Triennial Performance Audit

of the

Central Contra Costa Transit Authority (CCCTA)

Fiscal Years 2013/14, 2014/15 and 2015/16

FINAL AUDIT REPORT

prepared for the

METROPOLITAN TRANSPORTATION COMMISSION

by

Pierlott & Associates, LLC
Management Consulting

May 2017

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 Central Contra Costa Transit Authority (CCCTA). 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 CCCTA, bus and paratransit, are the focus of this performance audit. The audit period is Fiscal Years 2014 through 2016 (from July 1, 2013 through June 30, 2016).

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 CCCTA'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 CCCTA's performance based on the results of the previous sections.

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

Results and Conclusions

Review of TDA Data Collection and Reporting Methods - The purpose of this review is to determine if CCCTA 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 CCCTA 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.

However, an exception relates to the reported FY2016 service and hours and miles for paratransit (which correspond to revenue vehicle hours and miles). They are trending in opposite directions (hours increasing 3.5 percent over FY2015, but miles decreasing 9.8 percent). This is an unexpected situation, as these statistics normally trend in the same direction. In explanation, CCCTA staff initially suggested that the contract operator had temporarily changed fuel providers (between May 2015 and July 2016) to one located much closer to the CCCTA facility. This could have significantly decreased the total vehicle miles traveled, but would not be expected to have much impact on vehicle service miles per se. A continuing investigation by CCCTA and contractor staff has not yet yielded any further definitive explanation. This raises some concerns about data accuracy, which if left unchecked, could result in further discrepancies in the future.

Performance Indicators and Trends – CCCTA'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 FY2011 through FY2016:

  – There was an average annual increase in the operating cost per hour of 1.5 percent, which amounted to a one percent decrease in inflation adjusted dollars.

  – The cost per passenger increased on average by 1.1 percent per year, which amounted to an average annual decrease of 1.4 percent in constant FY2011 dollars.

  – Passenger productivity showed somewhat positive trends, with passengers per vehicle service hour increasing by 0.5 percent per year overall, and passengers per vehicle service mile increasing by 0.6 percent annually.

  – Employee productivity decreased 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 FY2011 and FY2016:

  – Labor costs went up by nearly three percent per year, remaining the largest component cost area at nearly 50 percent of total costs. Labor costs increased in the last year (FY2016) by more than double the rate of any previous year. This reflected stipulations in a new labor agreement.

  – Fringe benefit costs went up by more than six percent per year, significantly higher than labor costs, and increased their share from 27 to 32 percent of total costs during the period. This reflected externally mandated increases in medical and pension contribution costs.

- There were moderate changes overall in most other component costs, with a substantial net decrease in fuel/lubricants costs. Casualty/liability costs increased by 12 percent annually on average, but varied from year to year and only contributed about two percent of total costs.

- Paratransit – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2011 through FY2016:

  - For cost efficiency, there was an average annual increase in the operating cost per hour of 2.1 percent; however, this amounted to an annual decrease of 0.4 percent in inflation adjusted dollars.

  - The operating cost per passenger achieved a slight annual decrease (0.1 percent on average) when normalized in FY2011 dollars.

  - Passenger productivity showed mixed results, with passengers per hour decreasing by 0.4 percent per year on average, but passengers per mile increasing by 1.9 percent annually.

  - The net result for employee productivity was an average annual decrease of 1.9 percent.

  The following is a brief summary of the component operating costs trend highlights for paratransit between FY2011 and FY2016:

  - Purchased transportation costs represented by far the largest portion of the total costs, at about 96 percent throughout the review period. They increased by about one percent per year on average despite a 6.2 percent increase in FY2016.

  - There was a 22 percent average annual decrease in materials/supplies; however, this category only accounted for about 0.1 percent of the total costs.

  - Other component cost categories changed by three percent or less per year on average, with no casualty/liability expenses reported except in FY2011.

PUC Compliance – CCCTA 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 – There were no recommendations made in CCCTA's prior performance audit.

Functional Performance Indicator Trends - To further assess CCCTA'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 FY2014 and FY2016:
  - Administrative costs increased moderately to 25 percent of total operating costs, and also increased by ten percent to $27.46 per vehicle service hour in FY2016.
  - Marketing costs decreased overall compared to total administrative costs but remained at about $0.04 per passenger trip.
  - The systemwide farebox recovery ratio declined from nearly 16 percent to 14.8 percent by FY2016.
- Bus Service – The following is a brief summary of the bus service functional trend highlights between FY2014 and FY2016:
  - Service Planning results showed the operating cost per passenger mile decreasing by 5.3 percent, farebox recovery remaining at about 16 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) remaining at about 31 percent.

Consistently 76 percent or more vehicle miles and hours were in service, and passenger productivity improved by eight percent.

- Operations results showed vehicle operations costs per service hour decreasing steadily and reduced compared to total costs as well. Operator absence data were only available for FY2016, when scheduled and unscheduled absences comprised five and seven percent of total operator time, respectively. Actual operator pay to platform hours remained at just above 150 percent. There was some improvement in schedule adherence to 86 percent, a substantial decrease in complaints received, and very few missed trips.

- Maintenance results showed maintenance costs steady at 17 percent of total costs but vehicle maintenance costs per service mile up by 4.1 percent, mechanic pay hours up slightly compared to service hours, general reductions in maintenance employee scheduled and unscheduled absence rates, the vehicle spare ratio reduced from 26 to 23 percent, and noticeable improvement in the mechanical failure rates.

- Safety results showed the rate of preventable accidents about the same in FY2014 and FY2016, and ten percent decreases in the casualty/liability cost rates.

- Paratransit – The following is a brief summary of the paratransit functional trend highlights between FY2014 and FY2016:

  - Service Planning results showed operating cost per passenger mile increasing by 6.6 percent overall, the farebox recovery ratio decreasing from 11.9 to 10.2 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) remaining between 36 and 38 percent. Consistently 80 percent or more vehicle miles and hours were in service, and passenger productivity was relatively steady.

  - Operations results showed steady vehicle operations costs per hour with a small increase compared to total costs. Schedule adherence decreased over the audit period from 86 to 81 percent. At the same time there was a significant overall decrease in the rate of

complaints. There were no ADA trip denials, the trip cancellation rate improved, and passenger no-shows increased but remained below one percent of ADA trips.

- Maintenance results showed total maintenance costs remaining at 8.5 percent of total costs, while vehicle maintenance costs per service mile increased overall from $0.36 to $0.41. The spare ratio increased from about 13 to 20 percent, and there was significant improvement in the mechanical failure rates.

- Safety results showed the preventable accident rate improved overall, despite less positive results in the interim year.

Recommendations

1. DEVELOP AND IMPLEMENT STRATEGIES TO IMPROVE SCHEDULE ADHERENCE ON THE PARATRANSIT SERVICE.
[Reference Section: VI. Functional Performance Indicator Trends]

It was found that over the audit period, CCCTA's paratransit schedule adherence was relatively low, and decreased steadily from year to year. The County Connection LINK service's on-time performance worsened from 86 percent in FY2014 to 84 percent in FY2015 and 81 percent in FY2016. In order to provide more reliable service, CCCTA and its contractor should expand efforts toward reversing this trend. These efforts should include additional monitoring activities to identify the causes, and a plan for addressing the circumstances found that are hindering LINK's on-time performance.

This page left intentionally blank.

Table of Contents

Page No.

Executive Summary i
Performance Audit and Report Organization i
Results and Conclusions ii
Recommendations vii

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 13
Bus Service Performance Trends 14
Bus Service Component Costs 22
Paratransit Performance Trends 26
Paratransit Component Costs 34
IV. Compliance with PUC Requirements 38
V. Status of Prior Audit Recommendations 41
VI. Functional Performance Indicator Trends 42
Systemwide 43
Bus Service 46
Paratransit 52
VII. Conclusions and Recommendations 57

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 11
Exhibit 3.3: TDA Statistics – Paratransit 12
Exhibit 4: TDA Indicator Performance - Bus Service 17
Exhibit 4.1: Operating Cost per Vehicle Service Hour - Bus Service 18
Exhibit 4.2: Passengers per Hour and per Mile – Bus Service 19
Exhibit 4.3: Operating Cost per Passenger – Bus Service 20
Exhibit 4.4: Vehicle Service Hours per FTE – Bus Service 21
Exhibit 4.5: Component Cost Trends – Bus Service 24
Exhibit 4.6: Distribution of Component Costs – Bus Service 25
Exhibit 5: TDA Indicator Performance – Paratransit 29
Exhibit 5.1: Operating Cost per Vehicle Service Hour – Paratransit 30
Exhibit 5.2: Passengers per Hour and per Mile – Paratransit 31
Exhibit 5.3: Operating Cost per Passenger – Paratransit 32
Exhibit 5.4: Vehicle Service Hours per FTE – Paratransit 33
Exhibit 5.5: Component Costs Trends – Paratransit 36
Exhibit 5.6: Distribution of Component Costs – Paratransit 37
Exhibit 6: Compliance with State PUC Requirements 39
Exhibit 7: Functional Performance Trends - Systemwide 45
Exhibit 8: Functional Performance Trends – Bus Service 49
Exhibit 9: Functional Performance Trends – Paratransit 55

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 Central Contra Costa Transit Authority (CCCTA). The two modes operated by CCCTA, bus and paratransit, are the focus of this performance audit. The audit period is Fiscal Years 2014 through 2016 (from July 1, 2013 through June 30, 2016).

An overview of CCCTA 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 CCCTA was conducted for MTC in accordance with its established procedures for performance audits. The audit consisted of two discrete steps:

1. Compliance Audit - Activities in this phase included:
    - An overview of data collection and reporting procedures for the five TDA performance indicators;
    - Analysis of the TDA indicators; and
    - A review of compliance with selected state Public Utilities Code (PUC) requirements.

2. Functional Review - Activities in this phase included:
    - A review of actions to implement the recommendations from the prior performance audit;
    - Calculation and evaluation of functional performance indicator trends; and
    - Findings, conclusions, and the formulation of recommendations.

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

Exhibit 1: System Overview

Location Headquarters: 2477 Arnold Industrial Way, Concord CA 94520

Establishment CCCTA was established in 1980 as a joint powers agency to coordinate, integrate and expand transit service within central Contra Costa County. There are eleven jurisdictions comprising the joint powers agency: the cities of Clayton, Concord, Lafayette, Martinez, Orinda, Pleasant Hill, San Ramon and Walnut Creek; the towns of Danville and Moraga; and the unincorporated areas of central Contra Costa County.

Board CCCTA is governed by an eleven-member Board of Directors consisting of one member from each of the incorporated member cities and towns, and one member representing the unincorporated areas of the County. The Board is organized into three standing committees: Administration and Finance; Marketing, Planning and Legislation; and Operations and Scheduling. The General Manager reports to the Board of Directors, and is responsible for the overall operation of the Authority, carrying out the policies of the Board and implementing the Disadvantaged Business Enterprise (DBE) program.

Facilities CCCTA's administration, operations and maintenance functions all are housed at the Concord facility located at 2477 Arnold Industrial Way.

Service Data CCCTA provides fixed-route bus service under the name "The County Connection," with an active bus fleet of 121 vehicles. The County Connection service consists of local weekday routes, express routes, weekend only routes, and a number of "select service" routes oriented to area schools. Most routes provide feeder service to BART and other rail stations in the County. There are also contract services provided for several business parks and employers, a free downtown shuttle service subsidized by the city of Walnut Creek, and an ACE park and ride train shuttle. All of these services are open to the general public.

Service is provided weekdays from approximately 5:30 a.m. until 11:00 p.m. On weekends, most service operates between 7:00 a.m. and 9:00 p.m. There is no service on major holidays. Headways on most routes range between 30 and 60 minutes during peak commute periods, and 60 to 90 minutes at other times.

The County Connection base fare is $2.00 ($2.25 for express trips). Children under age six ride free but must be accompanied by an adult. Discounted commuter cards offer 20 regular rides and BART transfers for $40. Discounted 12-ride and monthly passes are available for local and express services. Seniors (age 65 and older) and riders with disabilities pay

$1.00. There are also 20-ride passes available for reduced fare riders. Transfers within CCCTA are free; transfers from BART are $1.00 for regular fare riders and $0.50 for reduced fare riders.

CCCTA's ADA paratransit service, known as County Connection LINK, is an advance reservation dial-a-ride service. LINK service is provided under contract by First Transit, Inc. Hours of operation and service area reflect the hours during which the County Connection fixed route services operate. These hours vary depending upon the particular area. Weekend service covers only limited areas, restricted to the ¾ mile boundary around the fixed-route operations as defined in the Americans with Disabilities Act (ADA). In addition, LINK service operates on behalf of BART weekdays from 4:00 to 6:00 a.m. and 10:00 p.m. to midnight; Saturdays from 6:00 to 8:30 a.m. and 7:30 p.m. to midnight, and Sundays 6:30 a.m. to midnight. Phone reservations can be made up to two days in advance. Same day requests are accepted on a space-available basis, and standing reservations can be accommodated on a limited basis. The one-way fare is $4.00.

Recent Changes

CCCTA last raised its fares in 2009. CCCTA has implemented some minor fixed-route service changes, but nothing major since the service restructuring of 2009. Paratransit service changes follow the changes in the fixed-route system.

Since the last TDA audit, CCCTA has implemented real time passenger information systems, a new CAD/AVL system for dispatch and WiFi on all the buses.

Four new electric trolleys were purchased to replace those operating on Route #4 in Walnut Creek, and 33 clean diesel buses were purchased to replace equipment at the end of its useful life.

Two routes were made free through fare subsidy contributions from the Shadelands Business Park and the City of Walnut Creek.

In November of 2015 the Clipper regional fare system was installed on County Connection vehicles.

Planned Changes

CCCTA's short term operating plans include:

- review community development plans;
- implement bus stop access improvement projects in coordination with the cities;
- address specific route on-time performance;
- plan for demand increases at Bishop Ranch;
- evaluate the impact of Clipper implementation on fares and consider elimination of paper passes and transfers; and
- implement updated paratransit scheduling technology.

CCCTA's planned capital projects include replacement of 31 fixed-route buses in the next year, including the purchase of 4 more electric buses.

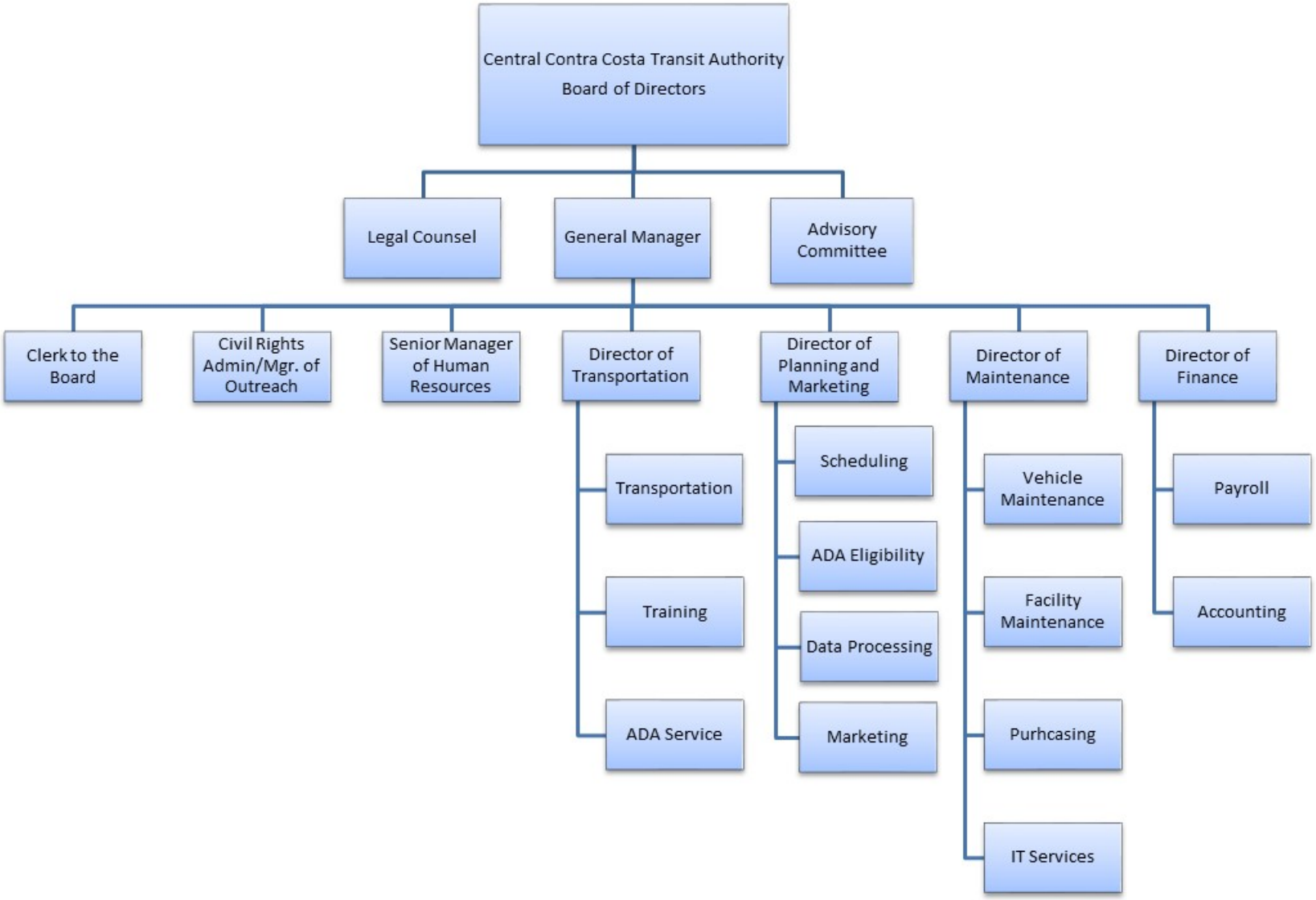
CCCTA also is planning for the installation of solar panels at the Arnold Way facility, and reconfiguration of the parking lot to accommodate more employee vehicles and public transit service.

Staff

CCCTA staff is organized into four divisions, each headed by a Director, along with certain separate departments. The FY2017 Budget document lists a total of 267 employees. The breakdown by functional area was as follows:

Transportation	194
Maintenance	40
General Administration	31
Paratransit (Non-Contractor)	2
TOTAL	267

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 CCCTA is compliance with the data collection and reporting requirements necessary to calculate the TDA performance indicators. The review is limited to the data items needed to calculate the indicators:

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

The TDA indicator analysis is based on these operating and financial statistics in the National Transit Database (NTD) reports submitted annually to the Federal Transit Administration (FTA). The information reported by CCCTA covering the audit period has been reviewed. CCCTA's NTD reports include its bus and paratransit services. However, consistent with FTA reporting requirements, CCCTA does not submit employee hour information for purchased transportation service to the NTD.

Compliance with Requirements

To support this review, CCCTA 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, CCCTA 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 CCCTA'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.

However, an exception relates to the reported FY2016 service and hours and miles for paratransit (which correspond to revenue vehicle hours and miles). They are trending in opposite directions (hours increasing 3.5 percent over FY2015, but miles decreasing 9.8 percent). This is an unexpected situation, as these statistics normally trend in the same direction. In explanation, CCCTA staff initially suggested that the contract operator had temporarily changed fuel providers (between May 2015 and July 2016) to one located much closer to the CCCTA facility. This could have significantly decreased the total vehicle miles traveled, but would not be expected to have much impact on vehicle service miles per se. A continuing investigation by CCCTA and contractor staff has not yet yielded any further definitive explanation. This raises some concerns about data accuracy, which if left unchecked, could result in further discrepancies in the future.

Exhibit 3.1: Compliance with TDA Data Collection and Reporting Requirements

TDA Statistic	TDA Definition	Compliance Finding	Verification Information
Operating Cost	"Operating cost" means all costs in the operating expense object classes exclusive of the costs in the depreciation and amortization expense object class of the uniform system of accounts and records adopted by the Controller pursuant to Section 99243. 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.	In Compliance	• Fixed-route - Service related costs, calculated according to several broad expense categories. Majority composed of wages and fringe benefits; remainder includes various "service expenses" (e.g., marketing and security) and materials/supplies. Reporting follows NTD categories and requirements. • Paratransit - Includes in-house paratransit-related costs and payments to the contractor for operating the service. By agreement, contractor's invoices are based on a monthly fixed rate plus an hourly rate. Contractor pay includes deadhead hours.
Vehicle Service Hours	"Vehicle service hours" means the total number of hours that each transit vehicle is in revenue service, including layover time.	In Compliance	• Fixed Route - *Ridecheck* software gathers data collected by on-board *Clever Devices* computers and produces reports. The entire fleet is equipped with this computer system. Vehicle service hours are now generated by *Ridecheck* and uploaded each night to the server for processing. • Paratransit - Includes hours from the time a vehicle leaves the yard until it returns, minus lunch and breaks. Data gleaned from drivers' manifests and input daily into computer.

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	• Fixed-route – *Ridecheck* software gathers data collected by on-board *Clever Devices* computers and produces reports. Vehicle service miles are now generated by *Ridecheck* and uploaded each night to the server for processing. • Paratransit - Includes miles accumulated by a vehicle for provision of service. Data gleaned from drivers' manifests and input daily into computer.
Unlinked Passengers	"Unlinked passengers" means the number of boarding passengers, whether revenue producing or not, carried by the public transportation system.	In Compliance	• Fixed-route - Ridecheck software gathers data collected by on-board Clever Devices computers, including Automatic Passenger Counting (APC) data and the passenger count by fare category entered by the driver. The entire fleet is now equipped with APC sensors and this computer system. The passenger count data is uploaded each night to the server for processing and report generation. • Paratransit - Includes all boardings as logged by drivers on their trip manifests. Drivers adjust pre-printed manifests for cancellations, no-shows, and additional same-day trips.
Employee Full-Time Equivalents	2,000 person-hours of work in one year constitute one employee.	In Compliance	• Fixed-route - Consistent with TDA definition; counted based on employee pay records. • Paratransit - Based on employee hours, as reported by the contractor.

Exhibit 3.2: TDA Statistics – Bus Service

TDA Statistic	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
Operating Cost (Actual $)	$24,100,651	$24,690,727	$25,676,872	$27,566,494	$27,453,734	$28,354,932
Annual Change	- -	*2.4%*	*4.0%*	*7.4%*	*-0.4%*	*3.3%*
Vehicle Service Hours	208,901	208,719	213,624	222,553	221,320	227,916
Annual Change	- -	*-0.1%*	*2.4%*	*4.2%*	*-0.6%*	*3.0%*
Vehicle Service Miles	2,302,257	2,325,896	2,384,645	2,421,102	2,433,010	2,491,968
Annual Change	- -	*1.0%*	*2.5%*	*1.5%*	*0.5%*	*2.4%*
Unlinked Passengers	3,304,456	3,107,879	3,296,763	3,328,558	3,597,054	3,689,110
Annual Change	- -	*-5.9%*	*6.1%*	*1.0%*	*8.1%*	*2.6%*
Employee Full-Time Equivalents	206.0	217.9	225.3	222.6	228.6	230.5
Annual Change	- -	*5.8%*	*3.4%*	*-1.2%*	*2.7%*	*0.8%*

Sources: *FY2011 through FY2013 - Prior Performance Audit Report*
FY2014 through FY2016 - NTD Reports

Exhibit 3.3: TDA Statistics – Paratransit

TDA Statistic	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
Operating Cost (Actual $)	$5,177,014	$5,170,150	$5,125,995	$5,230,924	$5,117,036	$5,408,838
Annual Change	- -	*-0.1%*	*-0.9%*	*2.0%*	*-2.2%*	*5.7%*
Vehicle Service Hours	81,006	77,729	74,093	74,394	73,717	76,311
Annual Change	- -	*-4.0%*	*-4.7%*	*0.4%*	*-0.9%*	*3.5%*
Vehicle Service Miles	1,294,421	1,246,821	1,208,228	1,218,760	1,208,223	1,089,505
Annual Change	- -	*-3.7%*	*-3.1%*	*0.9%*	*-0.9%*	*-9.8%*
Unlinked Passengers	166,102	152,720	154,945	158,664	156,832	153,715
Annual Change	- -	*-8.1%*	*1.5%*	*2.4%*	*-1.2%*	*-2.0%*
Employee Full-Time Equivalents	64.6	66.1	72.1	67.0	65.0	67.0
Annual Change	- -	*2.3%*	*9.1%*	*-7.1%*	*-3.0%*	*3.1%*

Sources: FY2011 through FY2013 - Prior Performance Audit Report
FY2014 through FY2016 - NTD Reports, except FTES - CCCTA Staff

III. TDA PERFORMANCE INDICATORS AND TRENDS

The performance trends for CCCTA'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. CCCTA's NTD reports were the source of all operating and financial statistics except for contractor FTEs. Contractor employee FTE data was provided by CCCTA staff from data reported by the contractor.

In addition to presenting performance for the three years of the audit period (FY2014 through FY2016), 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 CCCTA'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 FY2014 to FY2016 trend lines have been combined with those from the prior audit period (FY2011 through FY2013) 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 CCCTA'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 CCCTA'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 1.5 percent annually during the six-year review period.
  - The cost per hour ranged from a low of $115.37 in FY2011 to a high of $124.41 in FY2016. There were increases in every year; the largest (3.1 percent) occurring in FY2014.

- In FY2011 constant dollars, there was an average annual decrease in this indicator of one percent.

- Passengers per Vehicle Service Hour (Exhibit 4.2)

  - A key indicator of passenger productivity, passengers per hour increased an average of 0.5 percent annually during the six-year period.

  - The increase reflects an overall increase in passengers combined with a smaller increase in service hours.

  - Passengers per hour increased overall from 15.8 in FY2011 to 16.2 in FY2016.

- Passengers per Vehicle Service Mile (Exhibit 4.2)

  - Similar to passengers per hour, passengers per mile also increased overall, by 0.6 percent annually on average.

  - There were about 1.4 passengers per mile in all years, with the largest annual increase in FY2015 (7.5 percent).

- Operating Cost per Passenger (Exhibit 4.3)

  - A key measure of cost effectiveness, the cost per passenger was $7.29 in the first year of the review period followed by an increase in the next year to $7.94.

  - The cost per passenger varied somewhat from year to year through the rest of the period, to $7.69 per passenger in FY2016 (increasing on average by 1.1 percent annually).

  - With the impact of inflation removed from the cost side (normalization), the six-year result was an average annual decrease of 1.4 percent in the cost per passenger.

- Vehicle Service Hours per Employee (FTE) (Exhibit 4.4)

  - A measure of employee productivity, this indicator decreased by an average 0.5 percent per year over the six years.

- Hours per FTE decreased overall from just over 1,000 in the first review year to just below 1,000 in the last year.

- Annual FTEs increased at a 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 FY2011 through FY2016:

- There was an average annual increase in the operating cost per hour of 1.5 percent, which amounted to a one percent decrease in inflation adjusted dollars.

- The cost per passenger increased on average by 1.1 percent per year, which amounted to an average annual decrease of 1.4 percent in constant FY2011 dollars.

- Passenger productivity showed somewhat positive trends, with passengers per vehicle service hour increasing by 0.5 percent per year overall, and passengers per vehicle service mile increasing by 0.6 percent annually.

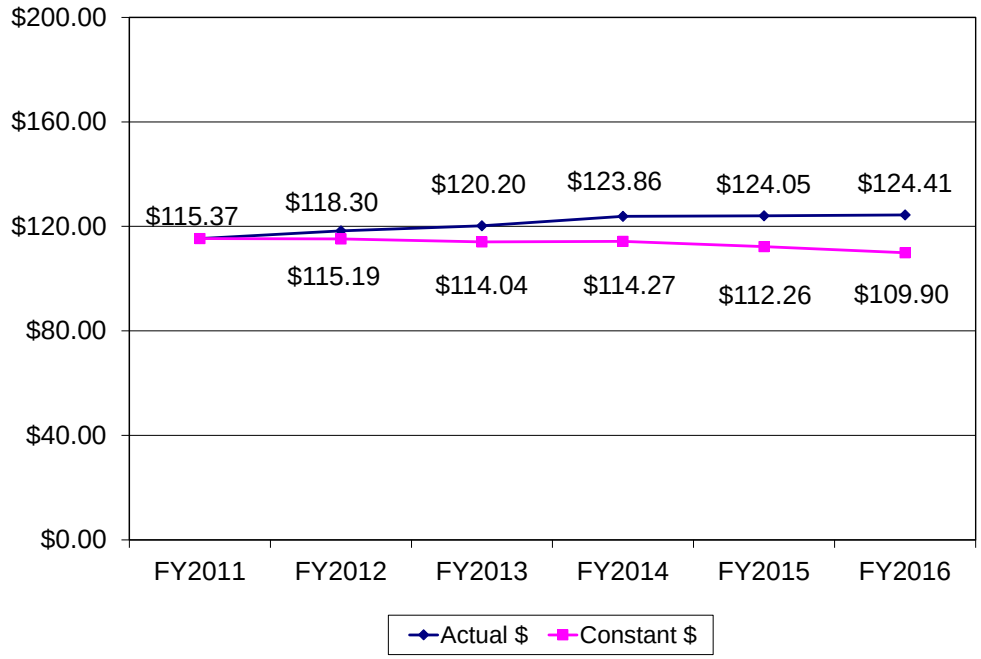
- Employee productivity decreased an average 0.5 percent per year.

Exhibit 4: TDA Indicator Performance - Bus Service

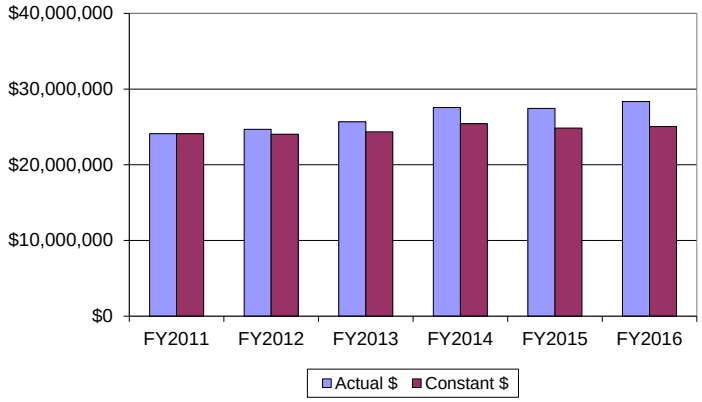
	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	*Av. Ann. Chg.*
Performance Indicators							
Op. Cost per Vehicle Svc. Hour (Actual $)	$115.37	$118.30	$120.20	$123.86	$124.05	$124.41	- -
Annual Change	- -	*2.5%*	*1.6%*	*3.1%*	*0.1%*	*0.3%*	*1.5%*
Op. Cost per Vehicle Svc. Hour (Constant $)	$115.37	$115.19	$114.04	$114.27	$112.26	$109.90	- -
Annual Change	- -	*-0.2%*	*-1.0%*	*0.2%*	*-1.8%*	*-2.1%*	*-1.0%*
Passengers per Vehicle Service Hour	15.8	14.9	15.4	15.0	16.3	16.2	- -
Annual Change	- -	*-5.9%*	*3.6%*	*-3.1%*	*8.7%*	*-0.4%*	*0.5%*
Passengers per Vehicle Service Mile	1.44	1.34	1.38	1.37	1.48	1.48	- -
Annual Change	- -	*-6.9%*	*3.5%*	*-0.6%*	*7.5%*	*0.1%*	*0.6%*
Op. Cost per Passenger (Actual $)	$7.29	$7.94	$7.79	$8.28	$7.63	$7.69	- -
Annual Change	- -	*8.9%*	*-2.0%*	*6.3%*	*-7.8%*	*0.7%*	*1.1%*
Op. Cost per Passenger (Constant $)	$7.29	$7.74	$7.39	$7.64	$6.91	$6.79	- -
Annual Change	- -	*6.1%*	*-4.5%*	*3.4%*	*-9.6%*	*-1.7%*	*-1.4%*
Vehicle Service Hours per FTE	1,014	958	948	1,000	968	989	- -
Annual Change	- -	*-5.5%*	*-1.0%*	*5.5%*	*-3.2%*	*2.2%*	*-0.5%*
Input Data							
Operating Cost (Actual $)	$24,100,651	$24,690,727	$25,676,872	$27,566,494	$27,453,734	$28,354,932	- -
Annual Change	- -	*2.4%*	*4.0%*	*7.4%*	*-0.4%*	*3.3%*	*3.3%*
Operating Cost (Constant $)	$24,100,651	$24,041,604	$24,361,359	$25,430,345	$24,845,008	$25,048,527	- -
Annual Change	- -	*-0.2%*	*1.3%*	*4.4%*	*-2.3%*	*0.8%*	*0.8%*
Vehicle Service Hours	208,901	208,719	213,624	222,553	221,320	227,916	- -
Annual Change	- -	*-0.1%*	*2.4%*	*4.2%*	*-0.6%*	*3.0%*	*1.8%*
Vehicle Service Miles	2,302,257	2,325,896	2,384,645	2,421,102	2,433,010	2,491,968	- -
Annual Change	- -	*1.0%*	*2.5%*	*1.5%*	*0.5%*	*2.4%*	*1.6%*
Unlinked Passengers	3,304,456	3,107,879	3,296,763	3,328,558	3,597,054	3,689,110	- -
Annual Change	- -	*-5.9%*	*6.1%*	*1.0%*	*8.1%*	*2.6%*	*2.2%*
Employee Full-Time Equivalents	206.0	217.9	225.3	222.6	228.6	230.5	- -
Annual Change	- -	*5.8%*	*3.4%*	*-1.2%*	*2.7%*	*0.8%*	*2.3%*
Bay Area CPI - Annual Change	- -	2.7%	2.6%	2.9%	1.9%	2.5%	- -
- Cumulative Change	- -	2.7%	5.4%	8.4%	10.5%	13.2%	*2.5%*

Sources: FY2011 through FY2013 - Prior Performance Audit Report
FY2014 through FY2016 - NTD Reports
CPI Data - U.S. Department of Labor, Bureau of Labor Statistics

Exhibit 4.1: Operating Cost per Vehicle Service Hour - Bus Service



Operating Cost



Vehicle Service Hours

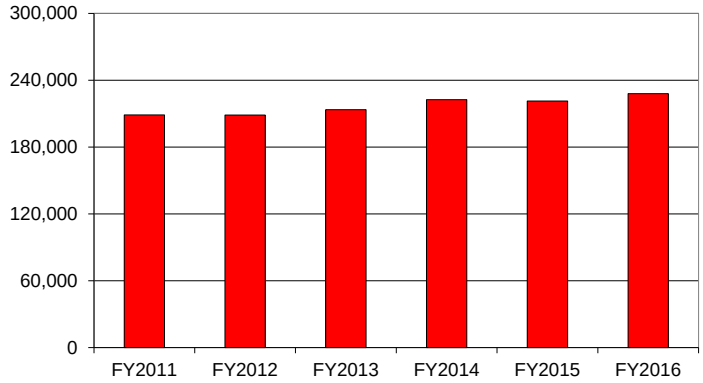
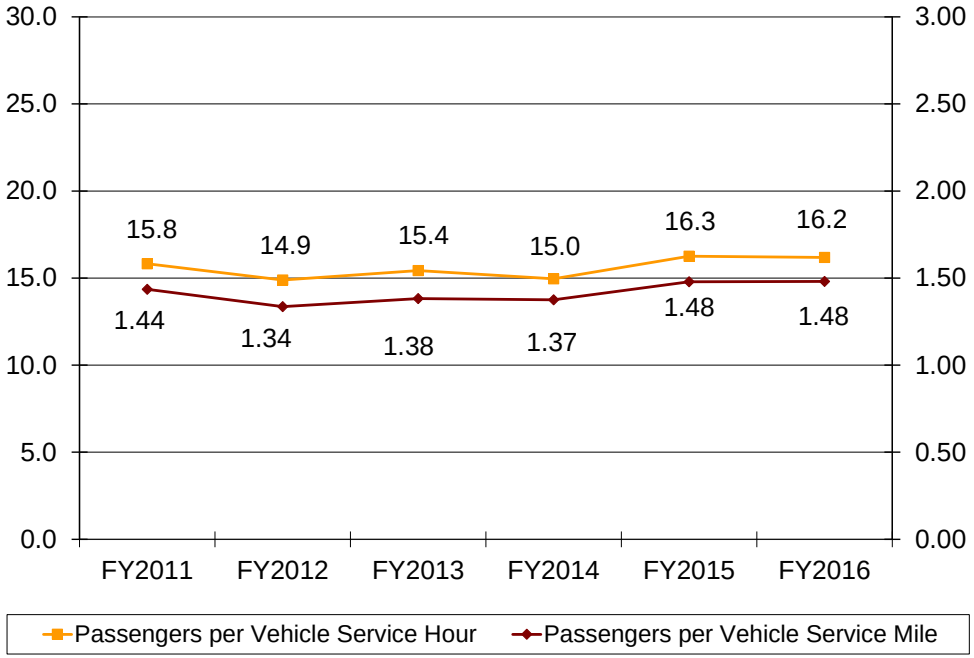
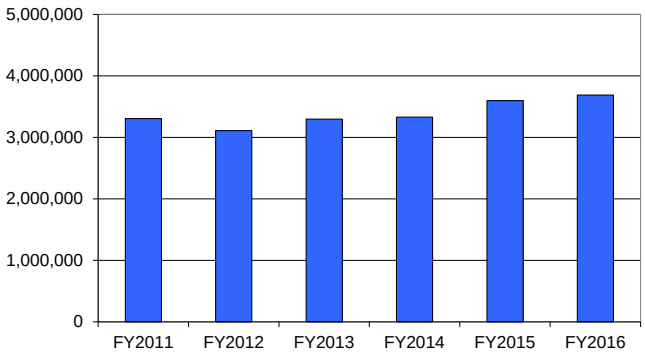


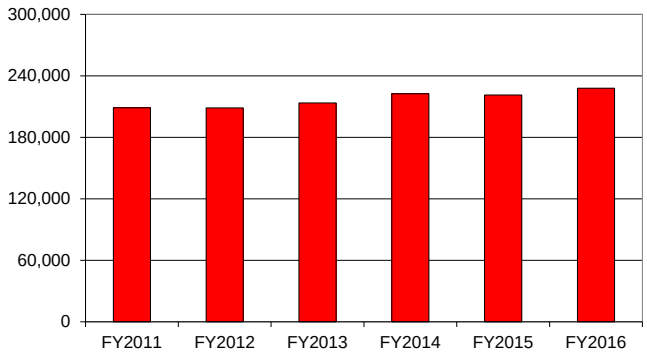
Exhibit 4.2: Passengers per Hour and per Mile – Bus Service



Unlinked Passengers



Vehicle Service Hours



Vehicle Service Miles

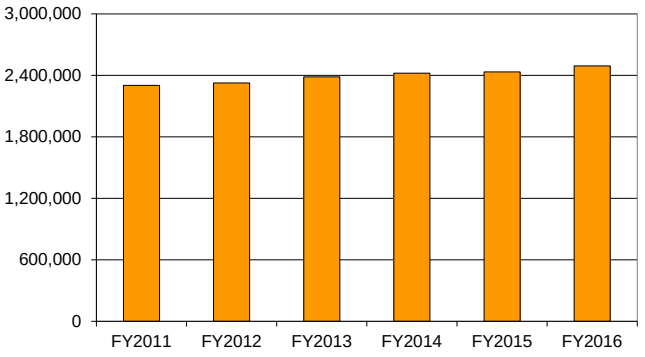
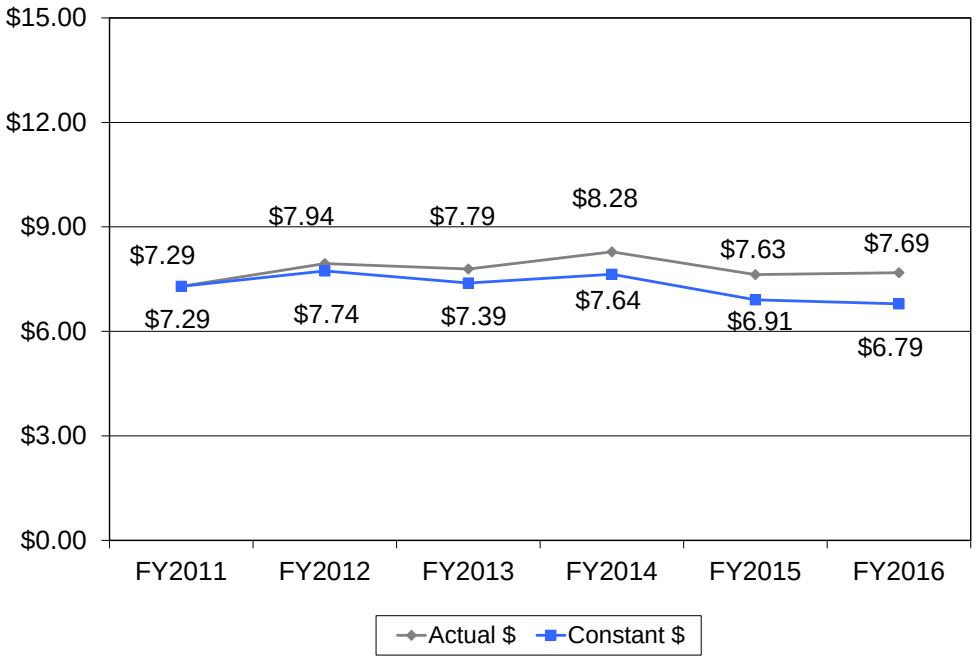
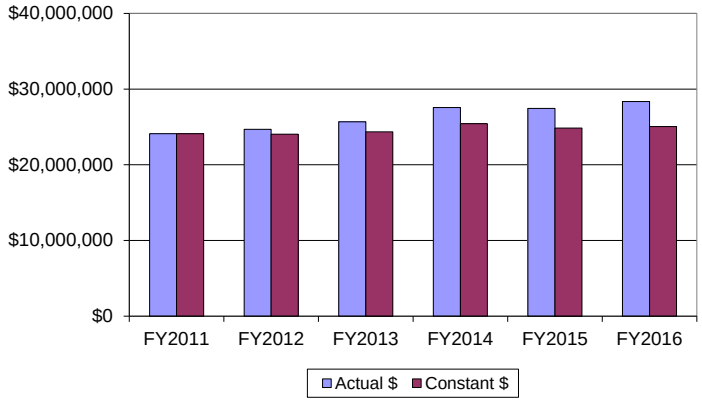


Exhibit 4.3: Operating Cost per Passenger – Bus Service



Operating Cost



Unlinked Passengers

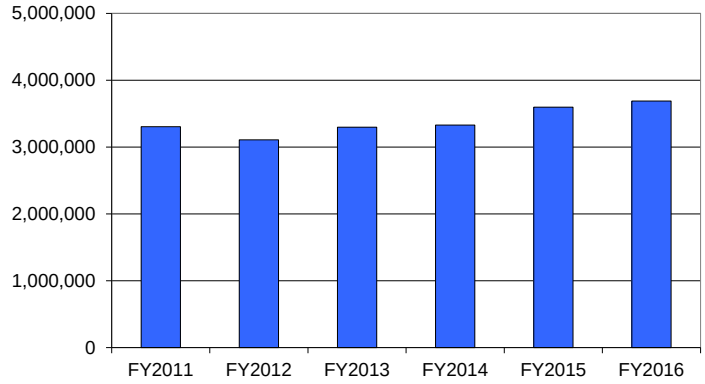
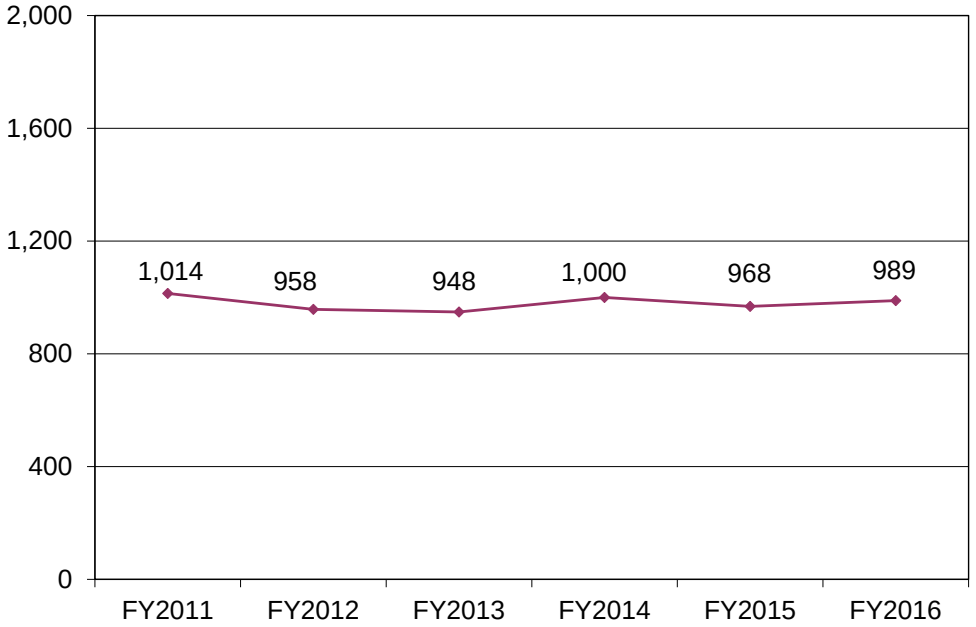
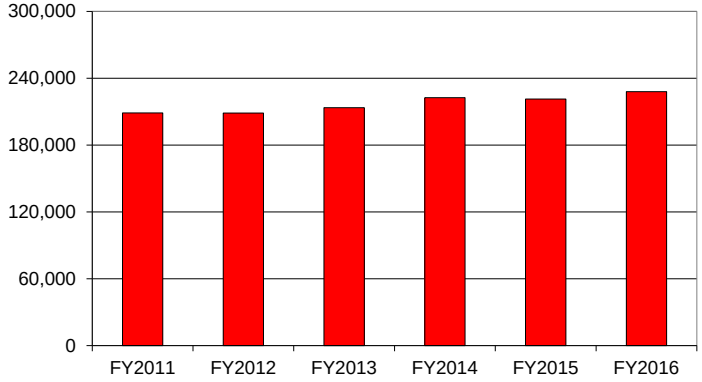


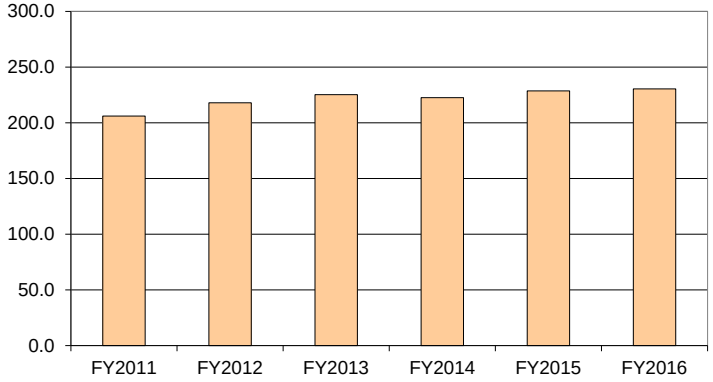
Exhibit 4.4: Vehicle Service Hours per FTE – Bus Service



Vehicle Service Hours



Full-time Equivalents



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.

- Labor costs increased in the last year (FY2016) by 7.1 percent compared to FY2015 -- more than double the rate of any previous year. CCCTA staff reported that this resulted from a new three year labor agreement that provided a four percent cost of living adjustment beginning on July 1, 2015. There had been no cost of living increases in the immediately preceding years. Also, operators had historically received raises in February of each year, but as part of this labor agreement, raises for the first year took effect sooner -- on July 1 instead of the next February.

- Fringe benefits costs increased sharply (by 15.2 percent) in FY2014 over the previous year, and also noticeably in FY2016. Further, fringe benefits costs increased overall during the six years at a significantly higher rate than labor costs (averaging 6.4 percent per year compared to 2.9 percent for labor costs). CCCTA staff noted that while wages had been frozen prior to FY2016, benefits costs were not, at least in terms of medical and pension costs. Medical costs rose over the audit period primarily due to increased costs associated with the Federal Affordable Care Act. In addition, pension costs increased by over $100,000 in FY2016, reflecting increased contributions mandated by CalPERS (the California Public Employees' Retirement System).

- Casualty/liability costs increased by 12 percent on average per year, with the most significant increase (94 percent) in FY2014, but also decreases in certain years. This trend appears in line with the relative unpredictability of settlement activity. Further, these costs remained near two percent of the total cost per vehicle service hour through the review period.

- Increases in the remaining component cost categories each averaged less than four percent per year, with a notable overall decrease posted for fuel/lubricants.

- Labor costs represented the largest portion of the total cost per vehicle service hour in all years, ranging between 45 and 49 percent. This was followed by fringe benefits costs, which increased overall from about 27 percent in FY2011 to 32 percent by FY2016.

- Other cost categories generally contributed shares of less than eight percent in all years. Fuel/lubricants costs surpassed this threshold early in the period, but their share was reduced to just four percent by FY2016.

* * * * *

The following is a brief summary of the bus service component operating costs trend highlights between FY2011 and FY2016:

- Labor costs went up by nearly three percent per year, remaining the largest component cost area at nearly 50 percent of total costs. Labor costs increased in the last year (FY2016) by more than double the rate of any previous year. This reflected stipulations in a new labor agreement.

- Fringe benefit costs went up by more than six percent per year, significantly higher than labor costs, and increased their share from 27 to 32 percent of total costs during the period. This reflected externally mandated increases in medical and pension contribution costs.

- There were moderate changes overall in most other component costs, with a substantial net decrease in fuel/lubricants costs. Casualty/liability costs increased by 12 percent annually on average, but varied from year to year and only contributed about two percent of total costs.

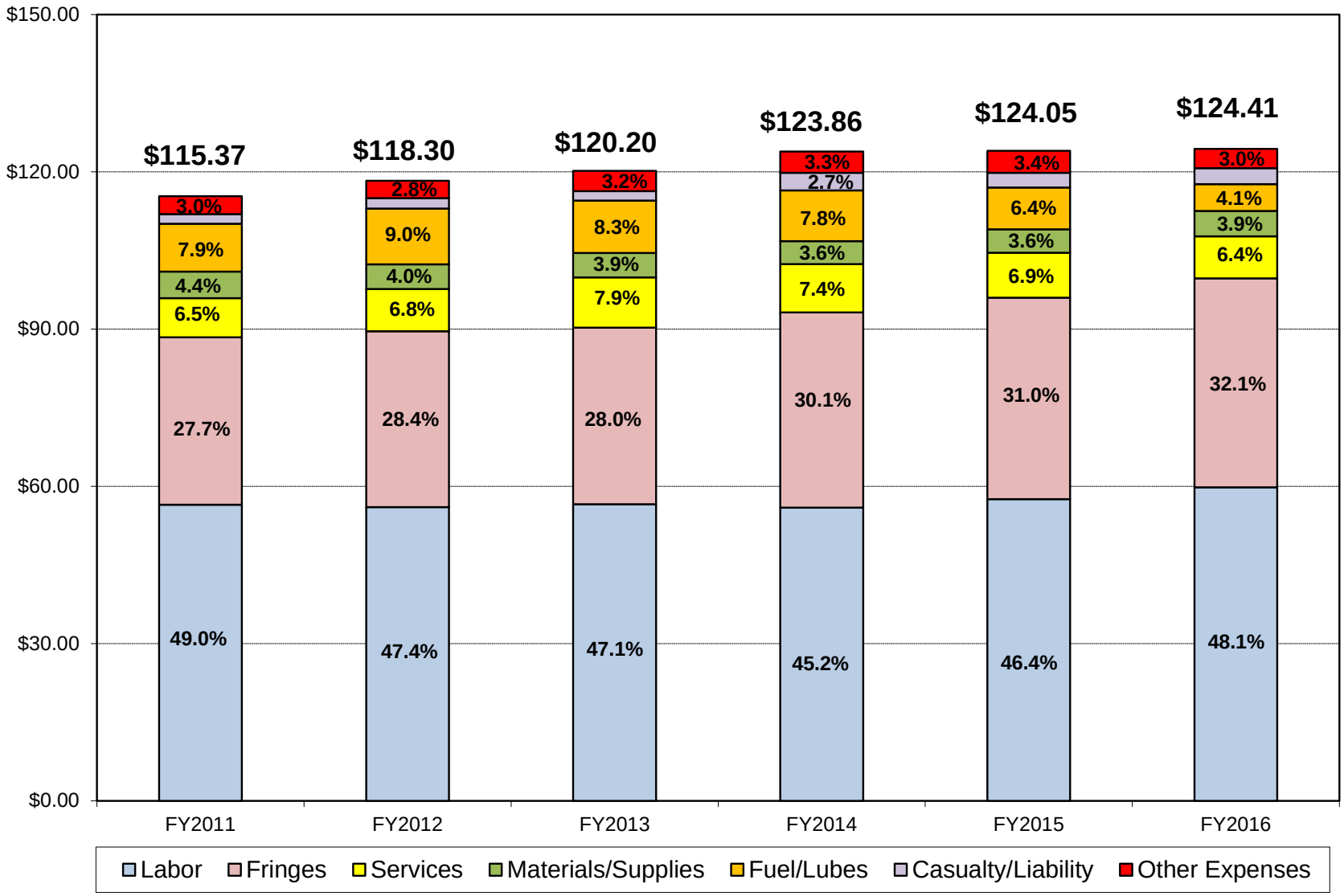
Exhibit 4.5: Component Cost Trends – Bus Service

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	*Av. Ann. Chg.*
COST CATEGORIES							
Labor - (Salaries, Wages)	$11,806,241	$11,693,347	$12,093,546	$12,451,226	$12,735,522	$13,634,627	- -
Annual Change	- -	*-1.0%*	*3.4%*	*3.0%*	*2.3%*	*7.1%*	*2.9%*
Fringe Benefits	$6,666,017	$7,002,819	$7,196,515	$8,287,197	$8,511,988	$9,088,071	- -
Annual Change	- -	*5.1%*	*2.8%*	*15.2%*	*2.7%*	*6.8%*	*6.4%*
Services	$1,563,554	$1,685,170	$2,040,602	$2,051,599	$1,892,565	$1,826,414	
Annual Change	- -	*7.8%*	*21.1%*	*0.5%*	*-7.8%*	*-3.5%*	*3.2%*
Materials/Supplies	$1,057,806	$987,749	$1,001,836	$980,275	$993,386	$1,097,357	- -
Annual Change	- -	*-6.6%*	*1.4%*	*-2.2%*	*1.3%*	*10.5%*	*0.7%*
Fuel/Lubricants	$1,909,869	$2,215,715	$2,132,441	$2,154,296	$1,765,183	$1,174,649	- -
Annual Change	- -	*16.0%*	*-3.8%*	*1.0%*	*-18.1%*	*-33.5%*	*-9.3%*
Casualty/Liability	$385,277	$415,417	$381,485	$740,595	$627,088	$685,551	- -
Annual Change	- -	*7.8%*	*-8.2%*	*94.1%*	*-15.3%*	*9.3%*	*12.2%*
Other Expenses *(a)*	$711,887	$690,510	$830,447	$901,306	$928,002	$848,263	- -
Annual Change	- -	*-3.0%*	*20.3%*	*8.5%*	*3.0%*	*-8.6%*	*3.6%*
Total	$24,100,651	$24,690,727	$25,676,872	$27,566,494	$27,453,734	$28,354,932	- -
Annual Change	- -	*2.4%*	*4.0%*	*7.4%*	*-0.4%*	*3.3%*	*3.3%*
OPERATING STATISTICS							
Vehicle Service Hours	208,901	208,719	213,624	222,553	221,320	227,916	- -
Annual Change	- -	*-0.1%*	*2.4%*	*4.2%*	*-0.6%*	*3.0%*	*1.8%*

Sources: FY2011 through FY2013 - Prior Performance Audit Report; FY2014 through FY2016 - NTD Reports
(a) Includes 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 CCCTA'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)
  - CCCTA's paratransit cost per hour increased in every year except FY2015, from $63.91 in FY2011 to $70.88 in FY2016.
  - Overall, the cost per hour increased an average of 2.1 percent per year over the six years.
  - With the effects of inflation removed, cost per hour exhibited an average annual decrease of 0.4 percent.
- Passengers per Vehicle Service Hour (Exhibit 5.2)
  - Passengers per vehicle service hour increased in some years of the review period and decreased in other years, but remained at about two passengers.
  - The trend amounted to an average annual decrease of 0.4 percent, as overall annual passenger levels decreased at a slightly higher rate than service hours.
- Passengers per Vehicle Service Mile (Exhibit 5.2)
  - Performance in passengers per vehicle service mile improved overall, with the largest annual increase (8.7percent) reported in the last year.
  - Passengers per mile posted an average increase of 1.9 percent over the six-year period.

- Operating Cost per Passenger (Exhibit 5.3)

  - The cost per passenger rose by 2.5 percent per year on average through the review period, from $31.17 in FY2011 to $35.19 in FY2016.

  - Operating costs increased by 0.9 percent per year, while passenger levels decreased by 1.5 percent per year.

  - With the impact of inflation removed, the result was a slight average annual decrease in the cost per passenger (0.1 percent).

- Vehicle Service Hours per FTE (Exhibit 5.4)

  - Employee productivity (primarily based on contractor work hours) decreased over the six years, from 1,254 hours per FTE in FY2011 to 1,139 hours in FY2016.

  - Employee FTEs increased slightly during the period, while service hours decreased modestly overall.

  - The net result was an average annual decrease in employee productivity of 1.9 percent.

* * * * *

The following is a brief summary of the paratransit TDA performance trend highlights over the six-year period of FY2011 through FY2016:

- For cost efficiency, there was an average annual increase in the operating cost per hour of 2.1 percent; however, this amounted to an annual decrease of 0.4 percent in inflation adjusted dollars.

- The operating cost per passenger achieved a slight annual decrease (0.1 percent on average) when normalized in FY2011 dollars.

- Passenger productivity showed mixed results, with passengers per hour decreasing by 0.4 percent per year on average, but passengers per mile increasing by 1.9 percent annually.

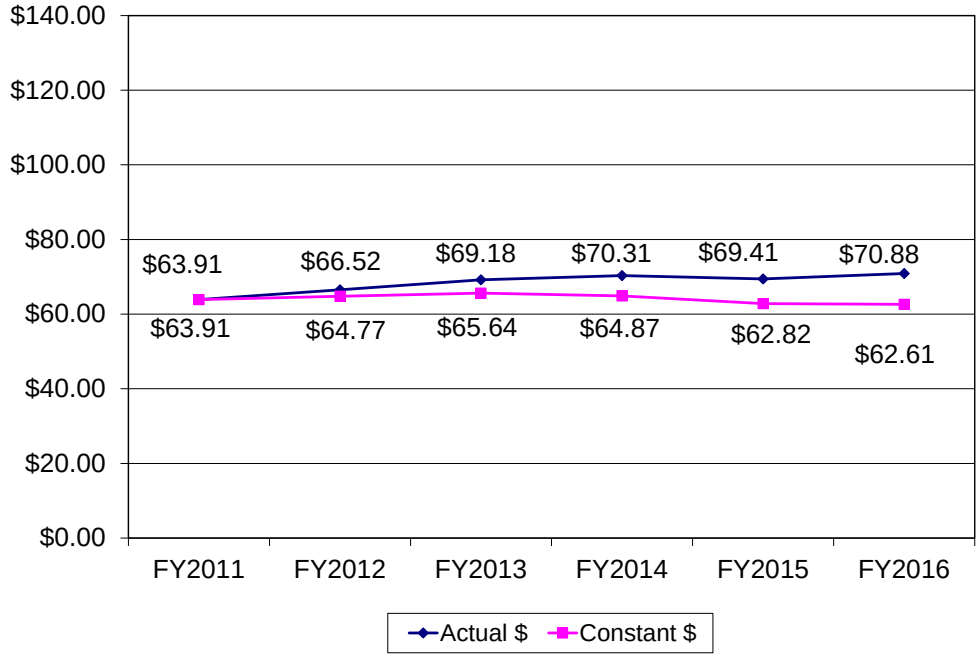
- The net result for employee productivity was an average annual decrease of 1.9 percent.

Exhibit 5: TDA Indicator Performance – Paratransit

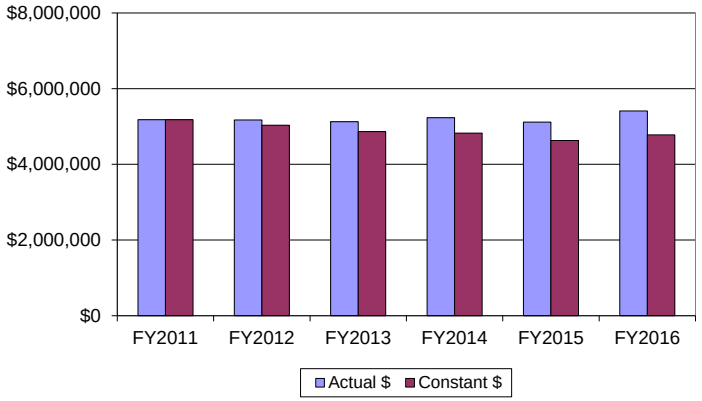
	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	*Av. Ann. Chg.*
Performance Indicators							
Op. Cost per Vehicle Svc. Hour (Actual $)	$63.91	$66.52	$69.18	$70.31	$69.41	$70.88	- -
Annual Change	- -	*4.1%*	*4.0%*	*1.6%*	*-1.3%*	*2.1%*	*2.1%*
Op. Cost per Vehicle Svc. Hour (Constant $)	$63.91	$64.77	$65.64	$64.87	$62.82	$62.61	- -
Annual Change	- -	*1.3%*	*1.3%*	*-1.2%*	*-3.2%*	*-0.3%*	*-0.4%*
Passengers per Vehicle Service Hour	2.05	1.96	2.09	2.13	2.13	2.01	- -
Annual Change	- -	*-4.2%*	*6.4%*	*2.0%*	*-0.2%*	*-5.3%*	*-0.4%*
Passengers per Vehicle Service Mile	0.128	0.122	0.128	0.130	0.130	0.141	- -
Annual Change	- -	*-4.5%*	*4.7%*	*1.5%*	*-0.3%*	*8.7%*	*1.9%*
Op. Cost per Passenger (Actual $)	$31.17	$33.85	$33.08	$32.97	$32.63	$35.19	- -
Annual Change	- -	*8.6%*	*-2.3%*	*-0.3%*	*-1.0%*	*7.8%*	*2.5%*
Op. Cost per Passenger (Constant $)	$31.17	$32.96	$31.39	$30.41	$29.53	$31.08	- -
Annual Change	- -	*5.8%*	*-4.8%*	*-3.1%*	*-2.9%*	*5.3%*	*-0.1%*
Vehicle Service Hours per FTE	1,254	1,176	1,028	1,110	1,134	1,139	- -
Annual Change	- -	*-6.2%*	*-12.6%*	*8.0%*	*2.1%*	*0.4%*	*-1.9%*
Input Data							
Operating Cost (Actual $)	$5,177,014	$5,170,150	$5,125,995	$5,230,924	$5,117,036	$5,408,838	- -
Annual Change	- -	*-0.1%*	*-0.9%*	*2.0%*	*-2.2%*	*5.7%*	*0.9%*
Operating Cost (Constant $)	$5,177,014	$5,034,226	$4,863,373	$4,825,576	$4,630,802	$4,778,125	- -
Annual Change	- -	*-2.8%*	*-3.4%*	*-0.8%*	*-4.0%*	*3.2%*	*-1.6%*
Vehicle Service Hours	81,006	77,729	74,093	74,394	73,717	76,311	- -
Annual Change	- -	*-4.0%*	*-4.7%*	*0.4%*	*-0.9%*	*3.5%*	*-1.2%*
Vehicle Service Miles	1,294,421	1,246,821	1,208,228	1,218,760	1,208,223	1,089,505	- -
Annual Change	- -	*-3.7%*	*-3.1%*	*0.9%*	*-0.9%*	*-9.8%*	*-3.4%*
Unlinked Passengers	166,102	152,720	154,945	158,664	156,832	153,715	- -
Annual Change	- -	*-8.1%*	*1.5%*	*2.4%*	*-1.2%*	*-2.0%*	*-1.5%*
Employee Full-Time Equivalents	64.6	66.1	72.1	67.0	65.0	67.0	- -
Annual Change	- -	*2.3%*	*9.1%*	*-7.1%*	*-3.0%*	*3.1%*	*0.7%*
Bay Area CPI - Annual Change	- -	2.7%	2.6%	2.9%	1.9%	2.5%	- -
- Cumulative Change	- -	2.7%	5.4%	8.4%	10.5%	13.2%	*2.5%*

Sources: FY2011 through FY2013 - Prior Performance Audit Report
FY2014 through FY2016 - NTD Reports, except FTEs - CCCTA Staff
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

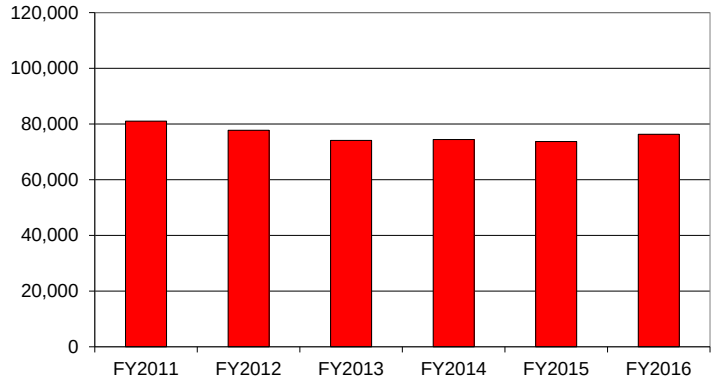
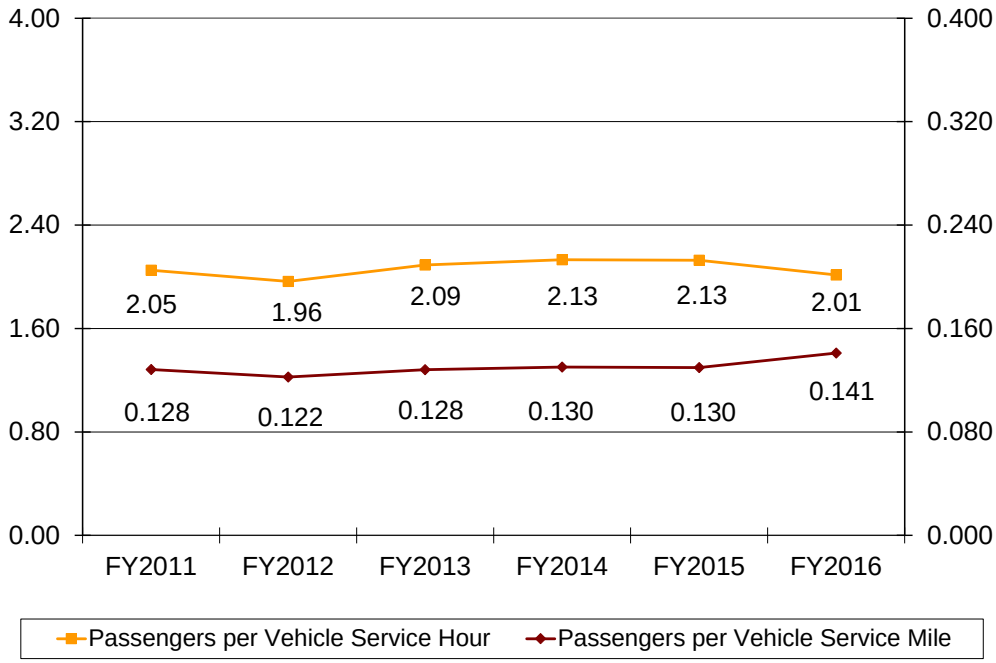
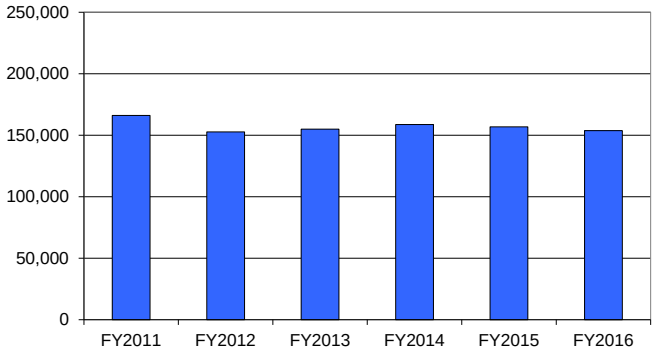


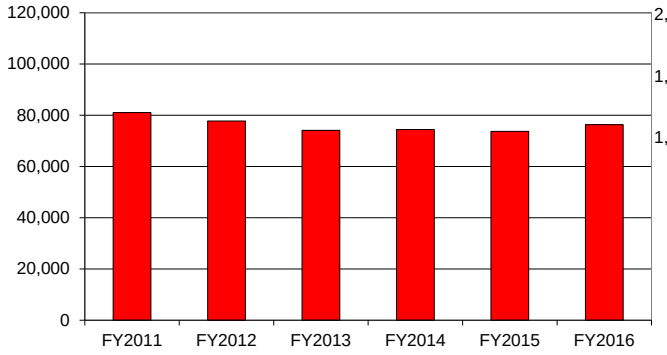
Exhibit 5.2: Passengers per Hour and per Mile – Paratransit



Unlinked Passengers



Vehicle Service Hours



Vehicle Service Miles

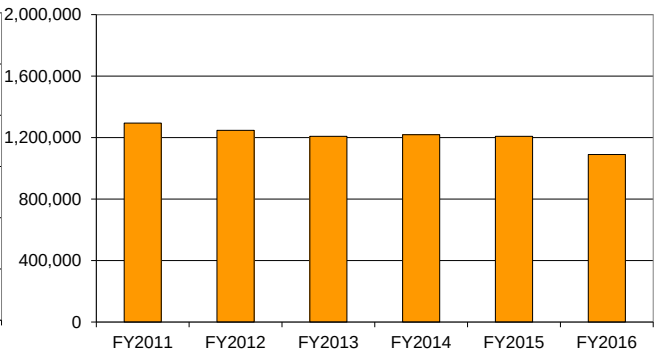
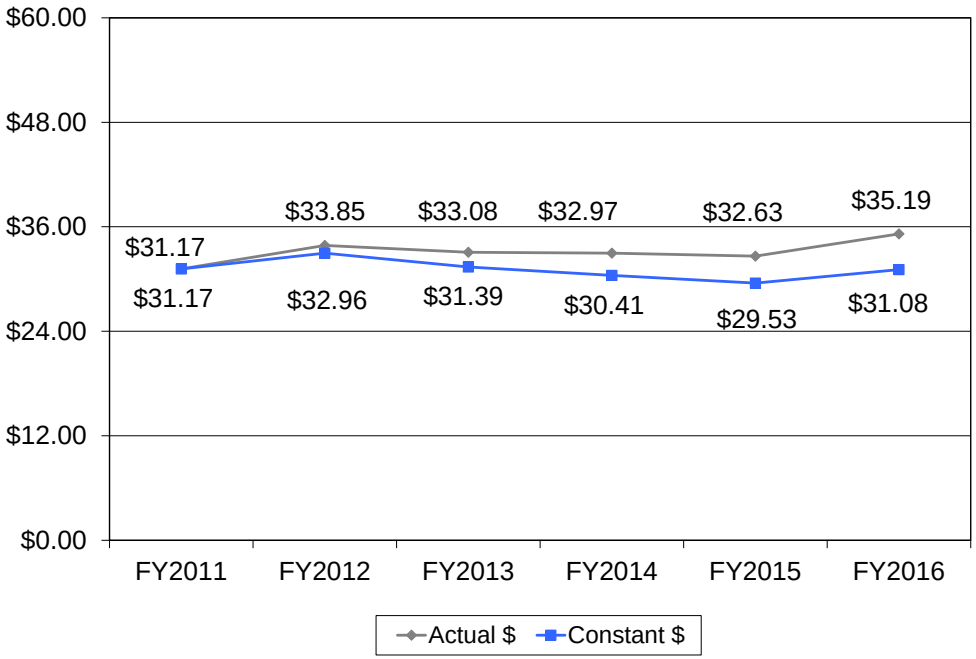
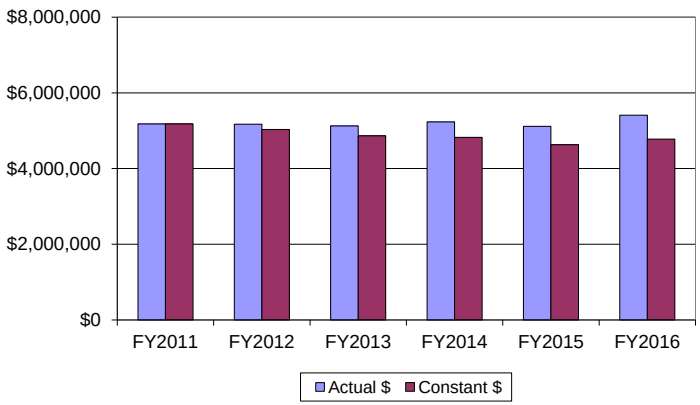


Exhibit 5.3: Operating Cost per Passenger – Paratransit



Operating Cost



Unlinked Passengers

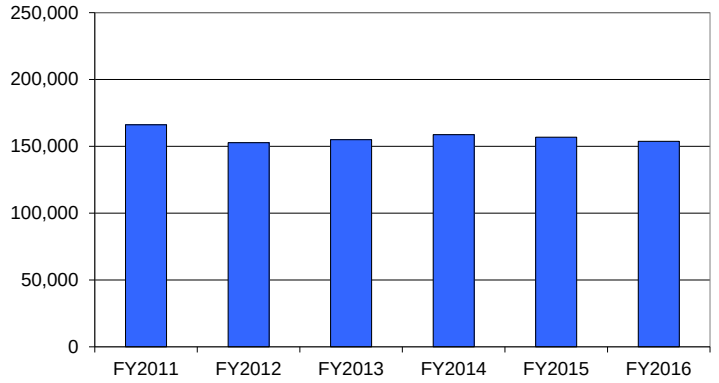
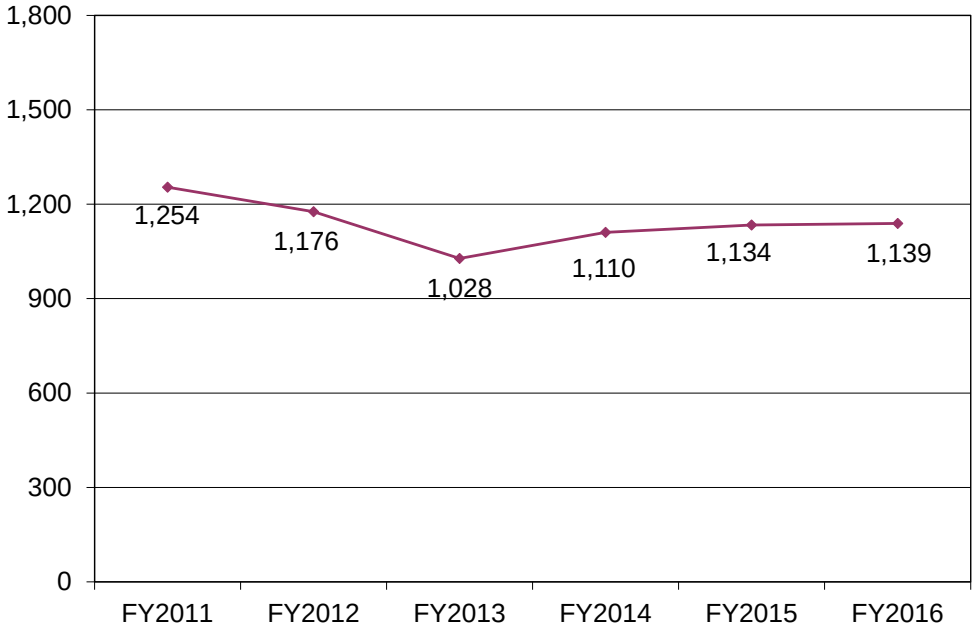
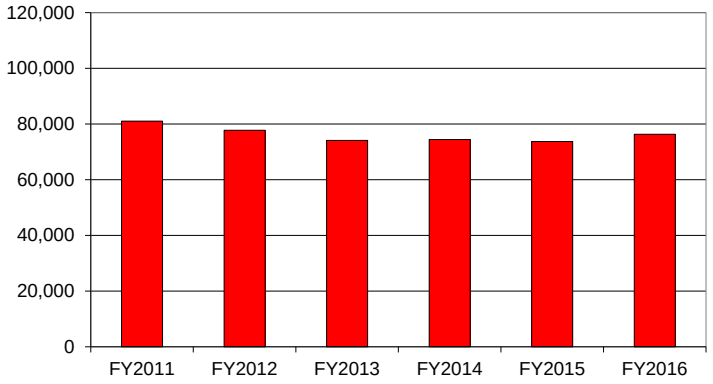


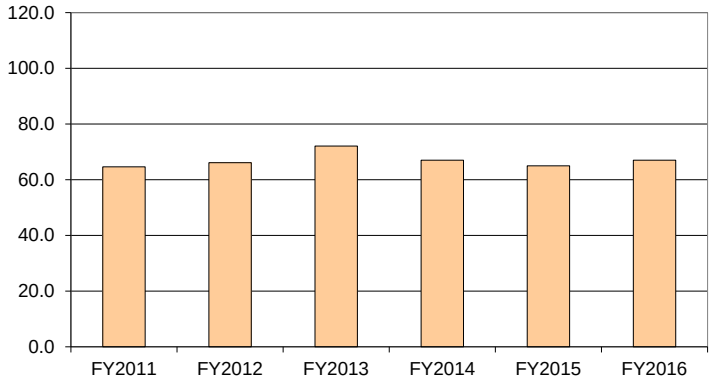
Exhibit 5.4: Vehicle Service Hours per FTE – Paratransit



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.

- Between FY2011 and FY2016, the total annual costs increased by 0.9 percent on average. This primarily reflected the trend in purchased transportation costs, which represented by far the largest portion of the total costs, at about 96 percent throughout the review period.

- Purchased transportation costs increased by 6.2 percent in FY2016 compared to the previous year, but still increased by less than one percent per year on average over the six years.

- The most significant change in the component costs was a 22 percent average annual decrease in materials/supplies; however, this category only accounted for about 0.1 percent of the total costs.

- Other component cost categories changed by three percent or less per year on average.

- $591 was reported for casualty/liability in FY2011, but no casualty/liability expenses were reported in the subsequent years.

* * * * *

The following is a brief summary of the paratransit component operating costs trend highlights between FY2011 and FY2016:

- Purchased transportation costs represented by far the largest portion of the total costs, at about 96 percent throughout the review period. They

increased by about one percent per year on average despite a 6.2 percent increase in FY2016.

- There was a 22 percent average annual decrease in materials/supplies; however, this category only accounted for about 0.1 percent of the total costs.

- Other component cost categories changed by three percent or less per year on average, with no casualty/liability expenses reported except in FY2011.

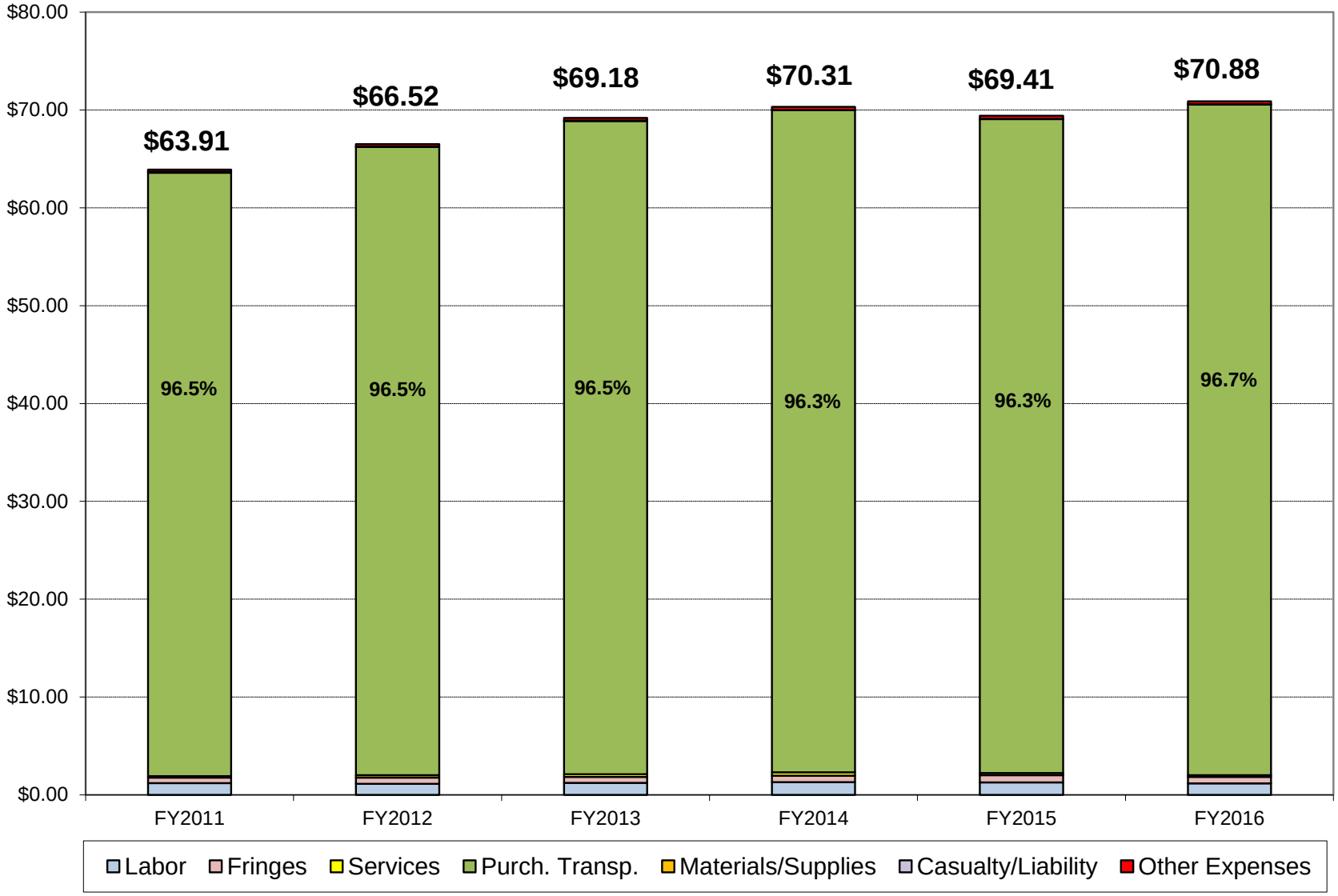
Exhibit 5.5: Component Costs Trends – Paratransit

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	*Av. Ann. Chg.*
COST CATEGORIES							
Labor - (Salaries, Wages)	$97,913	$88,411	$91,579	$97,549	$94,561	$90,846	- -
Annual Change	- -	*-9.7%*	*3.6%*	*6.5%*	*-3.1%*	*-3.9%*	*-1.5%*
Fringe Benefits	$44,880	$48,258	$45,552	$47,834	$54,014	$49,811	- -
Annual Change	- -	*7.5%*	*-5.6%*	*5.0%*	*12.9%*	*-7.8%*	*2.1%*
Services	$12,192	$19,503	$18,813	$25,665	$16,670	$12,418	- -
Annual Change	- -	*60.0%*	*-3.5%*	*36.4%*	*-35.0%*	*-25.5%*	*0.4%*
Purchased Transportation	$4,996,419	$4,991,166	$4,947,725	$5,035,998	$4,925,649	$5,231,626	- -
Annual Change	- -	*-0.1%*	*-0.9%*	*1.8%*	*-2.2%*	*6.2%*	*0.9%*
Materials/Supplies	$6,304	$3,066	$3,500	$1,601	$2,940	$1,859	- -
Annual Change	- -	*-51.4%*	*14.2%*	*-54.3%*	*83.6%*	*-36.8%*	*-21.7%*
Casualty/Liability	$591	$0	$0	$0	$0	$0	- -
Annual Change	- -	*-100.0%*	- -	- -	- -	- -	*-100.0%*
Other Expenses *(a)*	$18,715	$19,746	$18,826	$22,277	$23,202	$22,278	- -
Annual Change	- -	*5.5%*	*-4.7%*	*18.3%*	*4.2%*	*-4.0%*	*3.5%*
Total	$5,177,014	$5,170,150	$5,125,995	$5,230,924	$5,117,036	$5,408,838	- -
Annual Change	- -	*-0.1%*	*-0.9%*	*2.0%*	*-2.2%*	*5.7%*	*0.9%*
OPERATING STATISTICS							
Vehicle Service Hours	81,006	77,729	74,093	74,394	73,717	76,311	- -
Annual Change	- -	*-4.0%*	*-4.7%*	*0.4%*	*-0.9%*	*3.5%*	*-1.2%*

Sources: FY2011 through FY2013 - Prior Performance Audit Report; FY2014 through FY2016 - NTD Reports
(a) Includes utilities, taxes, and miscellaneous expenses

Exhibit 5.6: Distribution of Component Costs – Paratransit

Operating Cost per Vehicle Service Hour



This page left intentionally blank.

IV. COMPLIANCE WITH PUC REQUIREMENTS

An assessment of CCCTA'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 CCCTA's TDA-STA claim application.

The results from this review are detailed by individual requirement in Exhibit 6. CCCTA is in compliance with each of the seven sections of the state PUC that were reviewed as part of this performance audit. These sections included requirements concerning CHP terminal safety inspections, labor contracts, reduced fares, Welfare-to-Work, revenue sharing, and evaluating passenger needs.

Exhibit 6: Compliance with State PUC Requirements

Code Reference	Operator Compliance Requirements	Compliance Finding	Verification Information
PUC99251	CHP Certification - 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: • 2014: 07/10/14 • 2015: 08/05/15 • 2016: 08/09/16
PUC99264	Operator-to-Vehicle Staffing - The operator does not routinely staff with two or more persons public transportation vehicles designed to be operated by one person	In Compliance	• No provision for excess staffing in MOU with ATU (AFL CIO) Local 1605, effective 02/01/13; nor in Successor MOU, effective 02/01/16. • No provision for excess staffing in Paratransit Services Agreement with First Transit, Inc., effective 07/01/14.
PUC99314.5 (e)(1)(2)	Part Time Drivers and Contracting - Operators receiving STA funds are not precluded by contract from employing part-time drivers or from contracting with common carriers	In Compliance	• Part Time Drivers – Article 31 (Part-Time Employees) of MOU with ATU (AFL CIO) Local 1605, effective 02/01/13; and by reference in Successor MOU, effective 02/01/16. • Contracting - CCCTA contracts with First Transit, Inc. to provide its paratransit services.
PUC99155	Reduced Fare Eligibility - 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: • Bus route timetables • Guide to Accessible Services (brochure) • CCCTA website

Code Reference	Operator Compliance Requirements	Compliance Finding	Verification Information
PUC99155.1 (a)(1)(2)	Welfare to Work Coordination - Operators must coordinates with county welfare departments in order to ensure that transportation moneys available for purposes of assisting recipients of aid are expended efficiently for the benefit of that population; if a recipient of CalWORKs program funds by the county, the operator shall give priority to the enhancement of public transportation services for welfare-to-work purposes and to the enhancement of transportation alternatives, such as, but not limited to, subsidies or vouchers, van pools, and contract paratransit operations, in order to promote welfare-to-work purposes	In Compliance	CCCTA participates in the regional Coordinated Human Service Transportation plan. The services provided by CCCTA are included in the plan's inventory. In addition, CCCTA works closely with the County Human Services Department and sells them blocks of single ride tickets for dissemination to clients.
PUC99314.7, Govt Code 66516, MTC Res. Nos. 3837, 4073	Joint Revenue Sharing Agreement - 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	• Amended and Restated Clipper MOU, 08/21/15. • Other valid transfer/revenue sharing agreements with connecting operators: AC Transit, BART, Rio Vista, San Joaquin Regional Rail Comm.
PUC99246(d)	Process for Evaluation of Passenger Needs - The operator has an established process in place for evaluating the needs and types of passengers being served	In Compliance	• Short Range Transit Plan (SRTP) 2016-2025 includes evaluations of existing service conditions, passenger demographics, service needs, operating and capital budgets and recommendations. • 2015 Fixed-Route Transit Onboard Survey (Final Report - May 2015).

This page left intentionally blank.

V. STATUS OF PRIOR AUDIT RECOMMENDATIONS

CCCTA's prior performance audit was completed in May 2014. 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 CCCTA's responses to the recommendations made in the prior performance audit, and whether CCCTA made reasonable progress toward their implementation. However, there were no recommendations made in CCCTA's prior audit.

This page left intentionally blank.

VI. FUNCTIONAL PERFORMANCE INDICATOR TRENDS

To further assess CCCTA'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 CCCTA or for which input data were maintained by SCT 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, CCCTA'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 7.

- Administrative costs increased from 23 percent to 25 percent of total operating costs in FY2016.
- Administrative costs rose from $24.93 per vehicle service hour in the first year to $27.46 in FY2016 (ten percent)
- The portion of administrative costs attributed to marketing activities decreased overall from just over two percent in the first two years to 1.8 percent in FY2016.
- Marketing expenditures remained at about $0.04 per passenger trip in all three years.
- The systemwide farebox recovery ratio declined from nearly 16 percent in FY2014 and FY2015 to 14.8 percent in the last year.

* * * * *

The following is a brief summary of the systemwide functional trend highlights between FY2014 and FY2016:

- Administrative costs increased moderately to 25 percent of total operating costs, and also increased by ten percent to $27.46 per vehicle service hour in FY2016.

- Marketing costs decreased overall compared to total administrative costs but remained at about $0.04 per passenger trip.

- The systemwide farebox recovery ratio declined from nearly 16 percent to 14.8 percent by FY2016.

Exhibit 7: Functional Performance Trends - Systemwide

FUNCTION/Indicator	Actual Performance		
	FY2014	FY2015	FY2016
MANAGEMENT, ADMINISTRATION & MARKETING			
Administrative Cost/Total Operating Cost	22.6%	23.2%	24.7%
Annual Percent Change	- -	*2.8%*	*6.6%*
Three Year Percent Change	- -	- -	*9.6%*
Adminstrative Cost/Vehicle Service Hour	$24.93	$25.59	$27.46
Annual Percent Change	- -	*2.7%*	*7.3%*
Three Year Percent Change	- -	- -	*10.2%*
Marketing Cost/Total Administrative Cost	2.1%	2.2%	1.8%
Annual Percent Change	- -	*8.5%*	*-17.2%*
Three Year Percent Change	- -	- -	*-10.2%*
Marketing Cost/Unlinked Passenger Trip	$0.04	$0.04	$0.04
Annual Percent Change	- -	*2.8%*	*-10.5%*
Three Year Percent Change	- -	- -	*-8.0%*
Farebox Recovery Ratio (Farebox Rev./Oper. Cost)	15.6%	15.8%	14.8%
Annual Percent Change	- -	*1.6%*	*-6.6%*
Three Year Percent Change	- -	- -	*-5.0%*

Bus Service

CCCTA'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 8.

- Service Planning

  - Operating costs per passenger mile decreased from $1.33 in the first year to $1.73 in FY2016 (5.3 percent).

  - The bus service farebox recovery ratio declined slightly overall from 16.3 percent in the first year to 15.7 percent in FY2016. At the same time, the TDA recovery ratio decreased from 31.1 percent to 30.6 percent. For this calculation, farebox revenue is augmented with local support and operating costs reflect various allowable exclusions.

  - About 76 percent of all vehicle miles traveled were in service, as were about 88 percent of all vehicle hours in all three years.

  - Passengers carried per service mile and per service hour both improved by about eight percent over the three years.

- Operations

  - Vehicle operations costs comprised 61.5 percent of total operating costs in the first year, but decreased steadily to 58.5 percent in FY2016.

  - Vehicle operations costs per service hour decreased as well in each year, from $76.24 in FY2014 to $72.73 by FY2016.

  - In FY2016, operator scheduled absences (primarily for vacation, floating holidays and union business) amounted to five percent of total operator days, while unscheduled absences (primarily for sick time) amounted to 7.2 percent. Similar data for the two preceding years were not available, prior to implementation of a new reporting system.

- Actual operator pay hours to platform hours remained between 151 percent and 156 percent through the period.

- Schedule adherence improved from 83 percent in FY2014 to 86 percent in the last two years.

- The rate of complaints decreased in each year, by 32 percent over the three years.

- The incidence of missed trips was reduced in each year, from 0.13 percent in FY2014 to 0.11 percent in FY2016.

- Maintenance

  - Total maintenance costs comprised about 17 percent of total operating costs throughout the period.

  - Vehicle maintenance costs per service mile increased overall from $1.66 to $1.73 (4.1 percent).

  - Mechanic pay hours increased slightly from 21.6 percent of vehicle service hours to 22.5 percent over the period.

  - Maintenance employee scheduled absences decreased in each year, from over nine percent of total time in the first two years to 7.4 percent in FY2016. Unscheduled absences also decreased in each year, from 6.4 percent in FY2014 to 3.7 percent in FY2016.

  - The vehicle spare ratio decreased from 26 percent in the first year to 23 percent in the two subsequent years.

  - The mean distance between major failures improved overall by nearly 40 percent. When looking at all failures, there was steady improvement -- close to 30 percent through the period.

- Safety

  - The rate of preventable accidents was about the same in FY2014 and FY2016, but more positive results in the interim year.

- Casualty/liability costs per service hour and mile both decreased by about ten percent overall.

* * * * *

The following is a brief summary of the bus service functional trend highlights between FY2014 and FY2016:

- Service Planning results showed the operating cost per passenger mile decreasing by 5.3 percent, farebox recovery remaining at about 16 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) remaining at about 31 percent. Consistently 76 percent or more vehicle miles and hours were in service, and passenger productivity improved by eight percent.

- Operations results showed vehicle operations costs per service hour decreasing steadily and reduced compared to total costs as well. Operator absence data were only available for FY2016, when scheduled and unscheduled absences comprised five and seven percent of total operator time, respectively. Actual operator pay to platform hours remained at just above 150 percent. There was some improvement in schedule adherence to 86 percent, a substantial decrease in complaints received, and very few missed trips.

- Maintenance results showed maintenance costs steady at 17 percent of total costs but vehicle maintenance costs per service mile up by 4.1 percent, mechanic pay hours up slightly compared to service hours, general reductions in maintenance employee scheduled and unscheduled absence rates, the vehicle spare ratio reduced from 26 to 23 percent, and noticeable improvement in the mechanical failure rates.

- Safety results showed the rate of preventable accidents about the same in FY2014 and FY2016, and ten percent decreases in the casualty/liability cost rates.

Exhibit 8: Functional Performance Trends – Bus Service

FUNCTION/Indicator	Actual Performance		
	FY2014	FY2015	FY2016
SERVICE PLANNING			
Total Operating Cost/Passenger Mile	$1.83	$1.79	$1.73
Annual Percent Change	- -	*-2.4%*	*-3.0%*
Three Year Percent Change	- -	- -	*-5.3%*
Farebox Recovery Ratio (Farebox Rev./Oper. Cost)	16.3%	16.7%	15.7%
Annual Percent Change	- -	*2.8%*	*-6.4%*
Three Year Percent Change	- -	- -	*-3.7%*
TDA Recovery Ratio *(a)*	31.1%	32.3%	30.6%
Annual Percent Change	- -	*4.1%*	*-5.4%*
Three Year Percent Change	- -	- -	*-1.6%*
Vehicle Service Miles/Total Miles	76.1%	75.6%	75.6%
Annual Percent Change	- -	*-0.7%*	*0.1%*
Three Year Percent Change	- -	- -	*-0.6%*
Vehicle Service Hours/Total Hours	88.1%	87.4%	87.7%
Annual Percent Change	- -	*-0.8%*	*0.3%*
Three Year Percent Change	- -	- -	*-0.5%*
Passengers/Vehicle Service Mile	1.37	1.48	1.48
Annual Percent Change	- -	*7.5%*	*0.1%*
Three Year Percent Change	- -	- -	*7.7%*
Passengers/Vehicle Service Hour	15.0	16.3	16.2
Annual Percent Change	- -	*8.7%*	*-0.4%*
Three Year Percent Change	- -	- -	*8.2%*
OPERATIONS			
Vehicle Operations Cost/Total Operating Cost	61.5%	60.2%	58.5%
Annual Percent Change	- -	*-2.1%*	*-3.0%*
Three Year Percent Change	- -	- -	*-5.0%*
Vehicle Operations Cost/Vehicle Service Hour	$76.24	$74.73	$72.73
Annual Percent Change	- -	*-2.0%*	*-2.7%*
Three Year Percent Change	- -	- -	*-4.6%*
Operator Sched. Absences/Total Operator Days	*(b)*	*(b)*	5.0%
Annual Percent Change	- -	- -	- -
Three Year Percent Change	- -	- -	- -
Operator Unsched. Absences/Total Operator Days	*(b)*	*(b)*	7.2%
Annual Percent Change	- -	- -	- -
Three Year Percent Change	- -	- -	- -

FUNCTION/Indicator	Actual Performance		
	FY2014	FY2015	FY2016
OPERATIONS (continued)			
Operator Pay Hours to Platform Hours - Actual	155.0%	151.0%	156.4%
Annual Percent Change	- -	*-2.6%*	*3.6%*
Three Year Percent Change	- -	- -	*0.9%*
Trips On-Time/Total Trips	83%	86%	86%
Annual Percent Change	- -	*3.6%*	*0.0%*
Three Year Percent Change	- -	- -	*3.6%*
Complaints/100,000 Unlinked Passenger Trips	13.0	9.8	8.8
Annual Percent Change	- -	*-24.8%*	*-9.4%*
Three Year Percent Change	- -	- -	*-31.9%*
Missed Trips/Total Trips	0.13%	0.12%	0.11%
Annual Percent Change	- -	*-5.1%*	*-11.0%*
Three Year Percent Change	- -	- -	*-15.5%*
MAINTENANCE			
Vehicle + Non-Veh. Maint. Cost/Total Operating Cost	17.3%	17.7%	17.8%
Annual Percent Change	- -	*2.4%*	*0.2%*
Three Year Percent Change	- -	- -	*2.6%*
Vehicle Maintenance Cost/Vehicle Service Mile	$1.66	$1.70	$1.73
Annual Percent Change	- -	*2.5%*	*1.6%*
Three Year Percent Change	- -	- -	*4.1%*
Mechanic Pay Hours/Vehicle Service Hours	21.6%	22.2%	22.5%
Annual Percent Change	- -	*2.5%*	*1.2%*
Three Year Percent Change	- -	- -	*3.8%*
Maintenance Employee Scheduled Absences	9.4%	9.1%	7.4%
Annual Percent Change	- -	*-3.1%*	*-18.8%*
Three Year Percent Change	- -	- -	*-21.3%*
Maintenance Employee Unscheduled Absences	6.4%	5.8%	3.7%
Annual Percent Change	- -	*-10.2%*	*-36.2%*
Three Year Percent Change	- -	- -	*-42.7%*
Spare Vehicles/Total Vehicles	26.4%	23.1%	23.1%
Annual Percent Change	- -	*-12.5%*	*0.0%*
Three Year Percent Change	- -	- -	*-12.5%*
Mean Distance between Major Failures (Miles)	25,458	38,795	35,443
Annual Percent Change	- -	*52.4%*	*-8.6%*
Three Year Percent Change	- -	- -	*39.2%*
Mean Distance between All Failures (Miles)	17,295	20,909	22,272
Annual Percent Change	- -	*20.9%*	*6.5%*
Three Year Percent Change	- -	- -	*28.8%*

FUNCTION/Indicator	Actual Performance		
	FY2014	FY2015	FY2016
SAFETY			
Preventable Accidents/100,000 Vehicle Miles	0.94	0.84	0.97
Annual Percent Change	- -	*-11.1%*	*15.8%*
Three Year Percent Change	- -	- -	*3.0%*
Casualty & Liability Cost/Vehicle Service Hour	$3.33	$2.83	$3.01
Annual Percent Change	- -	*-14.9%*	*6.2%*
Three Year Percent Change	- -	- -	*-9.6%*
Casualty & Liability Cost/Vehicle Service Mile	$0.31	$0.26	$0.28
Annual Percent Change	- -	*-15.7%*	*6.7%*
Three Year Percent Change	- -	- -	*-10.1%*

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

(b) Not available

Paratransit

CCCTA's paratransit functional area trends represent mostly similar areas to the bus service. Audit period performance is discussed below and presented in Exhibit 9.

- Service Planning
  - Operating costs per passenger mile increased from about $3.50 in the first two years to $3.75 in FY2016 (6.6 percent overall).
  - The farebox recovery ratio declined from 11.9 percent in the first year to 10.2 percent in FY2016. At the same time, the TDA recovery ratio (farebox revenue augmented with local support and operating costs reflecting allowable exclusions) remained in a range of 36 to 38 percent.
  - About 82 percent of all vehicle miles traveled were in service in FY2014 and FY2016, though a single-year increase to 93 percent was reported in FY2015. About 80 percent of all vehicle hours were in service in all three years.
  - Passengers carried per service mile increased slightly, while passengers carried per service hour decreased slightly.
- Operations
  - Vehicle operations costs consistently comprised just over 60 percent of total operating costs.
  - Vehicle operations costs per service hour increased overall from $43.15 to $43.70 (1.3 percent).
  - Schedule adherence decreased during the audit period from 86 percent in FY2014 to a low of 81 percent in FY2016.
  - The rate of complaints also decreased, by nearly 50 percent overall during the period.

- There were no ADA trip denials.

- The trip cancellation rate decreased in each year, from 15.7 percent of total ADA trips in FY2014 to 13.0 percent by FY2016.

- The passenger no-show rate increased overall, but remained at less than one percent of total ADA trips.

- Maintenance

  - Total maintenance costs remained at about 8.5 percent of total operating costs throughout the period.

  - Vehicle maintenance costs per service mile increased overall from $0.36 to $0.41 (16 percent).

  - The vehicle spare ratio increased in each year, from 12.7 percent in the first year to 20.6 percent in FY2016.

  - The mean distance between major failures improved significantly. When looking at all failures, there was also a very positive trend.

- Safety

  - The rate of preventable accidents doubled in FY2015 compared to FY2014, but then achieved the best performance during the audit period in FY2016.

* * * * *

The following is a brief summary of the paratransit functional trend highlights between FY2014 and FY2016:

- Service Planning results showed operating cost per passenger mile increasing by 6.6 percent overall, the farebox recovery ratio decreasing from

11.9 to 10.2 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) remaining between 36 and 38 percent. Consistently 80 percent or more vehicle miles and hours were in service, and passenger productivity was relatively steady.

- Operations results showed steady vehicle operations costs per hour with a small increase compared to total costs. Schedule adherence decreased over the audit period from 86 to 81 percent. At the same time there was a significant overall decrease in the rate of complaints. There were no ADA trip denials, the trip cancellation rate improved, and passenger no-shows increased but remained below one percent of ADA trips.

- Maintenance results showed total maintenance costs remaining at 8.5 percent of total costs, while vehicle maintenance costs per service mile increased overall from $0.36 to $0.41. The spare ratio increased from about 13 to 20 percent, and there was significant improvement in the mechanical failure rates.

- Safety results showed the preventable accident rate improved overall, despite less positive results in the interim year.

Exhibit 9: Functional Performance Trends – Paratransit

FUNCTION/Indicator	Actual Performance		
	FY2014	FY2015	FY2016
SERVICE PLANNING			
Total Operating Cost/Passenger Mile	$3.52	$3.48	$3.75
Annual Percent Change	- -	*-1.0%*	*7.7%*
Three Year Percent Change	- -	- -	*6.6%*
Farebox Recovery Ratio (Farebox Rev./Oper. Cost)	11.9%	10.8%	10.2%
Annual Percent Change	- -	*-8.9%*	*-6.1%*
Three Year Percent Change	- -	- -	*-14.4%*
TDA Recovery Ratio *(a)*	36.9%	37.8%	36.4%
Annual Percent Change	- -	*2.5%*	*-3.7%*
Three Year Percent Change	- -	- -	*-1.3%*
Vehicle Service Miles/Total Miles	82.4%	93.8%	82.1%
Annual Percent Change	- -	*13.9%*	*-12.5%*
Three Year Percent Change	- -	- -	*-0.4%*
Vehicle Service Hours/Total Hours	80.2%	80.5%	79.5%
Annual Percent Change	- -	*0.4%*	*-1.2%*
Three Year Percent Change	- -	- -	*-0.8%*
Passengers/Vehicle Service Mile	0.13	0.13	0.14
Annual Percent Change	- -	*-0.3%*	*8.7%*
Three Year Percent Change	- -	- -	*8.4%*
Passengers/Vehicle Service Hour	2.1	2.1	2.0
Annual Percent Change	- -	*-0.2%*	*-5.3%*
Three Year Percent Change	- -	- -	*-5.6%*
OPERATIONS			
Vehicle Operations Cost/Total Operating Cost	61.4%	61.4%	61.7%
Annual Percent Change	- -	*0.0%*	*0.5%*
Three Year Percent Change	- -	- -	*0.5%*
Vehicle Operations Cost/Vehicle Service Hour	$43.15	$42.59	$43.70
Annual Percent Change	- -	*-1.3%*	*2.6%*
Three Year Percent Change	- -	- -	*1.3%*
Trips On-Time/Total Trips	86%	84%	81%
Annual Percent Change	- -	*-2.7%*	*-3.6%*
Three Year Percent Change	- -	- -	*-6.1%*
Complaints/10,000 Unlinked Passenger Trips	1.1	1.6	0.6
Annual Percent Change	- -	*40.5%*	*-63.3%*
Three Year Percent Change	- -	- -	*-48.4%*

FUNCTION/Indicator	Actual Performance		
	FY2014	FY2015	FY2016
OPERATIONS (continued)			
ADA Trip Denials/Total ADA Trips	0.0%	0.0%	0.0%
Annual Percent Change	- -	- -	- -
Three Year Percent Change	- -	- -	- -
Trip Cancellations/Total ADA Trips	15.7%	14.6%	13.0%
Annual Percent Change	- -	*-6.7%*	*-11.1%*
Three Year Percent Change	- -	- -	*-17.0%*
No-Shows/Total ADA Trips	0.6%	0.8%	0.7%
Annual Percent Change	- -	*33.8%*	*-18.4%*
Three Year Percent Change	- -	- -	*9.2%*
MAINTENANCE			
Vehicle + Non-Veh. Maint. Cost/Total Operating Cost	8.4%	8.4%	8.5%
Annual Percent Change	- -	*-0.5%*	*0.8%*
Three Year Percent Change	- -	- -	*0.3%*
Vehicle Maintenance Cost/Vehicle Service Mile	$0.36	$0.35	$0.41
Annual Percent Change	- -	*-1.3%*	*17.8%*
Three Year Percent Change	- -	- -	*16.2%*
Spare Vehicles/Total Vehicles	12.7%	15.3%	20.6%
Annual Percent Change	- -	*20.1%*	*35.3%*
Three Year Percent Change	- -	- -	*62.5%*
Mean Dist. betw. Major Failures (Miles)	369,862	429,228	663,831
Annual Percent Change	- -	*16.1%*	*54.7%*
Three Year Percent Change	- -	- -	*79.5%*
Mean Dist. betw. All Failures (Miles)	35,225	40,240	49,173
Annual Percent Change	- -	*14.2%*	*22.2%*
Three Year Percent Change	- -	- -	*39.6%*
SAFETY			
Preventable Accidents/100,000 Vehicle Miles	0.47	0.93	0.45
Annual Percent Change	- -	*97.0%*	*-51.5%*
Three Year Percent Change	- -	- -	*-4.5%*

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

This page left intentionally blank.

VII. CONCLUSIONS AND RECOMMENDATIONS

The preceding sections presented a review of CCCTA's transit service performance during the three-year period of FY2014 through FY2016 (July 1, 2013 through June 30, 2016). They focused on TDA compliance issues including trends in TDA-mandated performance indicators and compliance with selected sections of the state Public Utilities Code (PUC). They also provided the findings from an overview of CCCTA's data collection activities to support the TDA indicators, actions taken to implement recommendations from the prior performance audit, and a review of selected key functional performance results.

Conclusions

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

- Data Collection – CCCTA 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.

  However, an exception relates to the reported FY2016 service and hours and miles for paratransit (which correspond to revenue vehicle hours and miles). They are trending in opposite directions (hours increasing 3.5 percent over FY2015, but miles decreasing 9.8 percent). This is an unexpected situation, as these statistics normally trend in the same direction. In explanation, CCCTA staff initially suggested that the contract operator had temporarily changed fuel providers (between May 2015 and July 2016) to one located much closer to the CCCTA facility. This could have significantly decreased the total vehicle miles traveled, but would not be expected to have much impact on vehicle service miles per se. A continuing investigation by CCCTA and contractor staff has not yet yielded any

further definitive explanation. This raises some concerns about data accuracy, which if left unchecked, could result in further discrepancies in the future.

- TDA Performance Trends

CCCTA'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 FY2011 through FY2016:

– There was an average annual increase in the operating cost per hour of 1.5 percent, which amounted to a one percent decrease in inflation adjusted dollars.

– The cost per passenger increased on average by 1.1 percent per year, which amounted to an average annual decrease of 1.4 percent in constant FY2011 dollars.

– Passenger productivity showed somewhat positive trends, with passengers per vehicle service hour increasing by 0.5 percent per year overall, and passengers per vehicle service mile increasing by 0.6 percent annually.

– Employee productivity decreased 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 FY2011 and FY2016:

– Labor costs went up by nearly three percent per year, remaining the largest component cost area at nearly 50 percent of total costs. Labor costs increased in the last year (FY2016) by more than double the rate of any previous year. This reflected stipulations in a new labor agreement.

– Fringe benefit costs went up by more than six percent per year, significantly higher than labor costs, and increased their share from

27 to 32 percent of total costs during the period. This reflected externally mandated increases in medical and pension contribution costs.

– There were moderate changes overall in most other component costs, with a substantial net decrease in fuel/lubricants costs. Casualty/liability costs increased by 12 percent annually on average, but varied from year to year and only contributed about two percent of total costs.

Paratransit – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2011 through FY2016:

– For cost efficiency, there was an average annual increase in the operating cost per hour of 2.1 percent; however, this amounted to an annual decrease of 0.4 percent in inflation adjusted dollars.

– The operating cost per passenger achieved a slight annual decrease (0.1 percent on average) when normalized in FY2011 dollars.

– Passenger productivity showed mixed results, with passengers per hour decreasing by 0.4 percent per year on average, but passengers per mile increasing by 1.9 percent annually.

– The net result for employee productivity was an average annual decrease of 1.9 percent.

The following is a brief summary of the component operating costs trend highlights for paratransit between FY2011 and FY2016:

– Purchased transportation costs represented by far the largest portion of the total costs, at about 96 percent throughout the review period. They increased by about one percent per year on average despite a 6.2 percent increase in FY2016.

– There was a 22 percent average annual decrease in materials/ supplies; however, this category only accounted for about 0.1 percent of the total costs.

- Other component cost categories changed by three percent or less per year on average, with no casualty/liability expenses reported except in FY2011.

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

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

- Functional Performance Indicator Trends

  To further assess CCCTA'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 FY2014 and FY2016:

  - Administrative costs increased moderately to 25 percent of total operating costs, and also increased by ten percent to $27.46 per vehicle service hour in FY2016.

  - Marketing costs decreased overall compared to total administrative costs but remained at about $0.04 per passenger trip.

  - The systemwide farebox recovery ratio declined from nearly 16 percent to 14.8 percent by FY2016.

  Bus Service – The following is a brief summary of the bus service functional trend highlights between FY2014 and FY2016:

  - Service Planning results showed the operating cost per passenger mile decreasing by 5.3 percent, farebox recovery remaining at about

16 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) remaining at about 31 percent. Consistently 76 percent or more vehicle miles and hours were in service, and passenger productivity improved by eight percent.

- Operations results showed vehicle operations costs per service hour decreasing steadily and reduced compared to total costs as well. Operator absence data were only available for FY2016, when scheduled and unscheduled absences comprised five and seven percent of total operator time, respectively. Actual operator pay to platform hours remained at just above 150 percent. There was some improvement in schedule adherence to 86 percent, a substantial decrease in complaints received, and very few missed trips.

- Maintenance results showed maintenance costs steady at 17 percent of total costs but vehicle maintenance costs per service mile up by 4.1 percent, mechanic pay hours up slightly compared to service hours, general reductions in maintenance employee scheduled and unscheduled absence rates, the vehicle spare ratio reduced from 26 to 23 percent, and noticeable improvement in the mechanical failure rates.

- Safety results showed the rate of preventable accidents about the same in FY2014 and FY2016, and ten percent decreases in the casualty/liability cost rates.

Paratransit – The following is a brief summary of the paratransit functional trend highlights between FY2014 and FY2016:

- Service Planning results showed operating cost per passenger mile increasing by 6.6 percent overall, the farebox recovery ratio decreasing from 11.9 to 10.2 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) remaining between 36 and 38 percent. Consistently 80 percent or more vehicle miles and hours were in service, and passenger productivity was relatively steady.

- Operations results showed steady vehicle operations costs per hour with a small increase compared to total costs. Schedule adherence

decreased over the audit period from 86 to 81 percent. At the same time there was a significant overall decrease in the rate of complaints. There were no ADA trip denials, the trip cancellation rate improved, and passenger no-shows increased but remained below one percent of ADA trips.

- Maintenance results showed total maintenance costs remaining at 8.5 percent of total costs, while vehicle maintenance costs per service mile increased overall from $0.36 to $0.41. The spare ratio increased from about 13 to 20 percent, and there was significant improvement in the mechanical failure rates.

- Safety results showed the preventable accident rate improved overall, despite less positive results in the interim year.

Recommendations

1. DEVELOP AND IMPLEMENT STRATEGIES TO IMPROVE SCHEDULE ADHERENCE ON THE PARATRANSIT SERVICE.
[Reference Section: VI. Functional Performance Indicator Trends]

It was found that over the audit period, CCCTA's paratransit schedule adherence was relatively low, and decreased steadily from year to year. The County Connection LINK service's on-time performance worsened from 86 percent in FY2014 to 84 percent in FY2015 and 81 percent in FY2016. In order to provide more reliable service, CCCTA and its contractor should expand efforts toward reversing this trend. These efforts should include additional monitoring activities to identify the causes, and a plan for addressing the circumstances found that are hindering LINK's on-time performance.

APPENDIX A:
INPUT STATISTICS FOR
FUNCTIONAL PERFORMANCE MEASURES

Functional Performance Inputs - Systemwide (All Modes)

Data Item	FY2014	FY2015	FY2016	Source
Total Operating Costs	$32,797,418	$32,528,980	$33,763,770	NTD F-40
Administrative Costs	$7,401,714	$7,549,067	$8,355,051	NTD F-40
Vehicle Service Hours	296,947	295,037	304,227	NTD S-10 (all modes)
Marketing Costs	151,796	167,962	153,883	CCCTA Staff
Unlinked Passenger Trips	3,487,222	3,753,886	3,842,825	NTD S-10 (all modes)
Farebox Revenue (All Modes)	$5,105,101	$5,145,958	$4,990,623	NTD F-10

Functional Performance Inputs – Bus Service

Data Item	FY2014	FY2015	FY2016	Source
Operator Pay Hours - Actual	391,616	382,486	406,595	Fixed Route Year-End Rpt
Vehicle Service Miles	2,421,102	2,433,010	2,491,968	NTD S-10 MB
Total Vehicle Miles	3,182,307	3,219,971	3,296,216	NTD S-10 MB
Platform Hours - Scheduled	251,547	252,103	259,157	CCCTA Staff
Platform Hours - Actual	252,589	253,316	259,985	CCCTA Staff (NTD S-10)
Vehicle Service Hours	222,553	221,320	227,916	NTD S-10 MB
Total Vehicle Hours	252,589	253,316	259,985	NTD S-10 MB
Unlinked Passenger Trips	3,328,558	3,597,054	3,689,110	NTD S-10 MB
Farebox Revenue	$4,484,135	$4,592,437	$4,441,003	NTD F-10, FY2016 Budget, 2016-25 SRTP
Local Support - Taxes Directly Levied (Measure J)	$4,081,743	$4,287,458	$4,231,476	CCCTA Staff
Total Operating Costs	$27,566,494	$27,453,734	$28,354,932	NTD F-30 MB
Passenger Miles	15,077,109	15,379,992	16,372,305	NTD S-10 MB
Vehicle Operations Costs	$16,966,714	$16,538,415	$16,575,560	NTD F-30 MB
Total Operator Work Days	Not available	Not available	60,025	CCCTA Staff
Operator Scheduled Days Absent	Not available	Not available	3,025	CCCTA Staff
Operator Unscheduled Days Absent	Not available	Not available	4,298	CCCTA Staff
Trips On-Time	83%	86%	86%	Fixed Route Year-End Rpt
Total Trips	284,120	295,146	306,512	Fixed Route Year-End Rpt
Complaints	432	351	326	CCCTA Staff
Missed Trips	363	358	331	Fixed Route Year-End Rpt
Mechanic Pay Hours	48,137	49,080	51,174	Fixed Route Year-End Rpt
Total Maintenance Employee Work Hours	47,664	49,872	62,184	CCCTA Staff
Maint. Employee Sched. Hours Absent	4,464	4,528	4,584	CCCTA Staff
Maint. Employee Unsched. Hours Absent	3,072	2,888	2,296	CCCTA Staff
Vehicle Maintenance Costs	$4,020,361	$4,142,364	$4,309,283	NTD F-30 MB
Non-Vehicle Maintenance Costs	$756,682	$729,141	$730,700	NTD F-30 MB
Spare Vehicles (Total less Maximum Service)	32	28	28	NTD S-10 MB
Total Vehicles	121	121	121	NTD S-10 MB
Revenue Vehicle Mechanical System Failures - Total	184	154	148	NTD R-20
Revenue Vehicle Mechanical System Failures - Major	125	83	93	NTD R-20
Preventable Accidents	30	27	32	Fixed Route Year-End Rpt
Casualty/Liability Costs	$740,595	$627,088	$685,551	NTD F-30 MB

Functional Performance Inputs – Paratransit

Data Item	FY2014	FY2015	FY2016	Source
Vehicle Service Miles	1,218,760	1,208,223	1,089,505	NTD S-10 DR
Total Vehicle Miles	1,479,448	1,287,684	1,327,662	NTD S-10 DR
Vehicle Service Hours	74,394	73,717	76,311	NTD S-10 DR
Total Vehicle Hours	92,798	91,624	95,997	NTD S-10 DR
Unlinked Passenger Trips	158,664	156,832	153,715	NTD S-10 DR
Farebox Revenue	$620,968	$553,521	$549,620	NTD F-10, FY2016 Budget
Local Support - Taxes Directly Levied (Measure J)	$1,308,400	$1,380,877	$1,419,166	CCCTA Staff
Total Operating Costs	$5,230,924	$5,117,036	$5,408,838	NTD F-30 DR
Passenger Miles	1,485,996	1,468,797	1,441,554	NTD S-10 DR
Vehicle Operations Costs	$3,209,946	$3,139,610	$3,334,640	NTD F-30 DR
Trips On-Time	86%	84%	81%	CCCTA Staff, LINK Year-End Monthly Rpt
Total Trips	159,295	156,830	153,714	CCCTA Staff
Complaints	18	25	9	LINK Year-End Monthly Rpt
Total ADA Trips	149,455	147,493	144,893	CCCTA Staff
ADA Trip Denials	0	0	0	LINK Year-End Monthly Rpt
Trip Cancellations	23,470	21,605	18,878	LINK Year-End Monthly Rpt
No Shows	933	1,232	988	LINK Year-End Monthly Rpt
Vehicle Maintenance Costs	$433,096	$423,606	$449,920	NTD F-30 DR
Non-Vehicle Maintenance Costs	$8,905	$6,777	$8,616	NTD F-30 DR
Spare Vehicles	8	9	13	NTD S-10 DR
Total Vehicles	63	59	63	NTD S-10 DR
Revenue Vehicle Mechanical System Failures - Total	42	32	27	NTD R-20
Revenue Vehicle Mechanical System Failures - Major	4	3	2	NTD R-20
Preventable Accidents	7	12	6	LINK Year-End Monthly Rpt