overall from 1.13 passengers per mile in FY2012 to 1.15 passengers per mile in FY2017.
- Operating Cost per Passenger (Exhibit 4.3)
 - A key measure of cost effectiveness, the cost per passenger increased from \$6.60 in FY2012 to \$6.97 in FY2017.
 - The cost per passenger decreased in the first four years of the review period, before increasing in both FY2016 and FY2017, largely due to decreasing ridership in both those years.

- Overall, cost per passenger increased an average of 1.1 percent annually. With the impact of inflation removed from the cost side (normalization), cost per passenger exhibited an average annual decrease of 1.5 percent per year.
- Vehicle Service Hours per Employee (FTE) (Exhibit 4.4)
 - A measure of employee productivity, this indicator increased by an average 0.5 percent per year over the six years.
 - Hours per FTE increased overall from 1,074 in FY2012 to 1,101 in FY2017.
 - Annual FTEs decreased at a slightly higher rate than vehicle service hours overall during the period.

* * * * *

The following is a brief summary of the bus service TDA performance trend highlights over the six-year period of FY2012 through FY2017:

- There was an average annual increase in the operating cost per hour of 1.4 percent, which amounted to a 1.2 percent decrease in inflation adjusted dollars.
- The cost per passenger also was relatively flat, increasing on average by 1.1 percent per year, resulting in an average annual decrease of 1.5 percent in constant FY2012 dollars.
- Passenger productivity showed a slight improvement, with passengers per vehicle service hour increasing by 0.3 percent per year overall, and passengers per vehicle service mile increasing by 0.4 percent annually.
- Employee productivity increased an average 0.5 percent per year.

Exhibit 4: TDA Indicator Performance - Bus Service

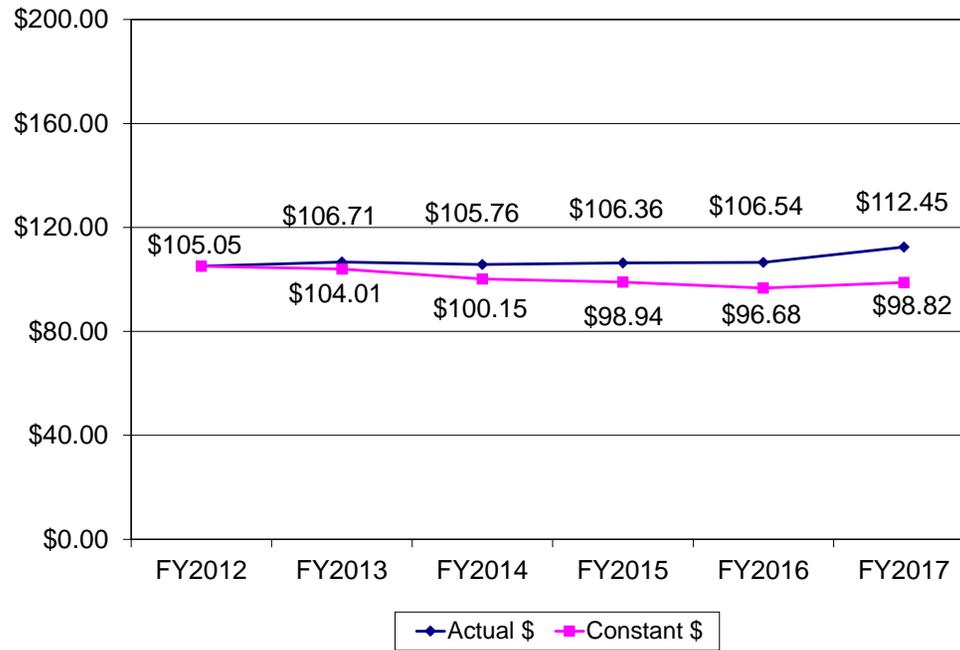
	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	Av. Ann. Chg.
Performance Indicators							
Op. Cost per Vehicle Svc. Hour (Actual \$)	\$105.05	\$106.71	\$105.76	\$106.36	\$106.54	\$112.45	- -
<i>Annual Change</i>	- -	1.6%	-0.9%	0.6%	0.2%	5.5%	1.4%
Op. Cost per Vehicle Svc. Hour (Constant \$)	\$105.05	\$104.01	\$100.15	\$98.94	\$96.68	\$98.82	- -
<i>Annual Change</i>	- -	-1.0%	-3.7%	-1.2%	-2.3%	2.2%	-1.2%
Passengers per Vehicle Service Hour	15.9	17.7	19.0	19.2	17.8	16.1	- -
<i>Annual Change</i>	- -	11.4%	6.9%	1.4%	-7.4%	-9.4%	0.3%
Passengers per Vehicle Service Mile	1.13	1.33	1.38	1.38	1.26	1.15	- -
<i>Annual Change</i>	- -	17.4%	4.0%	-0.3%	-8.5%	-8.6%	0.4%
Op. Cost per Passenger (Actual \$)	\$6.60	\$6.02	\$5.58	\$5.54	\$5.99	\$6.97	- -
<i>Annual Change</i>	- -	-8.8%	-7.3%	-0.8%	8.1%	16.5%	1.1%
Op. Cost per Passenger (Constant \$)	\$6.60	\$5.87	\$5.28	\$5.15	\$5.43	\$6.13	- -
<i>Annual Change</i>	- -	-11.1%	-9.9%	-2.5%	5.5%	12.8%	-1.5%
Vehicle Service Hours per FTE	1,074	1,065	1,124	1,120	1,105	1,101	- -
<i>Annual Change</i>	- -	-0.8%	5.5%	-0.3%	-1.3%	-0.4%	0.5%
Input Data							
Operating Cost (Actual \$)	\$16,045,646	\$16,495,048	\$15,804,465	\$15,535,463	\$15,415,833	\$16,350,370	- -
<i>Annual Change</i>	- -	2.8%	-4.2%	-1.7%	-0.8%	6.1%	0.4%
Operating Cost (Constant \$)	\$16,045,646	\$16,077,045	\$14,966,349	\$14,451,593	\$13,988,959	\$14,367,636	- -
<i>Annual Change</i>	- -	0.2%	-6.9%	-3.4%	-3.2%	2.7%	-2.2%
Vehicle Service Hours	152,746	154,578	149,444	146,063	144,692	145,397	- -
<i>Annual Change</i>	- -	1.2%	-3.3%	-2.3%	-0.9%	0.5%	-1.0%
Vehicle Service Miles	2,151,236	2,064,735	2,051,009	2,038,867	2,045,318	2,036,876	- -
<i>Annual Change</i>	- -	-4.0%	-0.7%	-0.6%	0.3%	-0.4%	-1.1%
Unlinked Passengers	2,431,768	2,740,834	2,832,264	2,806,028	2,574,864	2,344,985	- -
<i>Annual Change</i>	- -	12.7%	3.3%	-0.9%	-8.2%	-8.9%	-0.7%
Employee Full-Time Equivalents	142.2	145.1	133.0	130.4	130.9	132.0	- -
<i>Annual Change</i>	- -	2.0%	-8.3%	-2.0%	0.4%	0.8%	-1.5%
Bay Area CPI - Annual Change	- -	2.6%	2.9%	1.9%	2.5%	3.3%	- -
- Cumulative Change	- -	2.6%	5.6%	7.5%	10.2%	13.8%	2.6%

Sources: FY2012 through FY2014 - Prior Performance Audit Report

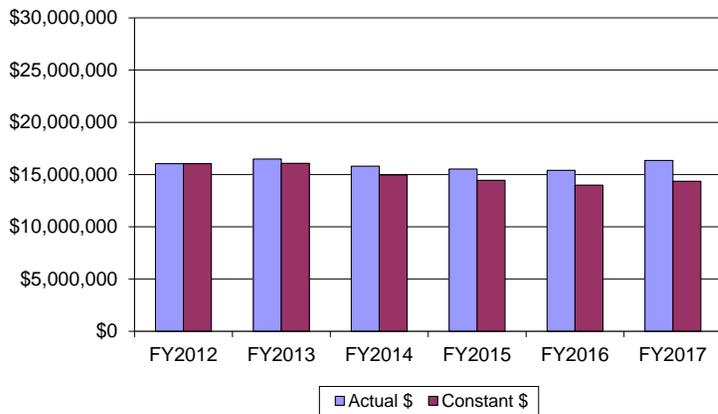
FY2015 through FY2017 - NTD Reports; FY2017 Revision 2, except FTEs - ECCTA Monthly Operating Statistics, Year-End Total

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

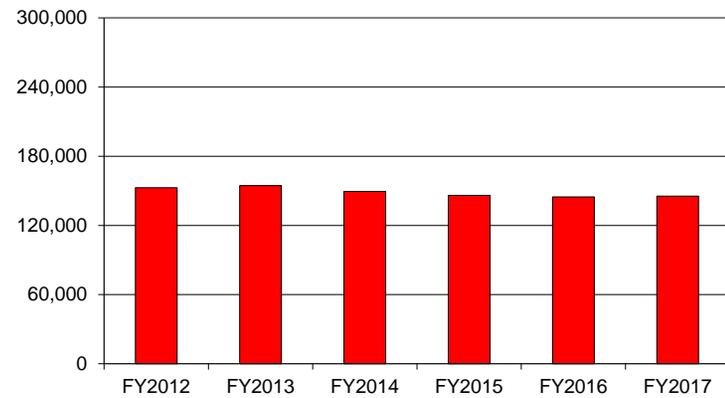
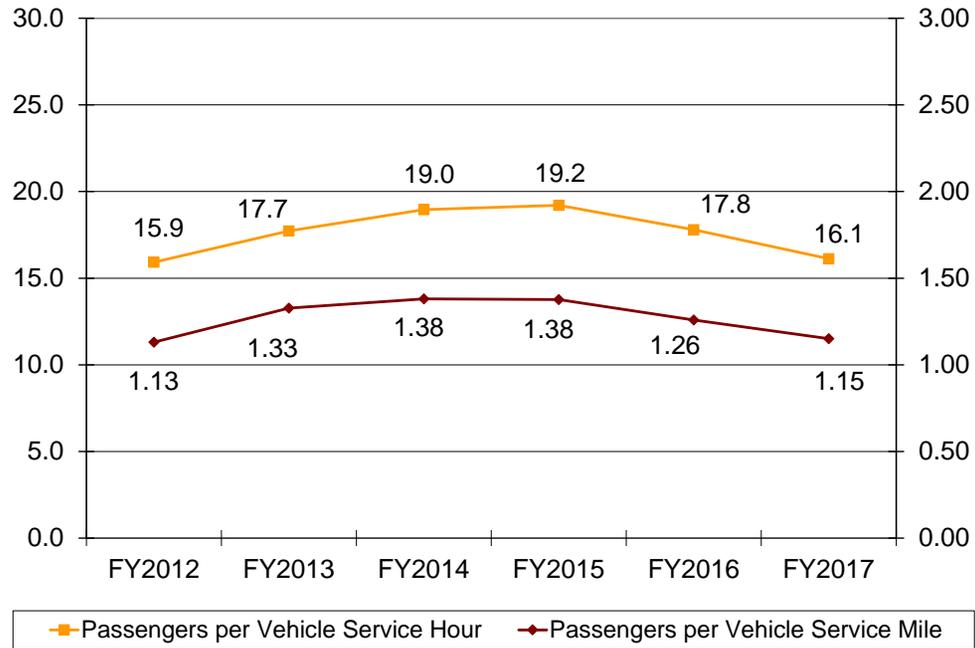
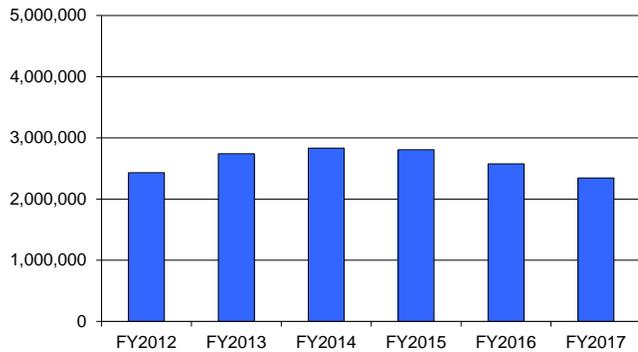


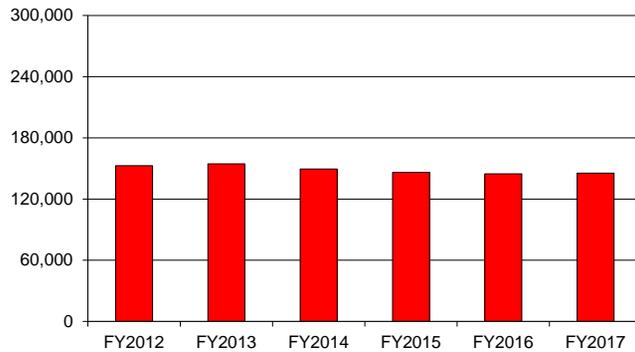
Exhibit 4.2: Passengers per Hour and per Mile – Bus Service



Unlinked Passengers



Vehicle Service Hours



Vehicle Service Miles

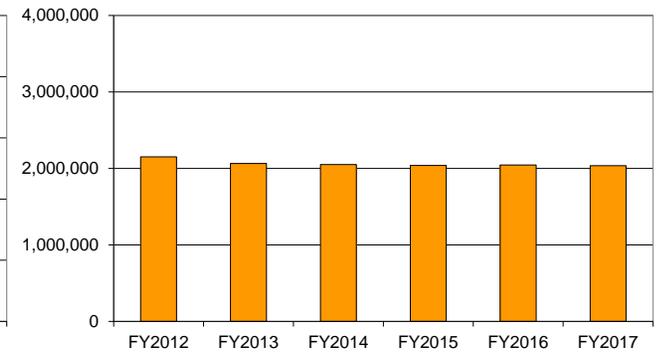
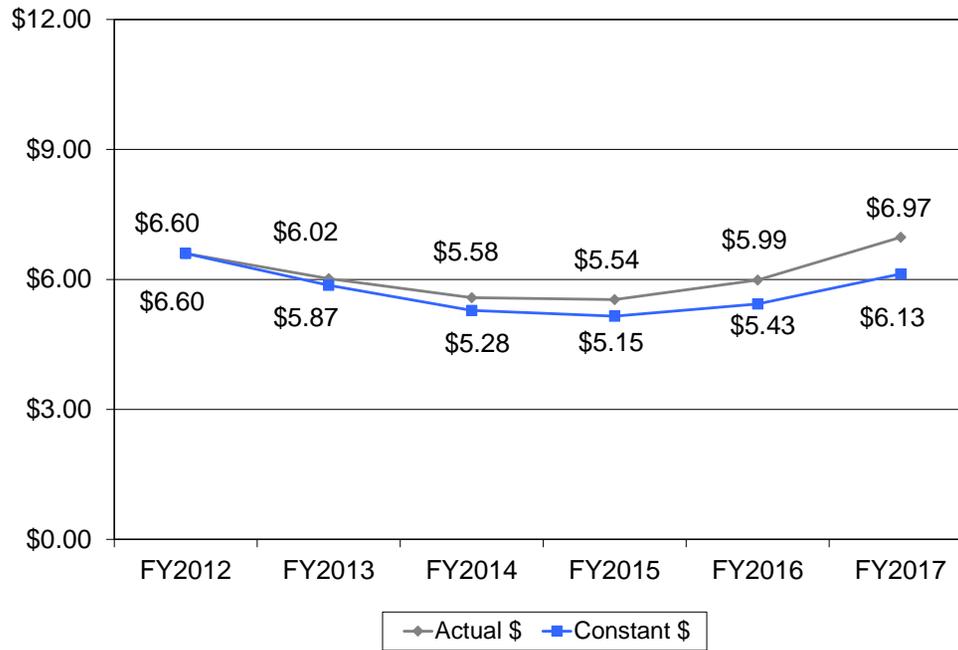
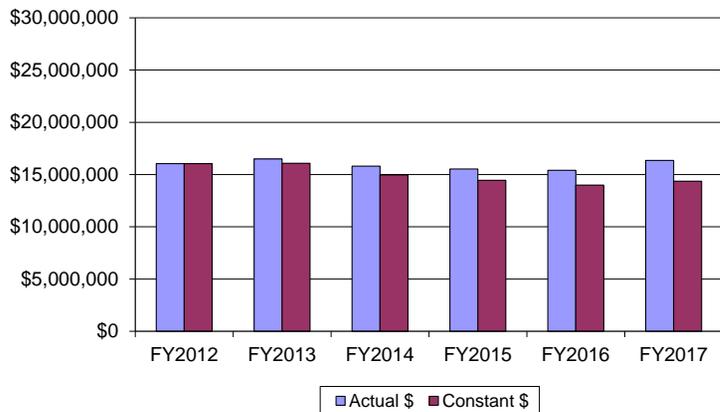


Exhibit 4.3: Operating Cost per Passenger – Bus Service



Operating Cost



Unlinked Passengers

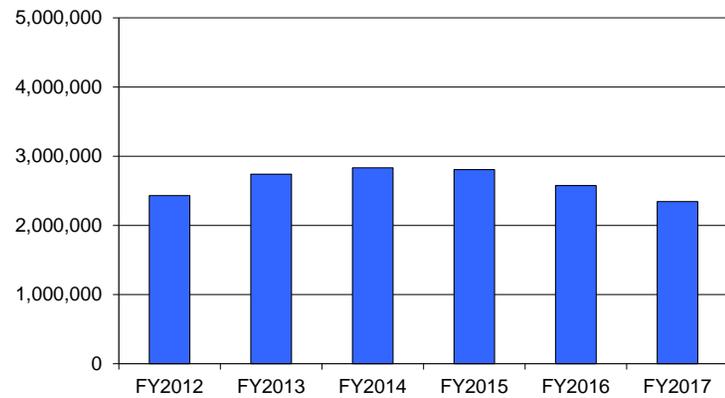
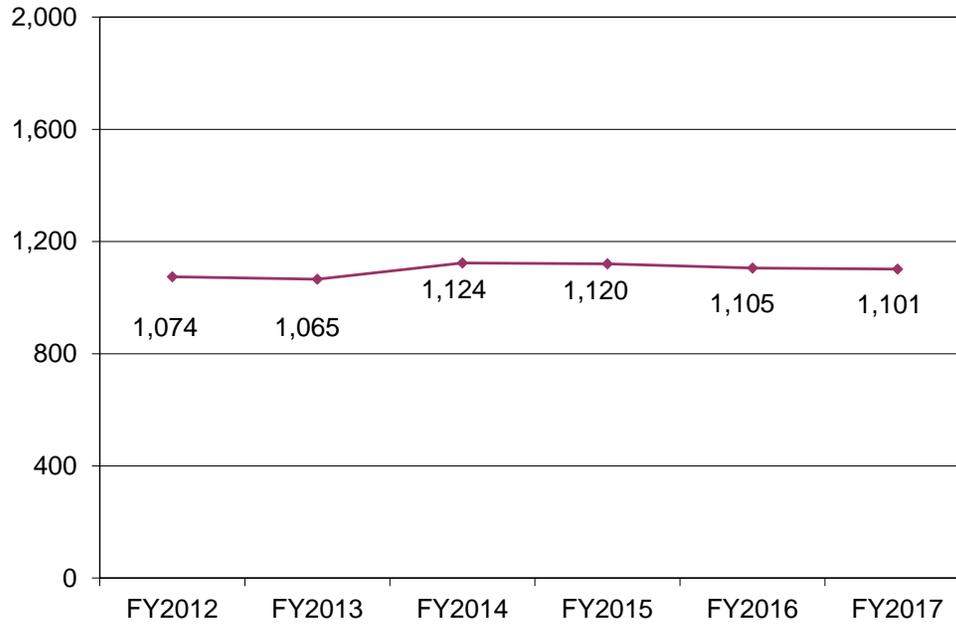
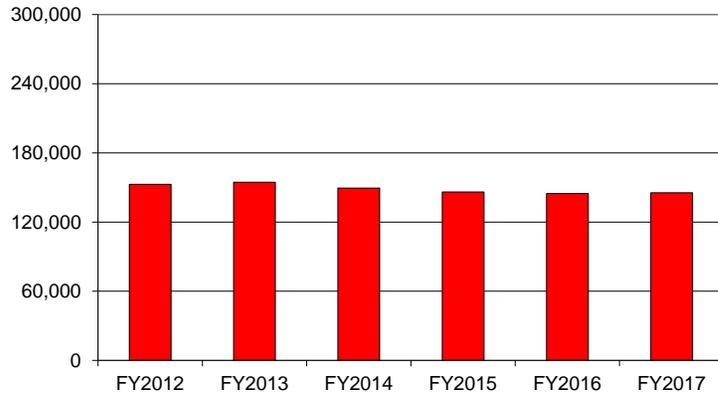


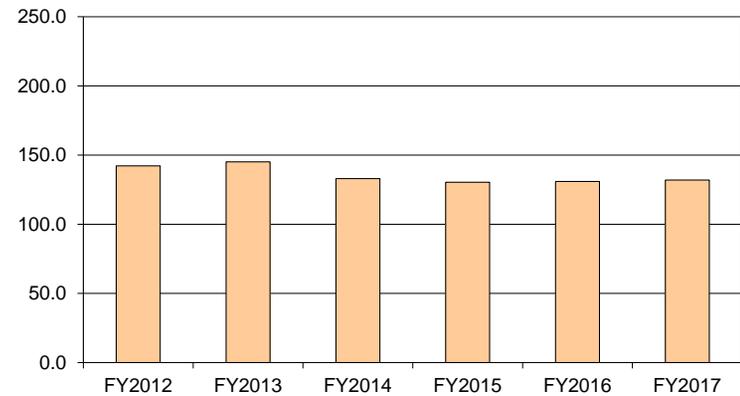
Exhibit 4.4: Vehicle Service Hours per FTE – Bus Service



Vehicle Service Hours



Full-time Equivalent



Bus Service Component Costs

Year-to-year changes in selected operating cost categories over the past six years are presented in Exhibit 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 4.5 also shows the concurrent changes in vehicle service hours, and Exhibit 4.6 illustrates the portion of the cost per bus service hour that can be attributed to each included cost component.

- In-house labor and fringe benefit costs both decreased over the six-year period, with labor decreasing 1.1 percent and fringes decreasing 0.8 percent on average each year.
- Services costs increased by 4.6 percent on average per year, with larger increases earlier in the review period, followed by decreases in the last two years. Services costs remained around four percent or less of the total cost per vehicle service hour through the review period.
- Purchased transportation costs increased an annual average of 3.3 percent per year. The largest increase occurred in FY2017, with a 9.4 percent increase in costs. No explanation for the increased costs is available at this time.
- Fuel/lubricants costs had a notable 13.5 percent overall decrease, while costs for materials/supplies decreased slightly, an average of 1.8 percent per year.
- There were increases in the casualty/liability (7.9 percent average annually) and other expenses (2.9 percent average annually), with both these component cost categories comprising less than five percent of total costs.
- Purchased transportation costs represented the largest portion of the total cost per vehicle service hour in all years, ranging between 47 and 54 percent. This was followed by labor and fringe benefit costs, each comprising 10 to 12 percent of total costs. Fuel/lubricants share of total costs decreased overall from about 14 percent in FY2012 to about seven percent by FY2017.

* * * * *

The following is a brief summary of the bus service component operating costs trend highlights between FY2012 and FY2017:

- Purchased transportation costs went up just over three percent per year, remaining the largest component cost area at about 50 percent of total costs. Purchased transportation costs increased in the last year (FY2017) by over nine percent, more than double the rate of any previous year.
- In-house labor and fringe benefit costs both decreased about one percent overall, with each of these categories comprising about ten percent of total operating costs.
- Fuel/lubricant costs decreased over 13 percent annually, and their overall share of total operating costs decreased from 14 percent to seven percent during the review period. There was also a minor annual decrease in materials/supplies costs each year.
- There were moderate annual average increases in the remaining component cost categories (services, casualty/liability and other expenses), with each of these components contributing less than five percent of total operating costs.

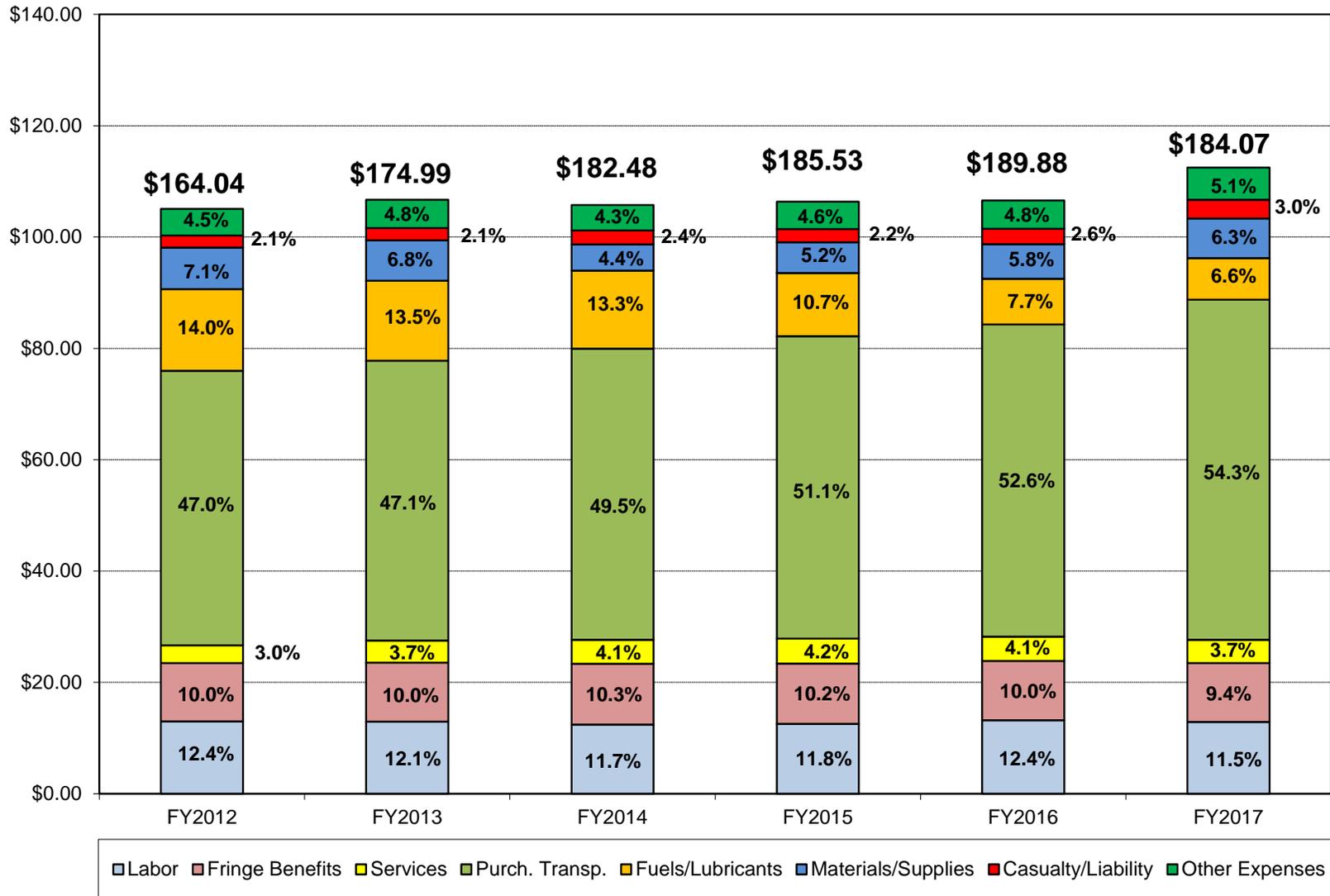
Exhibit 4.5: Component Cost Trends – Bus Service

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	Av. Ann. Chg.
COST CATEGORIES							
Labor - (Salaries, Wages)	\$1,981,740	\$1,999,569	\$1,855,512	\$1,835,378	\$1,910,518	\$1,875,775	--
Annual Change	--	0.9%	-7.2%	-1.1%	4.1%	-1.8%	-1.1%
Fringe Benefits	\$1,603,704	\$1,641,646	\$1,632,887	\$1,577,225	\$1,543,212	\$1,538,355	--
Annual Change	--	2.4%	-0.5%	-3.4%	-2.2%	-0.3%	-0.8%
Services	\$485,296	\$611,310	\$641,918	\$656,522	\$629,670	\$606,573	--
Annual Change	--	26.0%	5.0%	2.3%	-4.1%	-3.7%	4.6%
Purchased Transportation	\$7,534,875	\$7,769,020	\$7,816,544	\$7,934,593	\$8,114,508	\$8,879,342	--
Annual Change	--	3.1%	0.6%	1.5%	2.3%	9.4%	3.3%
Fuels/Lubricants	\$2,239,786	\$2,220,833	\$2,096,876	\$1,660,729	\$1,187,484	\$1,086,511	--
Annual Change	--	-0.8%	-5.6%	-20.8%	-28.5%	-8.5%	-13.5%
Materials/Supplies	\$1,138,375	\$1,123,049	\$699,493	\$803,792	\$898,538	\$1,037,136	--
Annual Change	--	-1.3%	-37.7%	14.9%	11.8%	15.4%	-1.8%
Casualty/Liability	\$333,249	\$340,471	\$379,291	\$346,231	\$396,962	\$487,630	--
Annual Change	--	2.2%	11.4%	-8.7%	14.7%	22.8%	7.9%
Other Expenses (a)	\$728,621	\$789,150	\$681,944	\$720,993	\$734,941	\$839,048	--
Annual Change	--	8.3%	-13.6%	5.7%	1.9%	14.2%	2.9%
Total	\$16,045,646	\$16,495,048	\$15,804,465	\$15,535,463	\$15,415,833	\$16,350,370	--
Annual Change	--	2.8%	-4.2%	-1.7%	-0.8%	6.1%	0.4%
OPERATING STATISTICS							
Vehicle Service Hours	152,746	154,578	149,444	146,063	144,692	145,387	--
Annual Change	--	1.2%	-3.3%	-2.3%	-0.9%	0.5%	-1.0%

Sources: FY2012 through FY2014 - Prior Performance Audit Report; FY2015 through FY2017 - NTD Reports; 2017 Revision 2

(a) Includes tires/tubes, utilities, taxes, and miscellaneous expenses

Exhibit 4.6: Distribution of Component Costs – Bus Service
Operating Cost per Vehicle Service Hour



Paratransit Performance Trends

This section provides an overview of the performance of Tri Delta Transit'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 5.4.

- Operating Cost per Vehicle Service Hour (Exhibit 5.1)
 - Tri Delta Transit's paratransit cost per hour increased in every year except FY2013, from \$64.35 in FY2012 to \$73.90 in FY2017.
 - This performance was the result of vehicle service hours decreasing at a higher rate than operating costs, with the largest decreases occurring in FY2017, when both operating costs and vehicle service hours experienced a double digit decline.
 - The decrease in service hours is the result of Tri Delta's efforts to improve scheduling, thereby increasing operational and cost efficiency. Increased efficiency leads to fewer service hours, which in turn reduces the hourly operating cost charges for service paid to the contractor.
 - Overall, the cost per hour increased an average of 2.8 percent per year over the six years.
 - With the effects of inflation removed, cost per hour exhibited an average annual increase of 0.2 percent.
- Passengers per Vehicle Service Hour (Exhibit 5.2)
 - Passengers per vehicle service hour increased overall from 2.1 passengers per hour in FY2012 to 2.5 passengers per hour in FY2017.
 - The trend in this indicator increased an average of 3.8 percent per year over the review period, with little change in annual passenger trips, and service levels decreasing at a higher rate.

- Passengers per Vehicle Service Mile (Exhibit 5.2)
 - Performance in passengers per vehicle service mile was almost unchanged, with an average decrease of 0.8 percent over the six-year period.
 - Tri Delta Transit’s paratransit service carried between 0.16 and 0.18 passengers per mile in every year of the review period.

- Operating Cost per Passenger (Exhibit 5.3)
 - The cost per passenger decreased by one percent per year on average over the review period, from \$30.59 in FY2012 to \$25.59 in FY2017.
 - Operating costs decreased by 0.6 percent per year, largely driven by the 14.4 percent decrease in FY2017, while passenger levels increased slightly by 10.4 percent per year.
 - With the impact of inflation removed, there was an average annual decrease in the cost per passenger of 3.5 percent.

- Vehicle Service Hours per FTE (Exhibit 5.4)
 - Employee productivity decreased from 1,634 hours per FTE in FY2012 to 1,228 hours in FY2017.
 - Employee FTEs increased slightly during the review period, while service hours decreased modestly overall.
 - Overall, employee productivity decreased an average of 5.5 percent per year over the review period.

* * * * *

The following is a brief summary of the paratransit TDA performance trend highlights over the six-year period of FY2012 through FY2017:

- Cost efficiency decreased, with an average annual increase in the operating cost per hour of 2.8 percent. This amounted to a slight average annual increase of 0.2 percent in inflation adjusted dollars.
- The operating cost per passenger decreased an average of one percent per year, or 3.5 percent annually when expressed as normalized FY2012 dollars.
- Passenger productivity improved, with passengers per hour increasing 3.8 percent per year on average, while passengers per mile experienced a more modest 0.8 percent annual increase.
- Employee productivity decreased an annual average of 5.5 percent.

Exhibit 5: TDA Indicator Performance – Paratransit

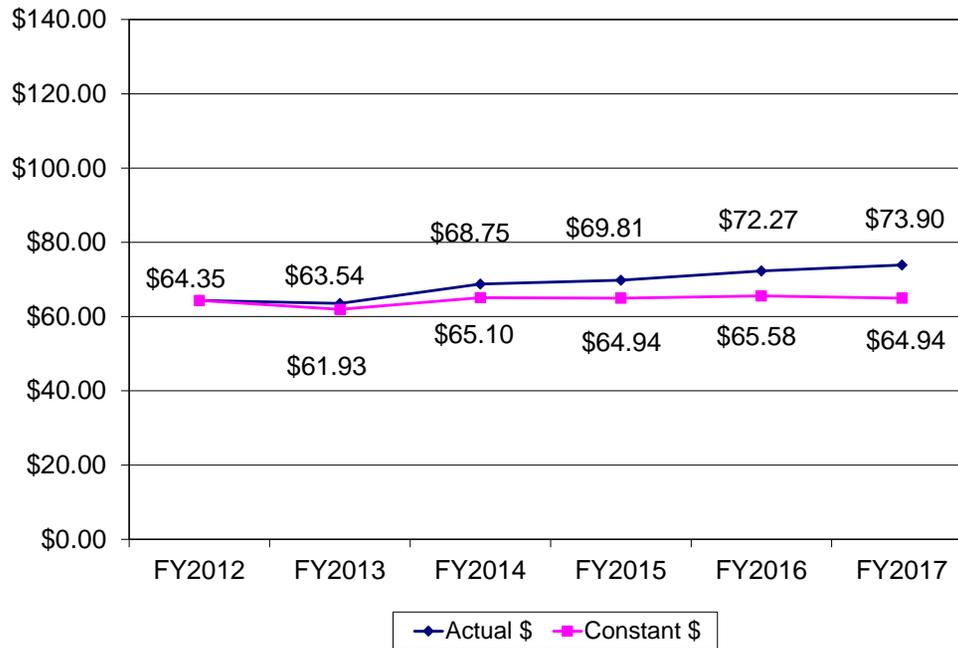
	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	Av. Ann. Chg.
Performance Indicators							
Op. Cost per Vehicle Svc. Hour (Actual \$)	\$64.35	\$63.54	\$68.75	\$69.81	\$72.27	\$73.90	- -
<i>Annual Change</i>	- -	-1.3%	8.2%	1.6%	3.5%	2.3%	2.8%
Op. Cost per Vehicle Svc. Hour (Constant \$)	\$64.35	\$61.93	\$65.10	\$64.94	\$65.58	\$64.94	- -
<i>Annual Change</i>	- -	-3.8%	5.1%	-0.2%	1.0%	-1.0%	0.2%
Passengers per Vehicle Service Hour	2.1	1.9	2.0	2.0	2.1	2.5	- -
<i>Annual Change</i>	- -	-9.1%	2.0%	4.7%	2.8%	20.8%	3.8%
Passengers per Vehicle Service Mile	0.17	0.16	0.16	0.17	0.17	0.18	- -
<i>Annual Change</i>	- -	-5.4%	1.3%	2.7%	1.3%	4.4%	0.8%
Op. Cost per Passenger (Actual \$)	\$30.59	\$33.23	\$35.25	\$34.18	\$34.41	\$29.12	- -
<i>Annual Change</i>	- -	8.7%	6.1%	-3.0%	0.7%	-15.4%	-1.0%
Op. Cost per Passenger (Constant \$)	\$30.59	\$32.39	\$33.38	\$31.79	\$31.23	\$25.59	- -
<i>Annual Change</i>	- -	5.9%	3.1%	-4.8%	-1.8%	-18.1%	-3.5%
Vehicle Service Hours per FTE	1,634	1,630	1,428	1,414	1,378	1,228	- -
<i>Annual Change</i>	- -	-0.2%	-12.4%	-1.0%	-2.6%	-10.8%	-5.5%
Input Data							
Operating Cost (Actual \$)	\$3,995,257	\$4,287,047	\$4,634,314	\$4,571,604	\$4,539,707	\$3,885,139	- -
<i>Annual Change</i>	- -	7.3%	8.1%	-1.4%	-0.7%	-14.4%	-0.6%
Operating Cost (Constant \$)	\$3,995,257	\$4,178,408	\$4,388,555	\$4,252,655	\$4,119,516	\$3,414,006	- -
<i>Annual Change</i>	- -	4.6%	5.0%	-3.1%	-3.1%	-17.1%	-3.1%
Vehicle Service Hours	62,085	67,475	67,413	65,485	62,820	52,570	- -
<i>Annual Change</i>	- -	8.7%	-0.1%	-2.9%	-4.1%	-16.3%	-3.3%
Vehicle Service Miles	765,586	799,424	804,497	796,820	775,428	751,328	- -
<i>Annual Change</i>	- -	4.4%	0.6%	-1.0%	-2.7%	-3.1%	-0.4%
Unlinked Passengers	130,619	128,999	131,476	133,769	131,917	133,406	- -
<i>Annual Change</i>	- -	-1.2%	1.9%	1.7%	-1.4%	1.1%	0.4%
Employee Full-Time Equivalents	38.0	41.4	47.2	46.3	45.6	42.8	- -
<i>Annual Change</i>	- -	8.9%	14.0%	-1.9%	-1.5%	-6.1%	2.4%
Bay Area CPI - Annual Change	- -	2.6%	2.9%	1.9%	2.5%	3.3%	- -
- Cumulative Change	- -	2.6%	5.6%	7.5%	10.2%	13.8%	2.6%

Sources: FY2012 through FY2014 - Prior Performance Audit Report

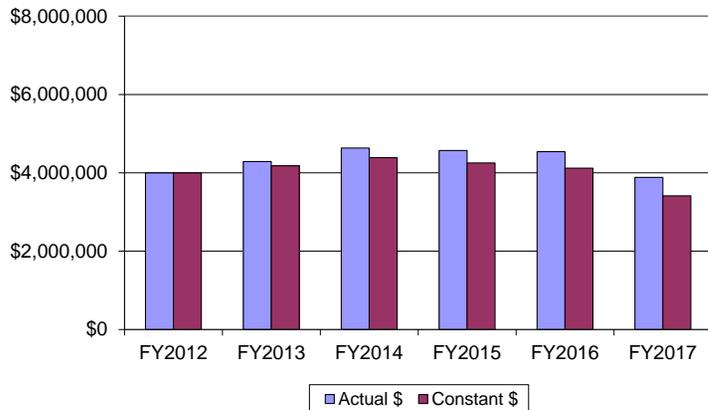
FY2015 through FY2017 - NTD Reports; FY2017 Revision 2, except FTEs - ECCTA Monthly Operating Statistics, Year-End Total

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

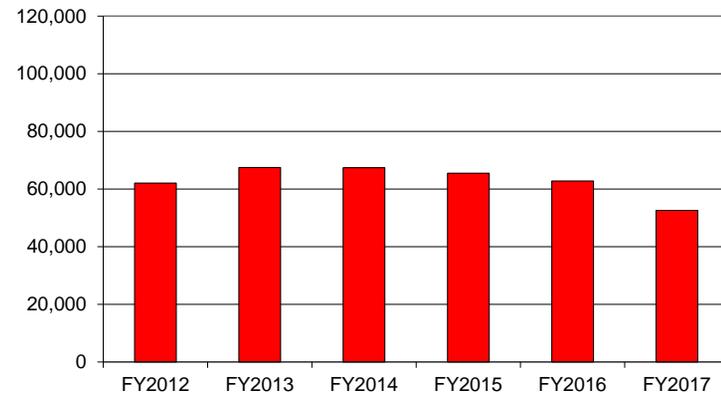
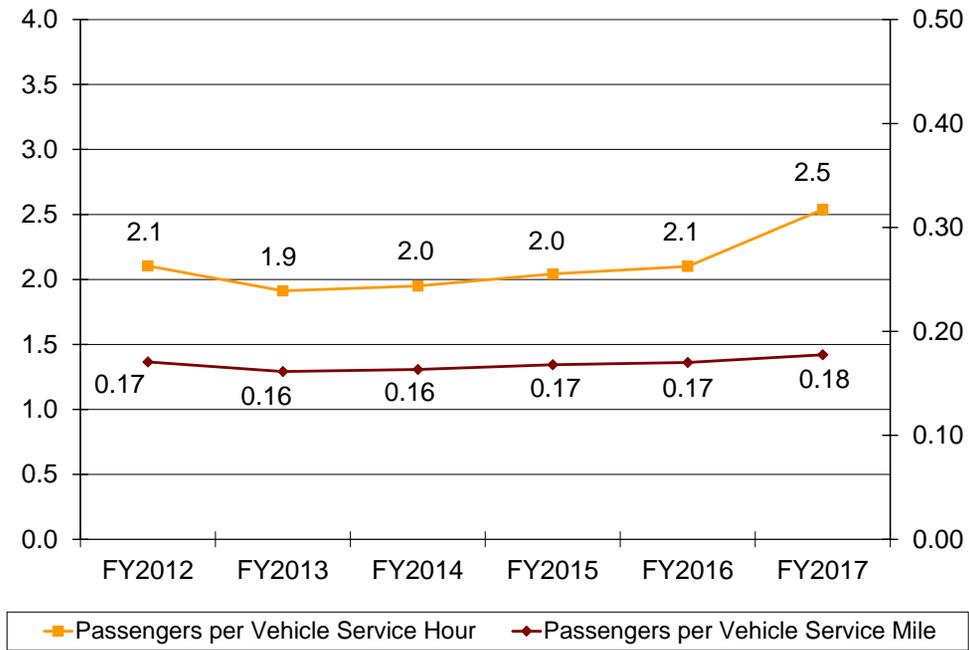
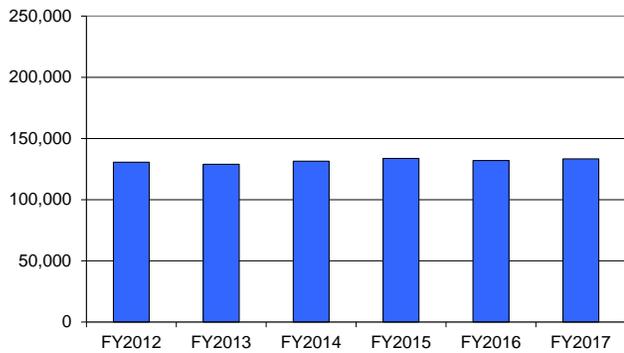


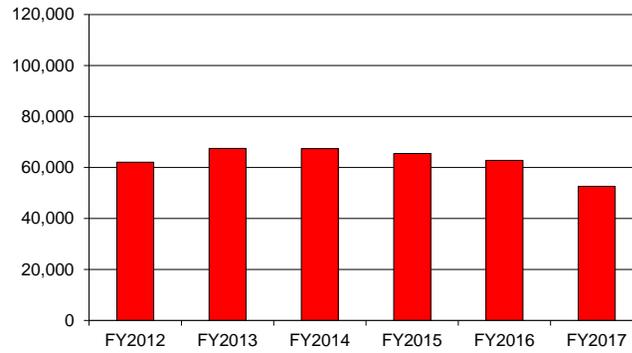
Exhibit 5.2: Passengers per Hour and per Mile – Paratransit



Unlinked Passengers



Vehicle Service Hours



Vehicle Service Miles

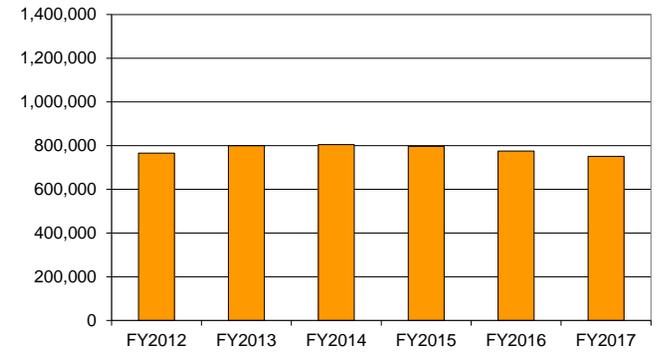
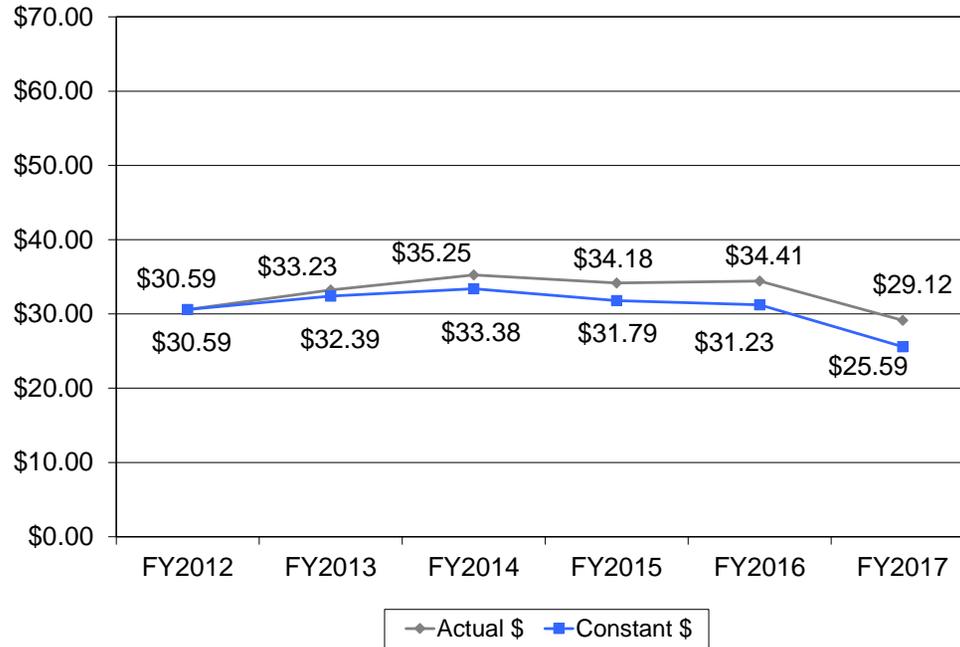
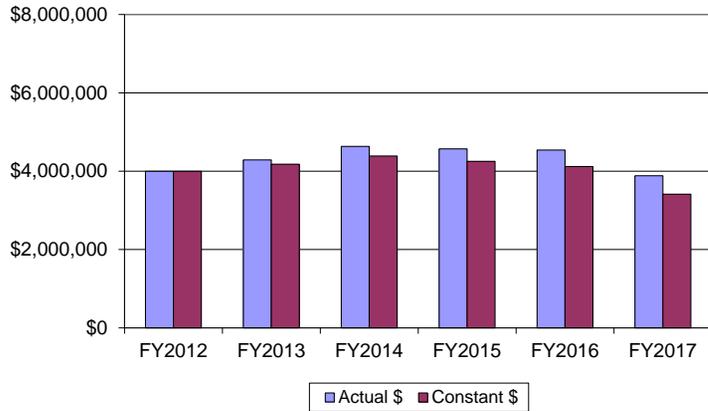


Exhibit 5.3: Operating Cost per Passenger – Paratransit



Operating Cost



Unlinked Passengers

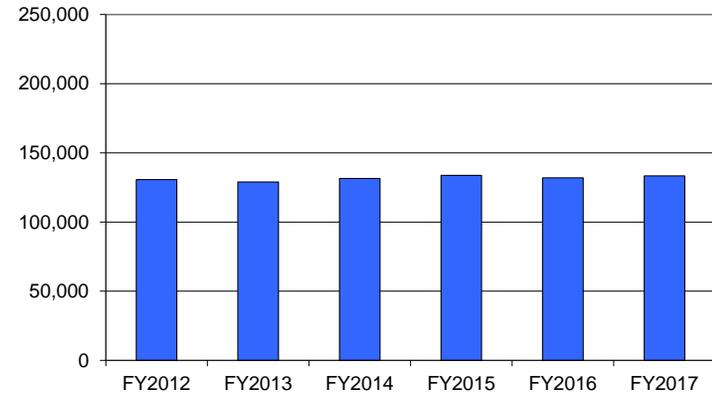
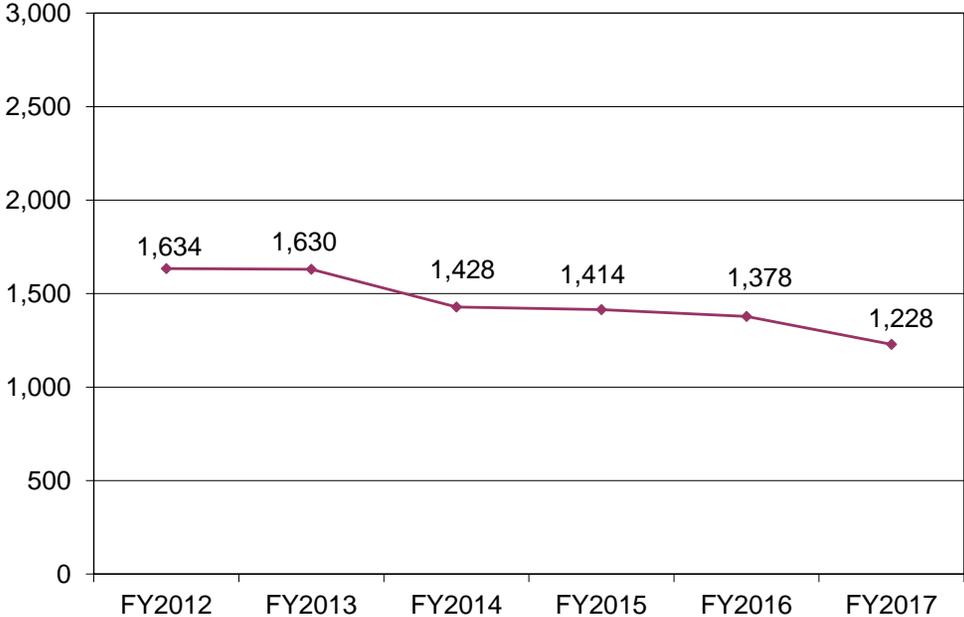
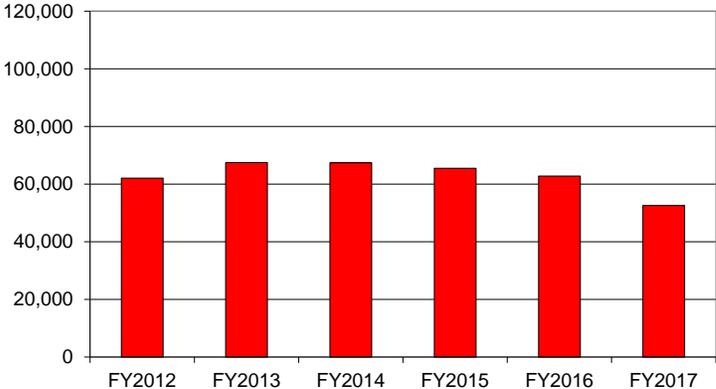


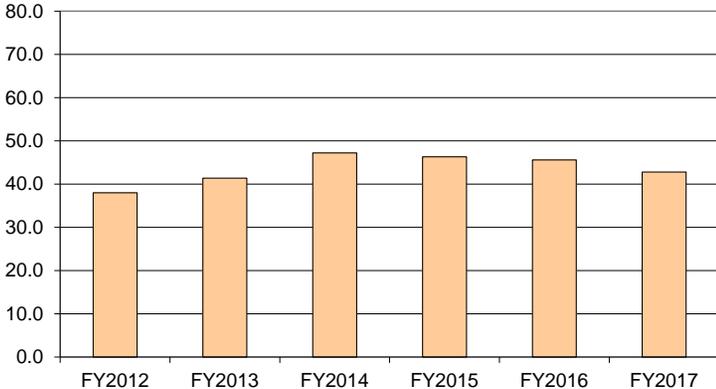
Exhibit 5.4: Vehicle Service Hours per FTE – Paratransit



Vehicle Service Hours



Full-time Equivalents



Paratransit Component Costs

The year-to-year changes in selected operating cost categories are presented in Exhibit 5.5, 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 5.6.

- In-house labor costs increased an average of 7.6 percent annually. Labor costs increased from about 4.5 percent to seven percent of total operating costs during the review period.
- Fringe benefit costs increased an annual average of 9.7 percent, however, this category only accounted for less than five percent of the total costs over the review period.
- Purchased transportation costs decreased by 2.4 percent on average per year between FY2012 and FY2017. During the review period, total annual costs decreased by 0.6 percent on average. This reflects the reduction in purchased transportation costs, which represents by far the largest portion of the total costs, at about 75 percent throughout the review period.
- The decrease in purchased transportation costs, especially in FY2017, is due to decreasing service hours, the result of Tri Delta's efforts to improve scheduling, thereby increasing operational and cost efficiency. Increased efficiency leads to fewer service hours, which in turn reduces the hourly charges for service paid to the contractor.
- Fuel and lubricants costs decreased an average of 5.4 percent annually, while the proportion of fuel costs declined from about 12 percent to eight percent of total operating costs over the six-year period.
- Costs for services, materials/supplies and other expenses increased more than 10 percent annually, while casualty/liability costs decreased almost eight percent per year. Each of these cost categories comprise less than five percent of the total annual operating costs.

* * * * *

The following is a brief summary of the paratransit component operating costs trend highlights between FY2012 and FY2017:

- Purchased transportation costs represented by far the largest portion of the total costs, averaging about 75 percent throughout the review period. Purchased transportation costs decreased by 2.4 percent per year on average.
- Labor costs increased an average of 7.6 percent per year, increasing that component cost from about 4.5 percent to seven percent of total operating costs.
- Fringe benefit costs increased an annual average of 9.7 percent, however, this category only accounted for less than five percent of the total costs over the review period.
- Fuel/lubricants costs decreased an average of 5.4 percent annually, with the proportion of fuel costs decreasing from about 12 percent to eight percent of total operating costs.
- Other component cost categories averaged increases of more than 10 percent per year, but each category comprises less than five percent of total operating costs.

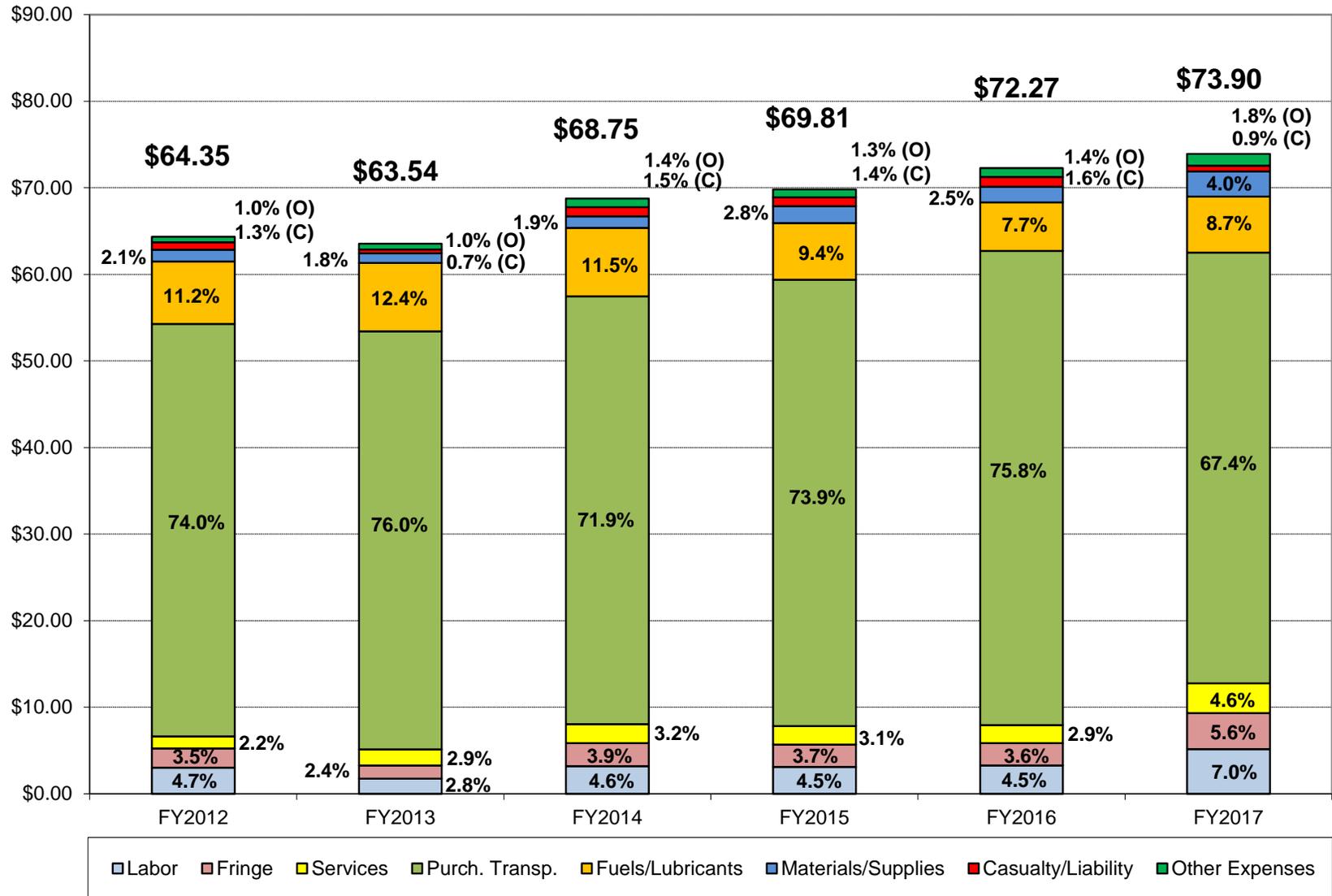
Exhibit 5.5: Component Costs Trends – Paratransit

	FY2012	FY2013	FY2014	FY2015	FY2016	FY2017	Av. Ann. Chg.
COST CATEGORIES							
Labor - (Salaries, Wages)	\$187,849	\$118,546	\$214,749	\$203,544	\$206,147	\$271,153	--
Annual Change	--	-36.9%	81.2%	-5.2%	1.3%	31.5%	7.6%
Fringe Benefits	\$137,955	\$101,586	\$180,225	\$168,438	\$162,133	\$218,964	--
Annual Change	--	-26.4%	77.4%	-6.5%	-3.7%	35.1%	9.7%
Services	\$86,587	\$125,762	\$147,659	\$139,709	\$130,082	\$179,971	--
Annual Change	--	45.2%	17.4%	-5.4%	-6.9%	38.4%	15.8%
Purchased Transportation	\$2,956,950	\$3,259,302	\$3,331,174	\$3,376,289	\$3,440,888	\$2,616,909	--
Annual Change	--	10.2%	2.2%	1.4%	1.9%	-23.9%	-2.4%
Fuels/Lubricants	\$447,349	\$531,624	\$532,683	\$428,435	\$351,799	\$338,475	--
Annual Change	--	18.8%	0.2%	-19.6%	-17.9%	-3.8%	-5.4%
Materials/Supplies	\$85,174	\$75,408	\$90,238	\$128,104	\$114,362	\$153,604	--
Annual Change	--	-11.5%	19.7%	42.0%	-10.7%	34.3%	12.5%
Casualty/Liability	\$52,779	\$30,779	\$71,153	\$66,215	\$71,381	\$35,020	--
Annual Change	--	-41.7%	131.2%	-6.9%	7.8%	-50.9%	-7.9%
Other Expenses (a)	\$40,614	\$44,040	\$66,433	\$60,870	\$62,915	\$71,043	--
Annual Change	--	8.4%	50.8%	-8.4%	3.4%	12.9%	11.8%
Total	\$3,995,257	\$4,287,047	\$4,634,314	\$4,571,604	\$4,539,707	\$3,885,139	--
Annual Change	--	7.3%	8.1%	-1.4%	-0.7%	-14.4%	-0.6%
OPERATING STATISTICS							
Vehicle Service Hours	62,085	67,475	67,413	65,485	62,820	52,570	--
Annual Change	--	8.7%	-0.1%	-2.9%	-4.1%	-16.3%	-3.3%

Sources: FY2012 through FY2014 - Prior Performance Audit Report; FY2015 through FY2017 - NTD Reports; 2017 Revision 2

(a) Includes tubes/tires, utilities, taxes, and miscellaneous expenses

Exhibit 5.6: Distribution of Component Costs – Paratransit
Operating Cost per Vehicle Service Hour



IV. COMPLIANCE WITH PUC REQUIREMENTS

An assessment of Tri Delta Transit'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 Tri Delta Transit's TDA-STA claim application.

The results from this review are detailed by individual requirement in Exhibit 6. Tri Delta Transit is in compliance with 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, labor contracts, reduced fares, revenue sharing, Welfare-to-Work 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"> • 2015: 12/23/15 • 2016: 12/16/16 • 2017: 01/14/18
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"> • No provision for excess vehicle staffing in Transit Services Agreement between ECCTA and First Transit, Inc. (July 1, 2016 – June 30, 2020).
PUC99314.5 (e)(1)(2)	<u>Part Time Drivers and Contracting</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"> • <u>Part Time Drivers</u> – No prohibition of part-time drivers in Transit Services Agreement between ECCTA and First Transit, Inc. (July 1, 2016 – June 30, 2020). • <u>Contracting</u> - ECCTA contracts with First Transit, Inc. to provide its fixed-route and paratransit services.
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 materials: <ul style="list-style-type: none"> • Tri Delta Bus Book • ECCTA website - http://trideltatransit.com/fares.aspx

Code Reference	Operator Compliance Requirements	Compliance Finding	Verification Information
PUC99155.1 (a)(1)(2)	<u>Welfare to Work Coordination</u> - Operators must coordinate with county welfare departments in order to ensure that transportation monies 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"> • Member, Contra Costa Transportation Authority Paratransit Coordinating Council (PCC) • PCC participates in the regional MTC Coordinated Human Service Transportation plan. Services provided by ECCTA are included in the plan's inventory.
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"> • Amended and Restated Clipper MOU, 08/21/15. • Valid revenue sharing agreement with Capital Corridor JPA

Code Reference	Operator Compliance Requirements	Compliance Finding	Verification Information
PUC99246(d)	<p><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</p>	In Compliance	<ul style="list-style-type: none"> • Passenger Comments: comment/complaint forms available on Tri Delta Transit web site, and customer service calls – recorded and followed up. • Regular On-Board Surveys: passenger surveys provide ridership data and feedback on customer perceptions of the effectiveness of services provided. Surveys conducted in 2012 and 2013. Also MTC surveys of all regional operators and surveys related to current system redesign study. • Public Outreach and Forums: travel training for seniors, staffing information booths at public events – customer feedback often received and fed into internal channels for customer service and planning purposes.

V. STATUS OF PRIOR AUDIT RECOMMENDATIONS

Tri Delta Transit's prior performance audit was completed in May 2015. 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 Tri Delta Transit's responses to the recommendations made in the prior performance audit, and whether Tri Delta Transit made reasonable progress toward their implementation. There was one recommendation made in Tri Delta Transit's prior audit. A summary of the recommendation and the actions taken by Tri Delta Transit 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.

Implementation is in progress for the one recommendation from the prior audit. During the prior two TDA audits, it was found that Tri Delta Transit's paratransit service was experiencing declines in passenger productivity and cost effectiveness. It was suggested that potential strategies for turning these trends around be explored. Tri Delta Transit has been implementing different strategies to address the issue, and during the current audit period, Tri Delta Transit took additional measures towards meeting this recommendation.

While the desired productivity and cost effectiveness results have not yet been fully achieved, both passenger productivity and cost effectiveness have improved over the current audit period. Tri Delta Transit is now participating in the county-wide Mobility Management Plan, which has allowed Tri Delta Transit to identify other available transportation services in the area to which it can redirect some paratransit requests it receives. Other efforts to improve productivity and cost effectiveness include scheduling software improvements and intensive training for contractor scheduling staff, resulting in increased productivity for paratransit services as indicated by improved passengers per hour during this audit period. Tri Delta Transit has experienced 3.0 passengers per revenue hour on many weekdays in the last year.

Tri Delta Transit is also in the process of implementing a TPI project whereby it is partnering with three different Transportation Network Companies (TNC), Uber, Lyft and United Taxi, to provide subsidized fares to current demand response registered users. This project will target non-ADA users of the paratransit service with the goal of providing an incentive to leave the demand response system and move to alternatives,

including fixed-route service. The project was anticipated to begin in December 2017. Tri Delta Transit anticipates many positive outcomes from this project, including a less cumbersome scheduling process, more direct and same-day service for the users, and reduced costs for the transit system, estimated at about half the current per passenger cost for paratransit service.

Exhibit 7: Status of Prior Audit Recommendations

Recommendation	Actions Taken	Evaluation
<p>1. Continue efforts to address the declining passenger productivity and cost effectiveness of the paratransit service.</p>	<p>Tri Delta is participating in the county-wide mobility management program although it has been slow to get off the ground. Participation has resulted in knowledge of other available transportation services in the area that can redirect some paratransit trips.</p> <p>Tri Delta continues scheduling software improvements and intensive training for contractor scheduling staff, which has resulted in increased productivity for paratransit services as indicated by improved passengers per hour.</p> <p>Tri Delta is in the process of implementing a TPI project, partnering with three different TNCs to provide subsidized fares to current DR registered users on Uber, Lyft and United Taxi. The fares will be targeted in a stepped fashion; the user pays the first \$4, Tri Delta pays the next \$16 and the user pays anything over that. Anticipated roll out of the project is mid-December. This project targets non-ADA users of the paratransit service with the goal of incentivizing them out of the demand response system and onto alternatives including fixed-route service. It is anticipated that it will produce a less cumbersome scheduling process, with more direct service and same day service for passengers. It is also anticipated to reduce costs, at about half of the current per passenger cost for paratransit service.</p>	<p>Implementation in Progress</p>

VI. FUNCTIONAL PERFORMANCE INDICATOR TRENDS

To further assess Tri Delta Transit'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 Tri Delta Transit or for which input data were maintained by Tri Delta Transit 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 input statistics for the indicators, along with their sources, are contained in Appendix A at the end of this report.

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, Tri Delta Transit's functional indicators relating to Management, Administration and Marketing have been included generally on a systemwide basis. Audit period performance is discussed below and presented in Exhibit 8.

- Administrative costs increased from 15 percent to 25 percent of total operating costs between FY2015 and FY2017. The increase was attributed to staff vacancies that were filled in late FY2016 and FY2017, and additional administrative costs included in the new operations contract that took effect in FY2017.
- Administrative costs rose from \$14.71 per vehicle service hour in FY2015 to \$25.68 in FY2017 (69 percent)
- The portion of administrative costs attributed to marketing activities decreased overall from about 15 percent in the first two years to nine percent in FY2017.
- Marketing expenditures ranged between \$0.16 and \$0.19 per passenger trip over the three years.
- The systemwide farebox recovery ratio declined from about 16 percent in FY2015 and FY2016 to 15 percent in the last year.

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The following is a brief summary of the systemwide functional trend highlights between FY2015 and FY2017:

- Administrative costs increased from 15 percent to 25 percent of total operating costs, and also increased by 69 percent from \$14.71 to \$25.68 per vehicle service hour over the three year period. The increases were attributed to the filling of vacant staff positions in late FY2016 and FY2017, and administrative costs included in the operations contract that took effect in FY2017.
- Marketing costs decreased overall compared to total administrative costs but increased from \$0.16 to \$0.19 per passenger trip.
- The systemwide farebox recovery ratio declined slightly from about 16 percent to 14.9 percent by FY2017.

Exhibit 8: Functional Performance Trends - Systemwide

FUNCTION/Indicator	Actual Performance		
	FY2015	FY2016	FY2017
MANAGEMENT, ADMINISTRATION & MARKETING			
Administrative Cost/Total Operating Cost	15.5%	15.8%	25.1%
<i>Annual Percent Change</i>	--	2.0%	59.2%
<i>Three Year Percent Change</i>	--	--	62.4%
Adminstrative Cost/Vehicle Service Hour	\$14.71	\$15.18	\$25.68
<i>Annual Percent Change</i>	--	3.2%	69.2%
<i>Three Year Percent Change</i>	--	--	74.6%
Marketing Cost/Total Administrative Cost	15.0%	14.3%	9.0%
<i>Annual Percent Change</i>	--	-5.0%	-36.7%
<i>Three Year Percent Change</i>	--	--	-39.9%
Marketing Cost/Unlinked Passenger Trip	\$0.16	\$0.17	\$0.19
<i>Annual Percent Change</i>	--	4.5%	11.6%
<i>Three Year Percent Change</i>	--	--	16.6%
Farebox Revenue/Operating Cost	16.1%	16.4%	14.9%
<i>Annual Percent Change</i>	--	1.6%	-8.9%
<i>Three Year Percent Change</i>	--	--	-7.5%

Bus Service

Tri Delta Transit'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
 - Operating costs per passenger mile increased from \$0.78 in the first year to \$0.96 in FY2017 (24.2 percent).
 - The bus service farebox recovery ratio declined overall from 17.9 percent in FY2015 to 16 percent in FY2017. At the same time, the TDA recovery ratio decreased from 24.9 percent to 22.3 percent. For this calculation, farebox revenue is augmented with local support and operating costs reflect various allowable exclusions.
 - About 85 percent of all vehicle miles traveled were in service, as were about 90 percent of all vehicle hours in all three years.
 - Passengers carried per service mile and per service hour both decreased by about 16 percent over the three years.

- Operations
 - Vehicle operations costs comprised about 63 percent of total operating costs in the first two years, but decreased to 50.3 percent in FY2017.
 - Vehicle operations costs per service hour also decreased in each year, from \$67.64 in FY2015 to \$56.51 by FY2017.
 - Schedule adherence declined from 92 percent in FY2015 and FY2016 to 82 percent in FY2017. This was attributed to construction on State Route 4 and a change in the on-time definition. Originally a late trip was recorded as 5 minutes after the scheduled departure time. That was changed to 10 minutes prior to this audit period, then changed back to 5-minutes in FY2017, causing the decrease in on-time performance.

- The rate of complaints increased over 170 percent between FY2016 and FY2017, but remained a very small number of complaints per trip.
 - The incidence of missed trips was also quite small, and decreased about 19 percent overall during the audit period.
- Maintenance
 - Total maintenance costs comprised about 20 percent of total operating costs throughout the period.
 - Vehicle maintenance costs per service mile increased overall from \$1.43 to \$1.54 (7.4 percent).
 - The vehicle spare ratio remained steady at 16.1 percent over the entire audit period.
 - The mean distance between major failures decreased overall by nearly 50 percent. Distance between all failures also decreased at about the same rate – about 48 percent over the period. This was attributed to the overall age of the Tri Delta Transit fixed-route fleet, as the fleet consists of older buses nearing the end of their useful service life.
 - Safety
 - The rate of preventable accidents per 100,000 vehicle miles showed positive results, improving by about 15 percent between FY2015 and FY2017.

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The following is a brief summary of the bus service functional trend highlights between FY2015 and FY2017:

- Service Planning results showed the operating cost per passenger mile increasing by 24.2 percent, farebox recovery decreasing from about 18 percent to 16 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) decreasing from about 25 percent to about 22 percent. Vehicle miles in service and vehicle hours in service were consistently at 85 percent and 90 percent, respectively, and passenger productivity declined by 16 percent.
- Operations results showed vehicle operations costs compared to total costs, and per service hour, decreasing overall, but especially in FY2017. There was a ten percent decrease in schedule adherence between FY2016 and FY2017, due to a change in the on-time measurement definition from within 10 minutes past scheduled departure to within five minutes in FY2017. There were very few incidences of complaints received and missed trips.
- Maintenance results showed maintenance costs steady at 20 percent of total costs but vehicle maintenance costs per service mile up by 7.4 percent. The vehicle spare ratio remained unchanged at 16.1 percent, and there was an almost 50 percent decrease in the mechanical failure rates, due to the overall advanced age of the Tri Delta Transit fixed-route fleet.
- Safety results showed the rate of preventable accidents about the same in FY2015 and FY2016, before a 15.5 percent improvement in FY2017.

Exhibit 9: Functional Performance Trends – Bus Service

FUNCTION/Indicator	Actual Performance		
	FY2015	FY2016	FY2017
SERVICE PLANNING			
Total Operating Cost/Passenger Mile	\$0.78	\$0.82	\$0.96
<i>Annual Percent Change</i>	--	6.1%	17.0%
<i>Three Year Percent Change</i>	--	--	24.2%
Farebox Recovery Ratio (Farebox Rev./Oper. Cost)	17.9%	18.2%	16.0%
<i>Annual Percent Change</i>	--	1.8%	-12.4%
<i>Three Year Percent Change</i>	--	--	-10.8%
TDA Recovery Ratio (a)	24.9%	24.4%	22.3%
<i>Annual Percent Change</i>	--	-2.2%	-8.4%
<i>Three Year Percent Change</i>	--	--	-10.4%
Vehicle Service Miles/Total Miles	84.9%	85.3%	85.3%
<i>Annual Percent Change</i>	--	0.4%	0.1%
<i>Three Year Percent Change</i>	--	--	0.5%
Vehicle Service Hours/Total Hours	89.2%	89.5%	89.5%
<i>Annual Percent Change</i>	--	0.4%	-0.1%
<i>Three Year Percent Change</i>	--	--	0.3%
Passengers/Vehicle Service Mile	1.4	1.3	1.2
<i>Annual Percent Change</i>	--	-8.5%	-8.6%
<i>Three Year Percent Change</i>	--	--	-16.3%
Passengers/Vehicle Service Hour	19.2	17.8	16.1
<i>Annual Percent Change</i>	--	-7.4%	-9.4%
<i>Three Year Percent Change</i>	--	--	-16.0%
OPERATIONS			
Vehicle Operations Cost/Total Operating Cost	63.6%	62.6%	50.3%
<i>Annual Percent Change</i>	--	-1.6%	-19.7%
<i>Three Year Percent Change</i>	--	--	-21.0%
Vehicle Operations Cost/Vehicle Service Hour	\$67.64	\$66.70	\$56.51
<i>Annual Percent Change</i>	--	-1.4%	-15.3%
<i>Three Year Percent Change</i>	--	--	-16.5%
On-Time Percentage	92.0%	92.0%	82.0%
<i>Annual Percent Change</i>	--	0.0%	-10.9%
<i>Three Year Percent Change</i>	--	--	-10.9%
Complaints/Unlinked Passenger Trip	0.009%	0.009%	0.025%
<i>Annual Percent Change</i>	--	1.3%	171.3%
<i>Three Year Percent Change</i>	--	--	174.7%
Missed Trips/Total Trips	0.002%	0.001%	0.002%
<i>Annual Percent Change</i>	--	-29.8%	15.6%
<i>Three Year Percent Change</i>	--	--	-18.9%

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

FUNCTION/Indicator	Actual Performance		
	FY2015	FY2016	FY2017
MAINTENANCE			
Vehicle + Non-Veh. Maint. Cost/Total Operating Cost	20.1%	20.8%	20.4%
<i>Annual Percent Change</i>	--	3.7%	-2.2%
<i>Three Year Percent Change</i>	--	--	1.4%
Vehicle Maintenance Cost/Vehicle Service Mile	\$1.43	\$1.47	\$1.54
<i>Annual Percent Change</i>	--	2.2%	5.1%
<i>Three Year Percent Change</i>	--	--	7.4%
Spare Vehicles/Total Vehicles	16.1%	16.1%	16.1%
<i>Annual Percent Change</i>	--	0.0%	0.0%
<i>Three Year Percent Change</i>	--	--	0.0%
Mean Distance between Major Failures (Miles)	40,691	27,263	20,399
<i>Annual Percent Change</i>	--	-33.0%	-25.2%
<i>Three Year Percent Change</i>	--	--	-49.9%
Mean Distance between All Failures (Miles)	29,278	19,041	15,202
<i>Annual Percent Change</i>	--	-35.0%	-20.2%
<i>Three Year Percent Change</i>	--	--	-48.1%
SAFETY			
Preventable Accidents/100,000 Vehicle Miles	1.04	1.04	0.88
<i>Annual Percent Change</i>	--	0.1%	-15.6%
<i>Three Year Percent Change</i>	--	--	-15.5%

Paratransit

Tri Delta Transit'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
 - Operating costs per passenger mile decreased from \$6.05 in FY2015 to \$4.86 in FY2017 (19.7 percent overall).
 - The farebox recovery ratio improved slightly from 10.1 percent in the first year to 10.6 percent in FY2017. At the same time, the TDA recovery ratio (farebox revenue augmented with local support and operating costs reflecting allowable exclusions) increased from 34.3 percent to 39.3 percent.
 - About 83 percent of all vehicle miles traveled were in service throughout the audit period, while the percent of vehicle hours in service decreased from 93.6 percent to 84.7 percent between FY2015 and FY2017.
 - Passengers carried per service mile increased was almost unchanged, while passengers carried per service hour increased from 2.0 to 2.5 passengers over the audit period.

- Operations
 - Vehicle operations costs as a share of total operating costs decreased from 84.7 percent to 75.4 percent during the audit period.
 - Vehicle operations costs per service hour decreased overall from \$59.10 to \$55.72 (5.7 percent).
 - Schedule adherence decreased during the audit period from 87 percent in FY2015 to 81 percent in FY2017.

- The rate of complaints increased, but remained less than one percent overall during the period.
 - There were almost no missed trips and no ADA trip denials during the audit period.
 - The trip cancellation rate remained almost unchanged during the period, with almost no late cancellations reported.
 - The passenger no-show rate increased slightly overall, from 5.1 percent in FY2015 to 6.3 percent of total ADA trips in FY2017.
- Maintenance
 - Total maintenance costs increased from 12.6 percent to 17.3 percent of total operating costs over the audit period.
 - Vehicle maintenance costs per service mile also increased overall from \$0.62 to \$0.81 (30 percent).
 - The vehicle spare ratio decreased from 27.6 percent in the first year to 18.8 percent in FY2017.
 - The mean distance between major failures and all failures were basically the same, showing significant improvement, especially in FY2017.
 - Safety
 - The rate of preventable accidents per 100,000 miles increased slightly by 6.4 percent over the audit period.

* * * * *

The following is a brief summary of the paratransit functional trend highlights between FY2015 and FY2017:

- Service Planning results showed operating cost per passenger mile decreasing by almost 20 percent overall, the farebox recovery ratio slightly increasing from 10.1 to 10.6 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) increasing from 34.3 to 39.3 percent. Vehicle miles in service was consistently in the 83 to 84 percent range, while vehicle hours in service decreased from about 94 percent to 85 percent. Passenger productivity was similar, with passengers per mile remaining relatively steady, while passengers per hour increased from 2.0 to 2.5 over the audit period.
- Operations results showed decreases in both vehicle operations costs per hour and vehicle costs compared to total costs. Schedule adherence decreased over the audit period from 87 to 81 percent. At the same time there was an overall increase in the rate of complaints, but it remained less than one percent. There were no ADA trip denials and almost no missed trips, the trip cancellation rate remained unchanged at about 20 percent, and late cancellations were almost nonexistent. Passenger no-shows increased from 5.1 percent to 6.3 percent of ADA trips during the audit period.
- Maintenance results showed total maintenance costs increasing from 12.6 to 17.3 percent of total costs, while vehicle maintenance costs per service mile increased overall from \$0.62 to \$0.81. The spare ratio decreased from 27.6 to 18.8 percent, and there was significant improvement in the mechanical failure rates, particularly in FY2017.
- Safety results showed the rate of preventable accidents per 100,000 miles increased by 6.4 percent overall.

Exhibit 10: Functional Performance Trends – Paratransit

FUNCTION/Indicator	Actual Performance		
	FY2015	FY2016	FY2017
SERVICE PLANNING			
Total Operating Cost/Passenger Mile	\$6.05	\$5.50	\$4.86
<i>Annual Percent Change</i>	--	-9.0%	-11.8%
<i>Three Year Percent Change</i>	--	--	-19.7%
Farebox Recovery Ratio (Farebox Rev./Oper. Cost)	10.1%	10.2%	10.6%
<i>Annual Percent Change</i>	--	0.2%	4.0%
<i>Three Year Percent Change</i>	--	--	4.2%
TDA Recovery Ratio (a)	34.3%	35.0%	39.3%
<i>Annual Percent Change</i>	--	2.0%	12.1%
<i>Three Year Percent Change</i>	--	--	14.4%
Vehicle Service Miles/Total Miles	83.5%	83.2%	83.7%
<i>Annual Percent Change</i>	--	-0.4%	0.7%
<i>Three Year Percent Change</i>	--	--	0.3%
Vehicle Service Hours/Total Hours	93.6%	91.7%	84.7%
<i>Annual Percent Change</i>	--	-2.1%	-7.6%
<i>Three Year Percent Change</i>	--	--	-9.5%
Passengers/Vehicle Service Mile	0.17	0.17	0.18
<i>Annual Percent Change</i>	--	1.3%	4.4%
<i>Three Year Percent Change</i>	--	--	5.8%
Passengers/Vehicle Service Hour	2.0	2.1	2.5
<i>Annual Percent Change</i>	--	2.8%	20.8%
<i>Three Year Percent Change</i>	--	--	24.2%
OPERATIONS			
Vehicle Operations Cost/Total Operating Cost	84.7%	85.4%	75.4%
<i>Annual Percent Change</i>	--	0.9%	-11.7%
<i>Three Year Percent Change</i>	--	--	-10.9%
Vehicle Operations Cost/Vehicle Service Hour	\$59.10	\$61.71	\$55.72
<i>Annual Percent Change</i>	--	4.4%	-9.7%
<i>Three Year Percent Change</i>	--	--	-5.7%
On-Time Percentage	87.0%	85.0%	81.0%
<i>Annual Percent Change</i>	--	-2.3%	-4.7%
<i>Three Year Percent Change</i>	--	--	-6.9%
Complaints/Unlinked Passenger Trips	0.10%	0.11%	0.38%
<i>Annual Percent Change</i>	--	11.0%	233.3%
<i>Three Year Percent Change</i>	--	--	269.8%
Missed Trips/Total Trips	0.000%	0.001%	0.000%
<i>Annual Percent Change</i>	--	--	-100.0%
<i>Three Year Percent Change</i>	--	--	--

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

FUNCTION/Indicator	Actual Performance		
	FY2015	FY2016	FY2017
OPERATIONS (continued)			
ADA Trip Denials/Total ADA Trips	0.0%	0.0%	0.0%
<i>Annual Percent Change</i>	--	--	--
<i>Three Year Percent Change</i>	--	--	--
Trip Cancellations/Total ADA Trips	20.6%	21.4%	20.6%
<i>Annual Percent Change</i>	--	3.8%	-3.8%
<i>Three Year Percent Change</i>	--	--	-0.1%
Late Trip Cancellations/Total ADA Trips	(b)	0.06%	0.03%
<i>Annual Percent Change</i>	--	--	-45.1%
<i>Three Year Percent Change</i>	--	--	--
No-Shows/Total ADA Trips	5.1%	5.8%	6.3%
<i>Annual Percent Change</i>	--	14.3%	8.6%
<i>Three Year Percent Change</i>	--	--	24.2%
MAINTENANCE			
Vehicle + Non-Veh. Maint. Cost/Total Operating Cost	12.6%	11.6%	17.3%
<i>Annual Percent Change</i>	--	-7.9%	49.2%
<i>Three Year Percent Change</i>	--	--	37.4%
Vehicle Maintenance Cost/Vehicle Service Mile	\$0.62	\$0.56	\$0.81
<i>Annual Percent Change</i>	--	-10.0%	44.0%
<i>Three Year Percent Change</i>	--	--	29.6%
Spare Vehicles/Total Vehicles	27.6%	34.4%	18.8%
<i>Annual Percent Change</i>	--	24.6%	-45.5%
<i>Three Year Percent Change</i>	--	--	-32.0%
Mean Dist. betw. Major Failures (Miles)	136,353	186,468	897,466
<i>Annual Percent Change</i>	--	36.8%	381.3%
<i>Three Year Percent Change</i>	--	--	558.2%
Mean Dist. betw. All Failures (Miles)	136,353	155,390	897,466
<i>Annual Percent Change</i>	--	14.0%	477.6%
<i>Three Year Percent Change</i>	--	--	558.2%
SAFETY			
Preventable Accidents/100,000 Vehicle Miles	0.63	0.64	0.67
<i>Annual Percent Change</i>	--	2.4%	3.9%
<i>Three Year Percent Change</i>	--	--	6.4%

(b) Not available

VII. CONCLUSIONS AND RECOMMENDATIONS

This report has presented the findings of the compliance audit portion of the performance audit of Tri Delta Transit's transit service. The primary focus was the three-year audit period of FY2015 through FY2017 (July 1, 2014 through June 30, 2017). 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 provides the findings from an overview of Tri Delta Transit's data collection activities to support the TDA indicators. Performance results from the previous three years have also been included as applicable to provide a longer perspective on performance.

Conclusions

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

- Data Collection – Tri Delta Transit is in compliance with the data collection and reporting requirements for all five TDA statistics. 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.

There was one anomaly noted for FY2017 paratransit statistic reporting. There was a 14.4 percent decrease in operating costs and a 16.3 percent decrease in vehicle service hours reported. However, vehicle service miles only experienced a 3.1 percent decrease that same year. Vehicle service miles and hours usually move together in tandem, without such a wide discrepancy in performance.

Tri Delta staff explained the decrease in service hours is the result of efforts to improve scheduling, thereby increasing operational and cost efficiency. Increased efficiency leads to fewer service hours, which in turn reduces the

hourly operating cost charges for service paid to the contractor. The increased scheduling efficiency has a greater effect on reducing service hours than service miles. This anomaly did not significantly impact Tri Delta's paratransit service provision, however, demonstrated by the fact that the paratransit average operating speed only increased by two miles an hour between FY2016 (12.3 mph) and FY2017 (14.3 mph).

- TDA Performance Trends

Tri Delta Transit'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 FY2012 through FY2017:

- There was an average annual increase in the operating cost per hour of 1.4 percent, which amounted to a 1.2 percent decrease in inflation adjusted dollars.
- The cost per passenger also was relatively flat, increasing on average by 1.1 percent per year, resulting in an average annual decrease of 1.5 percent in constant FY2012 dollars.
- Passenger productivity showed a slight improvement, with passengers per vehicle service hour increasing by 0.3 percent per year overall, and passengers per vehicle service mile increasing by 0.4 percent annually.
- Employee productivity increased an average 0.5 percent per year.

The following is a brief summary of the component operating costs trend highlights for the bus service between FY2012 and FY2017:

- Purchased transportation costs went up just over three percent per year, remaining the largest component cost area at about 50 percent of total costs. Purchased transportation costs increased in the last

year (FY2017) by over nine percent, more than double the rate of any previous year.

- In-house labor and fringe benefit costs both decreased about one percent overall, with each of these categories comprising about ten percent of total operating cost.
- Fuel/lubricant costs decreased over 13 percent annually, and their overall share of total operating costs decreased from 14 percent to seven percent during the review period. There was also a minor annual decrease in materials/supplies costs each year.
- There were moderate annual average increases in the remaining component cost categories (services, casualty/liability and other expenses), with each of these components contributing less than five percent of total operating costs.

Paratransit – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2012 through FY2017:

- Cost efficiency decreased, with an average annual increase in the operating cost per hour of 2.8 percent. This amounted to a slight average annual increase of 0.2 percent in inflation adjusted dollars.
- The operating cost per passenger decreased an average of one percent per year, or 3.5 percent annually when expressed as normalized FY2012 dollars.
- Passenger productivity improved, with passengers per hour increasing 3.8 percent per year on average, while passengers per mile experienced a more modest 0.8 percent annual increase.
- Employee productivity decreased an annual average of 5.5 percent.

The following is a brief summary of the component operating costs trend highlights for paratransit between FY2012 and FY2017:

- Purchased transportation costs represented by far the largest portion of the total costs, averaging about 75 percent throughout the review

period. Purchased transportation costs decreased by 2.4 percent per year on average.

- Labor costs increased an average of 7.6 percent per year, increasing that component cost from about 4.5 percent to seven percent of total operating costs.
 - Fringe benefit costs increased an annual average of 9.7 percent, however, this category only accounted for less than five percent of the total costs over the review period.
 - Fuel/lubricants costs decreased an average of 5.4 percent annually, with the proportion of fuel costs decreasing from about 12 percent to eight percent of total operating costs.
 - Other component cost categories averaged increases of more than 10 percent per year, but each category comprises less than five percent of total operating costs.
- PUC Compliance – Tri Delta Transit is in compliance with 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, labor contracts, reduced fares, revenue sharing, Welfare-to-Work and evaluating passenger needs.
 - Status of Prior Audit Recommendations – Implementation is in progress for the one recommendation from the prior audit. During the prior two TDA audits, it was found that Tri Delta Transit’s paratransit service was experiencing declines in passenger productivity and cost effectiveness. It was suggested that potential strategies for turning these trends around be explored. Tri Delta Transit has been implementing different strategies to address the issue, and during the current audit period, Tri Delta Transit took additional measures towards meeting this recommendation.

As a result of Tri Delta Transit’s efforts, both passenger productivity and cost effectiveness have improved over the current audit period. Tri Delta Transit is continuing its efforts to improve passenger productivity and cost per passenger with a new pilot project partnering with Transportation

Network Companies (TNC), (such as Uber, Lyft, etc.), to reduce demand for traditional paratransit services.

- Functional Performance Indicator Trends

To further assess Tri Delta Transit'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 FY2015 and FY2017:

- Administrative costs increased from 15 percent to 25 percent of total operating costs, and also increased by 69 percent from \$14.71 to \$25.68 per vehicle service hour over the three year period. The increases were attributed to the filling of vacant staff positions in late FY2016 and FY2017, and administrative costs included in the operations contract that took effect in FY2017.
- Marketing costs decreased overall compared to total administrative costs but increased from \$0.16 to \$0.19 per passenger trip.
- The systemwide farebox recovery ratio declined slightly from about 16 percent to 14.9 percent by FY2017.

Bus Service – The following is a brief summary of the bus service functional trend highlights between FY2015 and FY2017:

- Service Planning results showed the operating cost per passenger mile increasing by 24.2 percent, farebox recovery decreasing from about 18 percent to about 10 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) decreasing from about 25 percent to about 15 percent. Vehicle miles in service and vehicle hours in service were consistently at 85 percent and 90 percent, respectively, and passenger productivity declined by 16 percent.

- Operations results showed vehicle operations costs compared to total costs, and per service hour, decreasing overall, but especially in FY2017. There was a ten percent decrease in schedule adherence between FY2016 and FY2017, due to a change in the on-time measurement definition from within 10 minutes past scheduled departure to within five minutes in FY2017. There were very few incidences of complaints received and missed trips.
- Maintenance results showed maintenance costs steady at 20 percent of total costs but vehicle maintenance costs per service mile up by 7.4 percent. The vehicle spare ratio remained unchanged at 16.1 percent, and an almost 50 percent decrease in the mechanical failure rates, due to the overall advanced age of the Tri Delta Transit fixed-route fleet.
- Safety results showed the rate of preventable accidents about the same in FY2015 and FY2016, before a 15.5 percent improvement in FY2017.

Paratransit – The following is a brief summary of the paratransit functional trend highlights between FY2015 and FY2017:

- Service Planning results showed operating cost per passenger mile decreasing by almost 20 percent overall, the farebox recovery ratio slightly increasing from 10.1 to 10.6 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) increasing from 34.3 to 39.3 percent. Vehicle miles in service was consistently in the 83 to 84 percent range, while vehicle hours in service decreased from about 94 percent to 85 percent. Passenger productivity was similar, with passengers per mile remaining relatively steady, while passengers per hour increased from 2.0 to 2.5 over the audit period.
- Operations results showed decreases in both vehicle operations costs per hour and vehicle costs compared to total costs. Schedule adherence decreased over the audit period from 87 to 81 percent. At the same time there was an overall increase in the rate of complaints, but it remained less than one percent. There were no ADA trip denials and almost no missed trips, the trip cancellation rate

remained unchanged at about 20 percent, and late cancellations were almost nonexistent. Passenger no-shows increased from 5.1 percent to 6.3 percent of ADA trips during the audit period.

- Maintenance results showed total maintenance costs increasing from 12.6 to 17.3 percent of total costs, while vehicle maintenance costs per service mile increased overall from \$0.62 to \$0.81. The spare ratio decreased from 27.6 to 18.8 percent, and there was significant improvement in the mechanical failure rates, particularly in FY2017.
- Safety results showed the rate of preventable accidents per 100,000 miles increased by 6.4 percent overall.

Recommendations

No recommendations are suggested for Tri Delta Transit based on the results of this triennial performance audit.

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

Functional Performance Inputs - Systemwide (All Modes)

Data Item	FY2015	FY2016	FY2017	Source
Total Operating Costs	\$20,107,067	\$19,955,540	\$20,235,509	NTD F-40
Administrative Costs	\$3,111,198	\$3,150,451	\$5,084,515	NTD F-40
Vehicle Service Hours	211,548	207,512	197,967	NTD S-10 MB + DR
Marketing Costs	\$467,688	\$449,883	\$459,553	ECCTA Staff (Gen. Ledger)
Unlinked Passenger Trips	2,939,797	2,706,781	2,478,391	NTD S-10 MB + DR
Farebox Revenue (All Modes)	\$3,246,690	\$3,273,431	\$3,023,214	NTD F-10

Functional Performance Inputs – Bus Service

Data Item	FY2015	FY2016	FY2017	Source
Vehicle Service Miles	2,038,867	2,045,318	2,036,876	NTD S-10 MB
Total Vehicle Miles	2,400,781	2,399,133	2,386,708	NTD S-10 MB
Vehicle Service Hours	146,063	144,692	145,397	NTD S-10 MB
Total Vehicle Hours	163,817	161,594	162,503	NTD S-10 MB
Unlinked Passenger Trips	2,806,028	2,574,864	2,344,985	NTD S-10 MB
Farebox Revenue	\$2,782,688	\$2,811,588	\$2,612,164	NTD F-10
Total Operating Costs	\$15,535,463	\$15,415,833	\$16,350,370	NTD F-30 MB
Passenger Miles	19,997,041	18,695,870	16,944,717	NTD S-10 MB
Vehicle Operations Costs	\$9,880,392	\$9,651,370	\$8,216,693	NTD F-30 MB
Local Support (TDA Article 4 services only) (a)	\$592,034	\$562,934	\$639,235	ECCTA Staff (Gen. Ledger)
TDA Oper. Cost Exclusions - PUC 99247 (b)	\$0	\$0	\$0	ECCTA TDA Claim
TDA Oper. Cost Exclusions - PUC 99268.17 (c)	\$2,006,960	\$1,584,446	\$1,800,999	ECCTA Staff (Gen. Ledger)
Trips On-Time	92%	92%	82%	ECCTA Key Perf. Indicators by Service
Total Trips	2,806,028	2,574,864	2,344,985	ECCTA Key Perf. Indicators by Service
Complaints	254	236	583	ECCTA Operations Report
Missed Trips	59	38	40	ECCTA Operations Report
Vehicle Maintenance Costs	\$2,924,638	\$2,999,461	\$3,138,759	NTD F-30 MB
Non-Vehicle Maintenance Costs	\$198,408	\$214,123	\$195,316	NTD F-30 DR
Spare Vehicles (Total less Maximum Service)	10	10	10	NTD S-10 MB
Total Vehicles	62	62	62	NTD S-10 MB
Revenue Vehicle Mechanical System Failures - Total	82	126	157	NTD R-20
Revenue Vehicle Mechanical System Failures - Major	59	88	117	NTD R-20
Preventable Accidents	25	25	21	ECCTA Operations Report

(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)

Functional Performance Inputs – Paratransit

Data Item	FY2015	FY2016	FY2017	Source
Vehicle Service Miles	796,820	775,428	751,328	NTD S-10 DR
Total Vehicle Miles	954,469	932,338	897,466	NTD S-10 DR
Vehicle Service Hours	65,485	62,820	52,570	NTD S-10 DR
Total Vehicle Hours	69,932	68,513	62,067	NTD S-10 DR
Unlinked Passenger Trips	133,769	131,917	133,406	NTD S-10 DR
Farebox Revenue	\$464,002	\$461,843	\$411,050	NTD F-10
Total Operating Costs	\$4,571,604	\$4,539,707	\$3,885,139	NTD F-30 DR
Passenger Miles	756,200	825,079	800,161	NTD S-10 DR
Vehicle Operations Costs	\$3,870,078	\$3,876,919	\$2,929,254	NTD F-30 DR
Local Support (TDA Article 4 services only) (a)	\$936,224	\$980,538	\$968,310	ECCTA Staff (Gen. Ledger)
TDA Oper. Cost Exclusions - PUC 99247 (b)	\$0	\$0	\$0	ECCTA TDA Claim
TDA Oper. Cost Exclusions - PUC 99268.17 (c)	\$494,650	\$423,180	\$373,475	ECCTA Staff (Gen. Ledger) ECCTA Key Perf. Indicators by Service
Trips On-Time	87%	85%	81%	ECCTA Key Perf. Indicators by Service
Total Trips	133,769	131,917	133,406	ECCTA Key Perf. Indicators by Service
Complaints	138	151	509	ECCTA Operations Report
Missed Trips	0	1	0	ECCTA Operations Report
Total ADA Trips	107,015	105,534	106,725	ECCTA Staff
ADA Trip Denials	0	0	0	ECCTA Operations Report
Trip Cancellations	22,087	22,615	22,000	ECCTA Trapeze System
Late Trip Cancellations	(d)	63	35	ECCTA Transit Miner
No Shows	5,438	6,132	6,737	ECCTA Staff
Vehicle Maintenance Costs	\$496,954	\$435,312	\$607,169	NTD F-30 DR
Non-Vehicle Maintenance Costs	\$77,832	\$90,119	\$63,803	NTD F-30 DR
Spare Vehicles (Total less Maximum Service)	8	11	6	NTD S-10 DR
Total Vehicles	29	32	32	NTD S-10 DR
Revenue Vehicle Mechanical System Failures - Total	7	6	1	NTD R-20
Revenue Vehicle Mechanical System Failures - Major	7	5	0	NTD R-20
Preventable Accidents	6	6	6	ECCTA Operations Report

(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)

(d) Not available