

# *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 Sonoma County Transit (SCT). 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 SCT, 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 SCT'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 SCT's performance based on the results of the previous sections.

Comments received from SCT 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 SCT 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 SCT 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, the trends in paratransit vehicle service hours and miles were not always commensurate. This was especially noticeable with the reported increases in FY2014 (11 percent for hours versus one percent for miles) and in FY2016 (13 percent for hours versus less than eight percent for miles). Hours and miles would normally be expected to trend in a relatively similar fashion from year to year. SCT staff attributed these results to increases in those years in the number of shorter distance trips provided, causing hours to increase at a higher rate than miles.

Also, for the paratransit service, there was a significant operating cost increase in FY2015 that does not appear to be the result of additional service. SCT staff indicated this resulted from wages being increased by the operating contractor for paratransit drivers during FY2015 to attract and retain employees, and to comply with Sonoma County's recently adopted Living Wage Ordinance.

<u>Performance Indicators and Trends</u> – SCT'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.

- <u>Bus Service</u> 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 0.7 percent, which amounted to a 1.8 percent decrease in inflation adjusted dollars.
  - The cost per passenger increased on average by five percent per year, which amounted to an average annual increase of 2.4 percent in constant FY2011 dollars.
  - Passenger productivity showed negative trends, with passengers per vehicle service hour decreasing by 4.1 percent per year overall, and passengers per vehicle service mile decreasing by 3.3 percent annually. Decreases reflect a general decline in passengers combined with increased service from SCT's recent takeover of two local shuttle routes, and changes made to several other routes.
  - Employee productivity increased an average 2.3 percent per year.

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

- In-house labor and fringe benefits costs both decreased overall, by six percent or more on average per year. In FY2016, labor costs were down somewhat but fringe benefits costs increased by 21 percent – driven by a one-time payment for fringe benefits to the City of Cloverdale.
- There was a five percent annual reduction in fuel/lubricants costs, but a 7.8 percent annual increase in the "other expenses" category.
   Casualty and liability costs saw almost no net change.

- Purchased transportation costs increased on average by 3.3 percent annually, and comprised by far the largest share of total costs.
- Services costs and "other expenses" both contributed about ten percent of total costs in all years, with the remaining areas generally contributing five percent or less.
- <u>Paratransit</u> 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 four percent (1.5 percent in inflation adjusted dollars).
  - The operating cost per passenger achieved an annual decrease of 2.8 percent when normalized in FY2011 dollars.
  - Passenger productivity improved, with passengers per hour and passengers per mile increasing by 4.4 percent and 5.3 percent per year on average, respectively.
  - The net result for employee productivity was an average annual increase of three percent.

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

- Total annual costs increased by about seven percent on average, with the most significant component cost change being a 19 percent annual increase in the services area.
- There was a 12.8 percent annual increase in the "other expenses" category, and an annual increase of nearly eight percent in casualty/liability costs.
- In-house labor and fringe benefits costs both decreased overall, as did fuel/lubricants costs.
- Purchased transportation costs increased on average by 6.8 percent annually, and comprised by far the largest share of total costs. A 15

percent increase in FY2015 resulted from wages being increased by the operating contractor for paratransit drivers.

 Services costs contributed more than 15 percent of total costs by the end of the period, with the remaining areas generally contributing less than ten percent in all years.

<u>PUC Compliance</u> – SCT 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.

<u>Status of Prior Audit Recommendations</u> – There were no recommendations made in SCT's prior performance audit.

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

- <u>Systemwide</u> The following is a brief summary of the systemwide functional trend highlights between FY2014 and FY2016:
  - Administrative costs remained at about 20 percent of total operating costs, but increased moderately to \$23.49 per vehicle service hour in FY2016.
  - Marketing costs increased overall compared to total administrative costs and passenger trips, reflecting costs of an expanded free ride pilot program for veterans and local college students.
  - The systemwide farebox recovery ratio declined from 15.4 to 13.9 percent, a trend likely impacted by fare structure changes during the period.

- <u>Bus Service</u> The following is a brief summary of the bus service functional trend highlights between FY2014 and FY2016:
  - Service Planning results showed operating cost per passenger mile increasing by 15 percent, the farebox recovery ratio decreasing from 17 to 15.5 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) decreasing from 34 to 30 percent. Consistently 80 percent or more vehicle miles and hours were in service, but various service adjustments and generally declining ridership resulted in passenger productivity declining by nearly 14 percent.
  - Operations results showed relatively steady vehicle operations costs per service hour and compared to total costs, with schedule adherence improving to 98 percent. At the same time, there was some increase in the rate of complaints, and the missed trip rate (reflecting SCT's definition of any trip not completed within 15 minutes of the scheduled time) increased but remained below one percent.
  - Maintenance results showed total maintenance costs remaining at about 25 percent of total costs but vehicle maintenance costs per service mile increasing overall by 3.4 percent. The spare ratio was steady near 20 percent, and there was overall improvement in the mechanical failure rates.
  - Safety results showed the preventable accident rate more than doubling over the period. While not inordinately high, the recent increase points to a potentially burgeoning safety issue.
- <u>Paratransit</u> 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 8.7 percent, the farebox recovery ratio decreasing from eight to seven percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) remaining at about 22 percent. Consistently 73 percent or more vehicle miles and hours were in service, and passenger productivity improved.

- Operations results showed relatively steady vehicle operations costs per hour but a 13 percent increase compared to total costs. Schedule adherence decreased from 90 to 86 percent, but at the same time there was a significant decrease in the rate of complaints. The missed trip rate increased but remained very low, and there were no ADA trip denials. Trip cancellations, late trip cancellations, and passenger no-shows all increased by significant percentages, though late cancellations and no-shows remained at comparatively low levels. Passenger cancellations reached nearly 20 percent of all ADA trips by FY2016.
- Maintenance results showed total maintenance costs increasing from 13 to 15 percent of total costs and vehicle maintenance costs per service mile increasing from \$0.43 to \$0.67. The spare ratio decreased to 10.7 percent, and there was significant overall 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. <u>CONTINUE EFFORTS TO IMPROVE PERFORMANCE IN THE PREVENTABLE ACCIDENT RATE FOR SCT'S BUS SERVICE.</u>

[Reference Section: VI. Functional Performance Indicator Trends]

It was found that the rate of preventable accidents, though low overall, increased in each audit year. It more than doubled in FY2015 compared to FY2014. There were 0.68 preventable accidents per 100,000 bus miles traveled in FY2016, comparing unfavorably with 0.66 in FY2015 and 0.32 in FY2014. Safety performance at SCT has been historically excellent, and SCT staff report that the operations contractor has a robust safety and training program in place. Although the number of accidents is not inordinately high, the recent increases in FY2015 and FY2016 points to a potentially burgeoning safety issue which SCT should

address in coordination with its operating contractor. Efforts should include additional strategies to improve operator training and enhance monitoring activities to ensure that safety issues are identified and corrected before they have a chance to escalate.

# 2. <u>DEVELOP AND IMPLEMENT STRATEGIES TO REDUCE TRIP</u> CANCELLATIONS ON THE PARATRANSIT SERVICE.

[Reference Section: VI. Functional Performance Indicator Trends]

Over the audit period, the rates of passenger trip cancellations on SCT's paratransit service increased overall by 18 percent, reaching nearly 20 percent of all ADA trips by FY2016. SCT staff indicated that a large portion of these cancellations are weather-related (e.g., rain storms). Nonetheless, in order to provide service more efficiently and productively, SCT should expand its efforts toward mitigating cancellations. These efforts should include additional paratransit passenger outreach and education.

# **Table of Contents**

	<u>Page No.</u>
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	23
Paratransit Performance Trends	27
Paratransit Component Costs	35
IV. Compliance with PUC Requirements	39
V. Status of Prior Audit Recommendations	43
VI. Functional Performance Indicator Trends	44
Systemwide	45
Bus Service	48
Paratransit	53
VII. Conclusions and Recommendations	58
Appendix A: Input Statistics for Functional Performance Measures	A-1
Functional Performance Inputs - Systemwide (All Modes)	
Functional Performance Inputs – Bus Service	
Functional Performance Inputs – Paratransit	

# **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	18
Exhibit 4.1: Operating Cost per Vehicle Service Hour - Bus Service	19
Exhibit 4.2: Passengers per Hour and per Mile – Bus Service	20
Exhibit 4.3: Operating Cost per Passenger – Bus Service	21
Exhibit 4.4: Vehicle Service Hours per FTE – Bus Service	22
Exhibit 4.5: Component Cost Trends – Bus Service	
Exhibit 4.6: Distribution of Component Costs – Bus Service	26
Exhibit 5: TDA Indicator Performance – Paratransit	30
Exhibit 5.1: Operating Cost per Vehicle Service Hour – Paratransit	31
Exhibit 5.2: Passengers per Hour and per Mile – Paratransit	32
Exhibit 5.3: Operating Cost per Passenger – Paratransit	33
Exhibit 5.4: Vehicle Service Hours per FTE – Paratransit	34
Exhibit 5.5: Component Costs Trends – Paratransit	37
Exhibit 5.6: Distribution of Component Costs – Paratransit	38
Exhibit 6: Compliance with State PUC Requirements	40
Exhibit 7: Functional Performance Trends - Systemwide	
Exhibit 8: Functional Performance Trends – Bus Service	
Exhibit 9: Functional Performance Trends – Paratransit	56

#### 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 Sonoma County Transit (SCT). The two modes operated by SCT, 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 SCT 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 SCT was conducted for MTC in accordance with its established procedures for performance audits. The audit consisted of two discrete steps:

- 1. <u>Compliance Audit</u> 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. <u>Functional Review</u> 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 SCT and MTC staff regarding the draft report have been incorporated into this final report.

## **Exhibit 1: System Overview**

Location

355 West Robles Avenue, Santa Rosa, CA 95407

**Establishment** 

The County has provided paratransit services to the general public since 1979, under contract with the Volunteer Center of Sonoma County. The fixed-route system began operations in July 1980, and has been operated under contract with various private firms. The contractor since 1989 has been Transdev (and its predecessor companies, Veolia and ATC).

Board

SCT is a division of the County of Sonoma Transportation and Public Works Department. Policy direction is received from the five-member Sonoma County Board of Supervisors.

**Facilities** 

The SCT Administration, Operations and Maintenance facility at 355 West Robles Avenue in Santa Rosa is the central base of operations for services. It houses both agency staff and contractor employees. SCT owns and/or maintains 16 park-and-ride facilities throughout the County. SCT also developed and maintains the Petaluma Transit Mall.

Service Data

SCT's fixed-route system provides countywide service along major travel corridors in the rural areas of Sonoma County. It also links most small towns and communities and all nine incorporated cities in the County. In addition to intercity service, SCT provides local public transit service, under contract, within seven cities and a number of unincorporated communities. SCT also contracts with the Mendocino Transit Authority to provide intercounty service between Mendocino and Sonoma Counties, and has an agreement with Golden Gate Transit to provide other services operating within and outside of Sonoma County.

SCT operates 23 fixed-routes Monday through Friday from 5:20 a.m. to 10:37 p.m. On Saturday and Sunday, 13 and 7 routes operate, respectively. Weekend service runs between 7:05 a.m. and 10:02 p.m. Frequencies on most routes are variable and trips are often widely spaced, but headways are generally between 45 minutes and two hours. This reflects the mix of service types and the system's predominantly rural and intercity orientation.

SCT's current fixed-route fleet consists of 53 revenue vehicles, including CNG-fueled 30-foot and 40-foot transit coaches as well as 25-foot gasoline-fueled mini-buses.

The fare structure on intercity routes is based on the distance a passenger travels. The current local and intercity route base fare is \$1.50 for adults, \$1.25 for youth, and \$0.75 for seniors and persons with disabilities. For additional fare zones crossed the fare increases between \$0.60 and \$0.90 for

adults and youth, and between \$0.30 and \$0.45 for senior/disabled. Transfers between SCT routes are free for up to three hours on one-way trips within the first zone, but require a step-up charge for additional zones. Credits are offered for transfers with other connecting operators, and a free boarding zone transfer is available for riders of SCT from Santa Rosa CityBus, Petaluma Transit and Golden Gate Transit. SCT also sells several types of tickets and passes, which offer a substantial discount over the one-way cash fare. For example, a Monthly Pass/31-DayPass is available at \$62.50 for regular adults, \$47.00 for youth and \$31.25 for seniors and persons with disabilities.

Sonoma County Paratransit service is available during the same hours and days as the fixed-route system, within a ¾ mile corridor on each side of each fixed-route. Fares are based on trip length and range up to \$7.80 per one-way trip. The base fare is \$3.00, with an additional step-up fare of between \$1.20 and \$1.80 required for additional fare zones crossed. Currently, the paratransit fleet consists of 31 revenue vehicles, ranging from passenger sedans to gasoline-powered, lift-equipped mini-vans and mini-buses.

#### **Recent Changes**

SCT raised the fares on its fixed-route and paratransit (base and zonal rates) in January 2016 in conjunction with the implementation of Clipper, the regional electronic fare payment system.

SCT assumed the operation of Healdsburg Transit and Cloverdale Transit as new local routes in SCT's system.

SCT introduced its real-time bus arrival information system.

SCT completed the Cotati Depot and Healdsburg Depot park-and-ride facilities.

#### **Planned Changes**

SCT's planned operating changes over the next fiscal year will focus on the introduction of several feeder bus routes to Sonoma Marin Area Rail Transit (SMART) stations located in Sonoma County.

SCT's planned capital projects over the next several fiscal years will focus on the rehabilitation of SCT's Operations and Maintenance Facility, and the replacement of various fixed-route buses and paratransit mini-buses, minivans and sedans, as necessary.

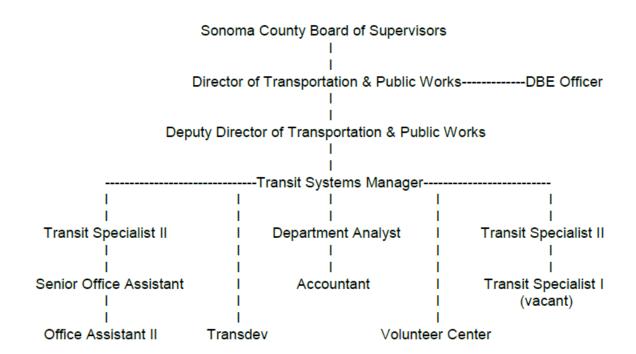
Staff

The Volunteer Center has a staff of approximately 30 persons, including paratransit drivers, reservationists, schedulers, road supervisors and administrative staff. Transdev employs approximately 100 persons,

including bus operators, mechanics, fuelers/washers, road supervisors and management staff. SCT employs an administrative staff of seven:

- Transit Systems Manager
- Transit Specialist II (2)
- Accountant
- Department Analyst
- Senior Office Assistant
- Office Assistant II

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

#### Compliance with Requirements

To support this review, SCT staff provided information that confirmed 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, SCT 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 SCT'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, the trends in SCT's paratransit vehicle service hours and miles were not always commensurate. This was especially noticeable with the reported increases in FY2014 (11 percent for hours versus one percent for miles) and in FY2016 (13 percent for hours versus less than eight percent for miles). Hours and miles would normally be expected to trend in a relatively similar fashion from year to year. SCT staff attributed these results to increases in those years in the number of shorter distance trips provided on paratransit, causing hours to increase at a higher rate than miles.

Also, for the paratransit service, there was a significant operating cost increase in FY2015 that does not appear to be the result of additional service. SCT staff indicated this resulted from wages being increased by the operating contractor for paratransit drivers during FY2015 to attract and retain employees, and to comply with Sonoma County's recently adopted Living Wage Ordinance.

**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	<ul> <li>Fixed-route - operating costs are calculated based on the sum of the operations contractor's costs, County staff costs, and consumables (i.e. parts and fuel). Total operating costs are apportioned to each route in the system based on each routes vehicle service hours.</li> <li>Paratransit - operating costs are calculated based on the sum of the operations contractor's costs, County staff costs, and consumables (i.e. parts and fuel). Costs vary depending on the number of paratransit trips provided on a monthly basis and the average length of trips.</li> </ul>
Vehicle Service Hours	"Vehicle service hours" means the total number of hours that each transit vehicle is in revenue service, including layover time.	In Compliance	<ul> <li>Fixed Route - calculated based on total revenue plus deadhead hours as indicated on each route's schedules. Hours are updated, if necessary, when schedules change.</li> <li>Paratransit - calculated based on daily trip manifests developed by the operations contractor. Revenue plus deadhead hours are collected from trip manifests on a daily basis and summarized in monthly management reports. Total hours are updated as information is verified for each day's service per the dispatch log and the actual trip times the vehicle operator manually collects on their manifests.</li> </ul>

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 - calculated based on the length of each trip for each route in the system times the number of trips provided for each route on a monthly basis. Revenue and deadhead miles are collected by road supervisors in the field and updated, if necessary, when schedules change.
			Paratransit - calculated based on daily trip manifests developed by the operations contractor. Revenue plus deadhead miles are collected by paratransit vehicle operators on a daily basis and summarized in monthly management reports. Miles are updated as information is verified for each day's service per the dispatch log, accounting for cancelled trips and trips that were added to the manifests during the day.
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 - collected and calculated either through an automated on-board GFI fare collection system or manually counted by bus operators on vehicles that do not have GFI systems. Ridership statistics are downloaded from the GFI system or manually collected by staff on a daily basis and presented in monthly management reports.
			Paratransit - collected by paratransit vehicle operators according to daily trip manifests. The number of passenger trips is updated as the information is verified for each day's service per the dispatch log and any changes noted on the vehicle operator's manifest. Ridership is summarized in monthly management reports.
Employee Full- Time Equivalents	2,000 person-hours of work in one year constitute one employee.	In Compliance	Sonoma County Transit defines one FTE employee as 2,000 person-hours of work during a one year period.

Exhibit 3.2: TDA Statistics – Bus Service

TDA Statistic	FY2011	FY2012	FY2012 FY2013		FY2015	FY2016	
Operating Cost (Actual \$)	\$10,707,796	\$10,580,064	\$10,695,944	\$11,560,223	\$11,130,865	\$11,840,301	
Annual Change		-1.2%	1.1%	8.1%	-3.7%	6.4%	
Vehicle Service Hours	85,964	86,488	87,343	89,675	87,490	91,974	
Annual Change		0.6%	1.0%	2.7%	-2.4%	5.1%	
Vehicle Service Miles	1,464,598	1,467,737	1,458,064	1,464,366	1,422,769	1,507,162	
Annual Change		0.2%	-0.7%	0.4%	-2.8%	5.9%	
Unlinked Passengers	1,346,357	1,372,442	1,364,547	1,316,113	1,201,186	1,168,548	
Annual Change		1.9%	-0.6%	-3.5%	-8.7%	-2.7%	
Employee Full-Time Equivalents	111.0	105.0	105.0	102.0	104.0	106.0	
Annual Change		-5.4%	0.0%	-2.9%	2.0%	1.9%	

Sources: FY2011 through FY2013 - Prior Performance Audit Report

FY2014 through FY2016 - NTD Reports, except FTEs - SCT Staff

Exhibit 3.3: TDA Statistics – Paratransit

TDA Statistic	FY2011	FY2012 FY2013		FY2014	FY2015	FY2016	
Operating Cost (Actual \$)	\$1,876,778	\$2,185,503	\$2,156,674	\$2,136,454	\$2,382,905	\$2,646,287	
Annual Change		16.4%	-1.3%	-0.9%	11.5%	11.1%	
Vehicle Service Hours	29,853	34,641	27,788	30,888	30,561	34,560	
Annual Change		16.0%	-19.8%	11.2%	-1.1%	13.1%	
Vehicle Service Miles	455,445	518,968	474,059	478,761	470,075	506,150	
Annual Change		13.9%	-8.7%	1.0%	-1.8%	7.7%	
Unlinked Passengers	36,013	40,958	39,109	45,420	48,981	51,783	
Annual Change		13.7%	-4.5%	16.1%	7.8%	5.7%	
Employee Full-Time Equivalents	31.0	31.0	29.0	33.0	33.0	31.0	
Annual Change		0.0%	-6.5%	13.8%	0.0%	-6.1%	

Sources: FY2011 through FY2013 - Prior Performance Audit Report

FY2014 through FY2016 - NTD Reports, except FTEs - SCT Staff

#### III. TDA PERFORMANCE INDICATORS AND TRENDS

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

- <u>Six-Year Time Period</u> While the performance audit focuses on the three fiscal years of the audit period, six-year trend lines have been constructed for SCT'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 SCT'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 SCT'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 0.7 percent annually during the six-year review period.
- The cost per hour ranged from a low of \$122.33 in FY2012 to a high of \$128.91 in FY2014. In the last year (FY2016), the cost per hour was just below the latter, at \$128.74.

 In FY2011 constant dollars, there was an average annual decrease in this indicator of 1.8 percent.

#### <u>Passengers per Vehicle Service Hour (Exhibit 4.2)</u>

- A key indicator of passenger productivity, passengers per hour decreased an average of 4.1 percent annually during the six-year period.
- Decreases reflect a general decline in passengers combined with increases in service hours in most of the later years. The increase in service hours in FY2016 (5.1 percent) especially reflected SCT's recent takeover of local routes 67 (Healdsburg Shuttle) and 68 (Cloverdale Shuttle) from operation by their respective cities. In addition, there were increased hours associated with changes to local routes in Rohnert Park and Cotati, and revisions to several core intercity routes to improve schedule adherence.
- Passengers per hour decreased overall from 15.7 in FY2011 to 12.7 in FY2016.

### <u>Passengers per Vehicle Service Mile (Exhibit 4.2)</u>

- Similar to passengers per hour, passengers per mile decreased overall, by 3.3 percent annually on average.
- There were more than 0.9 passengers per mile in the earlier years of the review period, followed by steady reduction to less than 0.8 passengers by FY2016.

#### • Operating Cost per Passenger (Exhibit 4.3)

- A key measure of cost effectiveness, the cost per passenger was \$7.95 in the first year of the review period, followed by a decrease in the next year to \$7.71.
- The cost per passenger exhibited a significant increasing trend through the rest of the period, to \$10.13 per passenger in FY2016

- The average annual increase over the six years was five percent, as operating costs increased by two percent per year while passenger levels decreased by nearly three percent per year.
- With the impact of inflation removed from the cost side (normalization), the six-year result was an average annual increase of 2.4 percent in the cost per passenger.

#### • <u>Vehicle Service Hours per Employee (FTE) (Exhibit 4.4)</u>

- A measure of employee productivity (primarily an internal contractor issue for SCT), this indicator increased by an average 2.3 percent per year over the six years.
- Hours per FTE increased overall from just under 774 in the first review year to 868 in the last year.
- Annual FTEs decreased slightly while vehicle service hours increased 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 0.7 percent, which amounted to a 1.8 percent decrease in inflation adjusted dollars.
- The cost per passenger increased on average by five percent per year, which amounted to an average annual increase of 2.4 percent in constant FY2011 dollars.
- Passenger productivity showed negative trends, with passengers per vehicle service hour decreasing by 4.1 percent per year overall, and passengers per vehicle service mile decreasing by 3.3 percent annually.
   Decreases reflect a general decline in passengers combined with increased

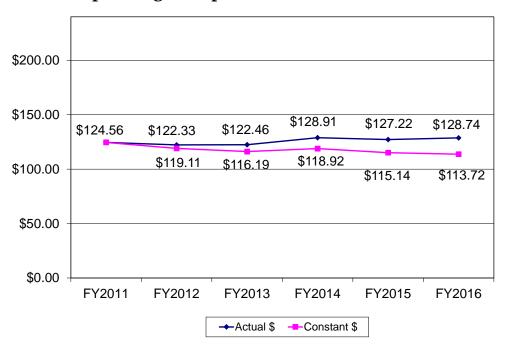
	service from SCT's recent takeover of two local shuttle routes, and changes made to several other routes.
•	Employee productivity increased an average 2.3 percent per year.

**Exhibit 4: TDA Indicator Performance - Bus Service** 

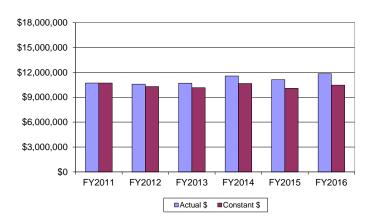
	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	Av. Ann. Chg.
Performance Indicators							
Op. Cost per Vehicle Svc. Hour (Actual \$)	\$124.56	\$122.33	\$122.46	\$128.91	\$127.22	\$128.74	
Annual Change		-1.8%	0.1%	5.3%	-1.3%	1.2%	0.7%
Op. Cost per Vehicle Svc. Hour (Constant \$)	\$124.56	\$119.11	\$116.19	\$118.92	\$115.14	\$113.72	
Annual Change		-4.4%	-2.5%	2.4%	-3.2%	-1.2%	-1.8%
Passengers per Vehicle Service Hour	15.7	15.9	15.6	14.7	13.7	12.7	
Annual Change		1.3%	-1.5%	-6.1%	-6.5%	-7.5%	-4.1%
Passengers per Vehicle Service Mile	0.92	0.94	0.94	0.90	0.84	0.78	
Annual Change		1.7%	0.1%	-4.0%	-6.1%	-8.2%	-3.3%
Op. Cost per Passenger (Actual \$)	\$7.95	\$7.71	\$7.84	\$8.78	\$9.27	\$10.13	
Annual Change		-3.1%	1.7%	12.1%	5.5%	9.3%	5.0%
Op. Cost per Passenger (Constant \$)	\$7.95	\$7.51	\$7.44	\$8.10	\$8.39	\$8.95	
Annual Change		-5.6%	-0.9%	9.0%	3.5%	6.7%	2.4%
Vehicle Service Hours per FTE	774	824	832	879	841	868	
Annual Change		6.4%	1.0%	5.7%	-4.3%	3.1%	2.3%
Input Data							
Operating Cost (Actual \$)	\$10,707,796	\$10,580,064	\$10,695,944	\$11,560,223	\$11,130,865	\$11,840,301	
Annual Change		-1.2%	1.1%	8.1%	-3.7%	6.4%	2.0%
Operating Cost (Constant \$)	\$10,707,796	\$10,301,912	\$10,147,954	\$10,664,412	\$10,073,181	\$10,459,630	
Annual Change		-3.8%	-1.5%	5.1%	-5.5%	3.8%	-0.5%
Vehicle Service Hours	85,964	86,488	87,343	89,675	87,490	91,974	
Annual Change		0.6%	1.0%	2.7%	-2.4%	5.1%	1.4%
Vehicle Service Miles	1,464,598	1,467,737	1,458,064	1,464,366	1,422,769	1,507,162	
Annual Change		0.2%	-0.7%	0.4%	-2.8%	5.9%	0.6%
Unlinked Passengers	1,346,357	1,372,442	1,364,547	1,316,113	1,201,186	1,168,548	
Annual Change		1.9%	-0.6%	-3.5%	-8.7%	-2.7%	-2.8%
Employee Full-Time Equivalents	111.0	105.0	105.0	102.0	104.0	106.0	
Annual Change		-5.4%	0.0%	-2.9%	2.0%	1.9%	-0.9%
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 - SCT Staff
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**

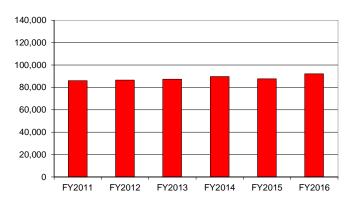
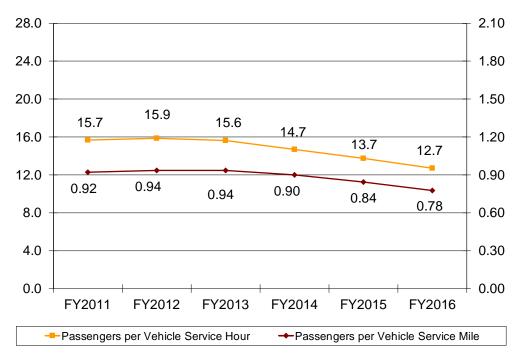


Exhibit 4.2: Passengers per Hour and per Mile – Bus Service



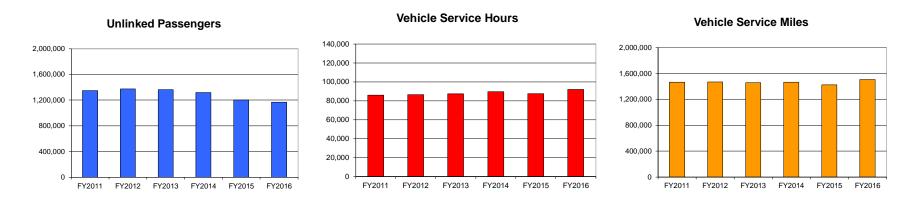
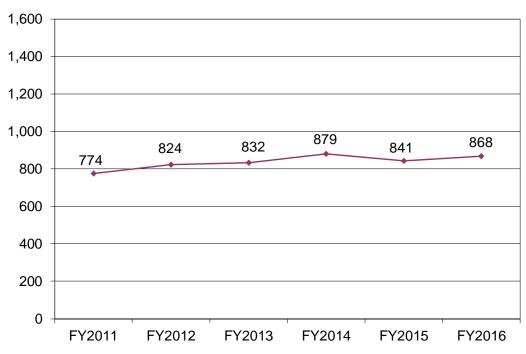


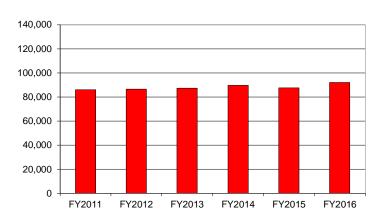
Exhibit 4.3: Operating Cost per Passenger – Bus Service



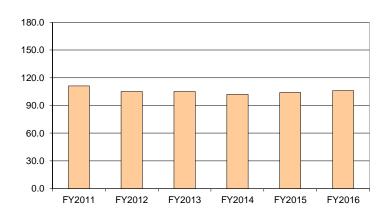
Exhibit 4.4: Vehicle Service Hours per FTE – Bus Service



#### **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.

- In-house labor costs and fringe benefits costs both decreased over the review period, by about seven and six percent per year respectively, on average. They generally trended similarly from year to year as well, especially more recently. However, FY2016 labor costs were down by 2.5 percent while fringe benefits costs increased substantially (21 percent). Staff reported that this reflected a one-time payment for fringe benefits to the City of Cloverdale that was related to assuming the operation of local route 68 in January 2016.
- Other significant changes included a five percent annual reduction in fuel/lubricants costs, but a 7.8 percent annual increase in the "other expenses" category.
- Casualty and liability costs saw almost no net change over the six years, while purchased transportation costs increased on average by 3.3 percent annually. The latter comprised by far the largest share of total cost per vehicle hour increasing from 62 to 66 percent in the last two years.
- After purchased transportation, services costs and "other expenses" represented the largest portions of the total cost per vehicle service hour in all years, both relatively near ten percent.
- Other cost categories generally contributed shares of five percent or less in all years.

\* \* \* \* \* \*

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

- In-house labor and fringe benefits costs both decreased overall, by six percent or more on average per year. In FY2016, labor costs were down somewhat but fringe benefits costs increased by 21 percent driven by a one-time payment for fringe benefits to the City of Cloverdale.
- There was a five percent annual reduction in fuel/lubricants costs, but a 7.8 percent annual increase in the "other expenses" category. Casualty and liability costs saw almost no net change.
- Purchased transportation costs increased on average by 3.3 percent annually, and comprised by far the largest share of total costs.
- Services costs and "other expenses" both contributed about ten percent of total costs in all years, with the remaining areas generally contributing five percent or less.

**Exhibit 4.5: Component Cost Trends – Bus Service** 

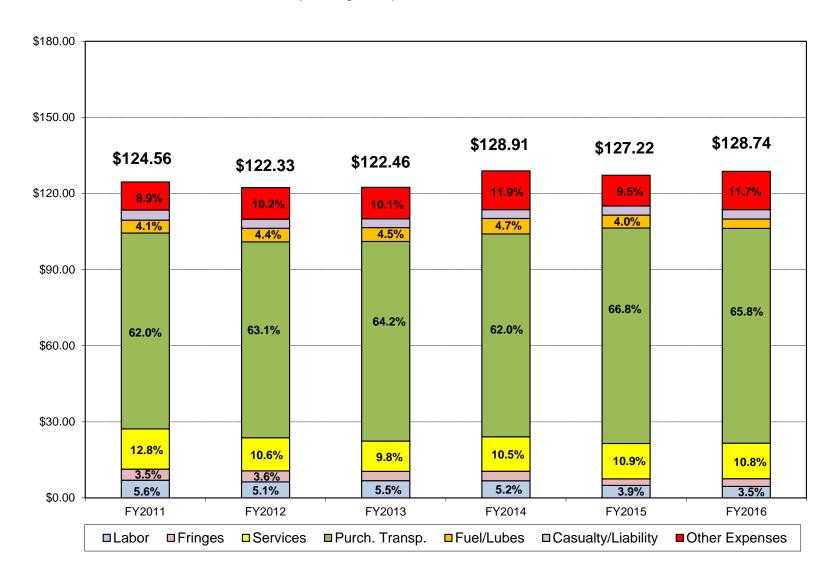
	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	Av. Ann. Chg.
	-	(	COST CATEGORIE	S			
Labor - (Salaries, Wages)	\$597,994	\$543,561	\$592,615	\$605,581	\$429,326	\$418,778	
Annual Change		-9.1%	9.0%	2.2%	-29.1%	-2.5%	-6.9%
Fringe Benefits	\$375,410	\$379,965	\$320,043	\$337,730	\$230,585	\$279,932	
Annual Change		1.2%	-15.8%	5.5%	-31.7%	21.4%	-5.7%
Services	\$1,367,366	\$1,126,477	\$1,045,661	\$1,219,417	\$1,215,958	\$1,283,382	
Annual Change		-17.6%	-7.2%	16.6%	-0.3%	5.5%	-1.3%
Purchased Transportation	\$6,636,451	\$6,679,056	\$6,870,633	\$7,170,009	\$7,432,557	\$7,791,861	
Annual Change		0.6%	2.9%	4.4%	3.7%	4.8%	3.3%
Fuel/Lubricants	\$436,326	\$462,856	\$481,274	\$544,579	\$446,669	\$337,611	
Annual Change		6.1%	4.0%	13.2%	-18.0%	-24.4%	-5.0%
Casualty/Liability	\$342,078	\$312,325	\$301,612	\$312,526	\$313,082	\$342,597	
Annual Change		-8.7%	-3.4%	3.6%	0.2%	9.4%	0.0%
Other Expenses (a)	\$952,171	\$1,075,824	\$1,084,106	\$1,370,381	\$1,062,688	\$1,386,140	
Annual Change		13.0%	0.8%	26.4%	-22.5%	30.4%	7.8%
Total	\$10,707,796	\$10,580,064	\$10,695,944	\$11,560,223	\$11,130,865	\$11,840,301	
Annual Change		-1.2%	1.1%	8.1%	-3.7%	6.4%	2.0%
OPERATING STATISTICS							
Vehicle Service Hours	85,964	86,488	87,343	89,675	87,490	91,974	
Annual Change		0.6%	1.0%	2.7%	-2.4%	5.1%	1.4%

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

 $(a) \quad \textit{Includes tires/tubes, other materials/supplies, utilities, taxes, and \textit{miscellaneous expenses} \\$ 

**Exhibit 4.6: Distribution of Component Costs – Bus Service** 

Operating Cost per Vehicle Service Hour



#### <u>Paratransit Performance Trends</u>

This section provides an overview of the performance of SCT'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)

- SCT's paratransit cost per hour increased through the first three years, from \$62.87 in FY2011 to \$77.61 in FY2013, followed by fluctuation in the last three years, ending at \$76.57 in FY2016.
- Overall, the cost per hour increased an average of four percent per year over the six years.
- With the effects of inflation removed, cost per hour exhibited an average annual increase of 1.5 percent.

#### <u>Passengers per Vehicle Service Hour (Exhibit 5.2)</u>

- Passengers per vehicle service hour increased in most years of the review period, from 1.2 passengers in FY2011 to 1.5 in the last year.
- The highest level achieved was 1.6 passengers per hour in FY2015.
- The trend amounted to an average annual increase of 4.4 percent, as overall annual passenger levels increased at a higher rate than service hours.

#### • Passengers per Vehicle Service Mile (Exhibit 5.2)

- Similar to passengers per hour, performance in passengers per vehicle service mile improved overall.
- Passengers per mile posted an average increase 5.3 percent over the sixyear period.

#### • Operating Cost per Passenger (Exhibit 5.3)

- Cost effectiveness improved by 0.4 percent per year on average through the review period, from \$52.11 per passenger in FY2011 to \$51.10 in FY2016.
- Operating costs increased by 7.1 percent per year over the period, while passenger levels increased by 7.5 percent per year.
- With the impact of inflation removed, the result was an average annual decrease in cost per passenger of 2.8 percent.

#### • <u>Vehicle Service Hours per FTE (Exhibit 5.4)</u>

- Employee productivity (primarily an internal contractor issue) increased overall, from 963 hours per FTE in FY2011 to 1,115 hours in FY2016.
- Employee FTEs did not deviate significantly overall during the period, while service hours increased moderately.
- The net result was an average annual increase in employee productivity of three percent.

\* \* \* \* \*

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

- For cost efficiency, there was an average annual increase in the operating cost per hour of four percent (1.5 percent in inflation adjusted dollars).
- The operating cost per passenger achieved an annual decrease of 2.8 percent when normalized in FY2011 dollars.

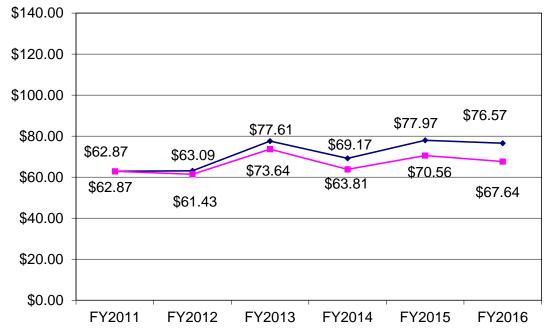
- Passenger productivity improved, with passengers per hour and passengers per mile increasing by 4.4 percent and 5.3 percent per year on average, respectively.
- The net result for employee productivity was an average annual increase of three percent.

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

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	Av. Ann. Chg.
Performance Indicators							
Op. Cost per Vehicle Svc. Hour (Actual \$)	\$62.87	\$63.09	\$77.61	\$69.17	\$77.97	\$76.57	
Annual Change		0.4%	23.0%	-10.9%	12.7%	-1.8%	4.0%
Op. Cost per Vehicle Svc. Hour (Constant \$)	\$62.87	\$61.43	\$73.64	\$63.81	\$70.56	\$67.64	
Annual Change		-2.3%	19.9%	-13.3%	10.6%	-4.1%	1.5%
Passengers per Vehicle Service Hour	1.21	1.18	1.41	1.47	1.60	1.50	
Annual Change		-2.0%	19.0%	4.5%	9.0%	-6.5%	4.4%
Passengers per Vehicle Service Mile	0.079	0.079	0.082	0.095	0.104	0.102	
Annual Change		-0.2%	4.5%	15.0%	9.8%	-1.8%	5.3%
Op. Cost per Passenger (Actual \$)	\$52.11	\$53.36	\$55.15	\$47.04	\$48.65	\$51.10	
Annual Change		2.4%	3.3%	-14.7%	3.4%	5.0%	-0.4%
Op. Cost per Passenger (Constant \$)	\$52.11	\$51.96	\$52.32	\$43.39	\$44.03	\$45.14	
Annual Change		-0.3%	0.7%	-17.1%	1.5%	2.5%	-2.8%
Vehicle Service Hours per FTE	963	1,117	958	936	926	1,115	
Annual Change		16.0%	-14.3%	-2.3%	-1.1%	20.4%	3.0%
Input Data							
Operating Cost (Actual \$)	\$1,876,778	\$2,185,503	\$2,156,674	\$2,136,454	\$2,382,905	\$2,646,287	
Annual Change		16.4%	-1.3%	-0.9%	11.5%	11.1%	7.1%
Operating Cost (Constant \$)	\$1,876,778	\$2,128,046	\$2,046,180	\$1,970,899	\$2,156,475	\$2,337,709	
Annual Change		13.4%	-3.8%	-3.7%	9.4%	8.4%	4.5%
Vehicle Service Hours	29,853	34,641	27,788	30,888	30,561	34,560	
Annual Change		16.0%	-19.8%	11.2%	-1.1%	13.1%	3.0%
Vehicle Service Miles	455,445	518,968	474,059	478,761	470,075	506,150	
Annual Change		13.9%	-8.7%	1.0%	-1.8%	7.7%	2.1%
Unlinked Passengers	36,013	40,958	39,109	45,420	48,981	51,783	
Annual Change		13.7%	-4.5%	16.1%	7.8%	5.7%	7.5%
Employee Full-Time Equivalents	31.0	31.0	29.0	33.0	33.0	31.0	
Annual Change		0.0%	-6.5%	13.8%	0.0%	-6.1%	0.0%
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 - SCT Staff CPI Data - U.S. Department of Labor, Bureau of Labor Statistics

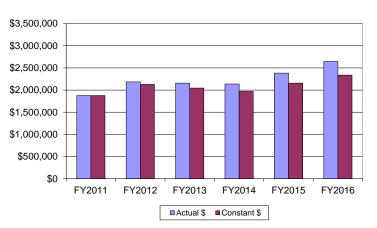
**Exhibit 5.1: Operating Cost per Vehicle Service Hour – Paratransit** 



→ Actual \$

Constant \$





#### Vehicle Service Hours

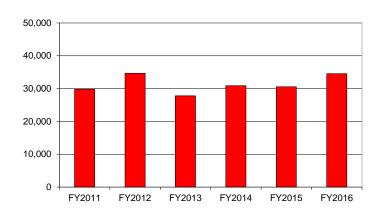
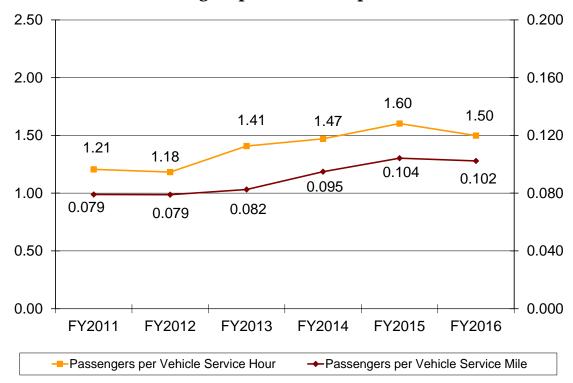
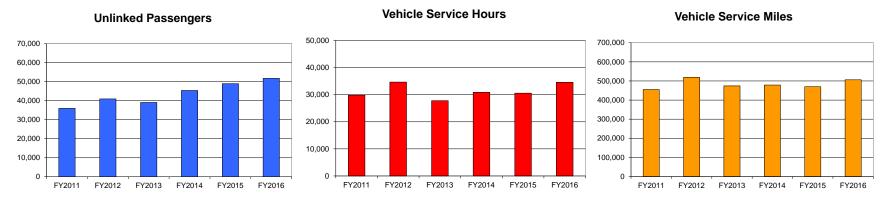


Exhibit 5.2: Passengers per Hour and per Mile – Paratransit

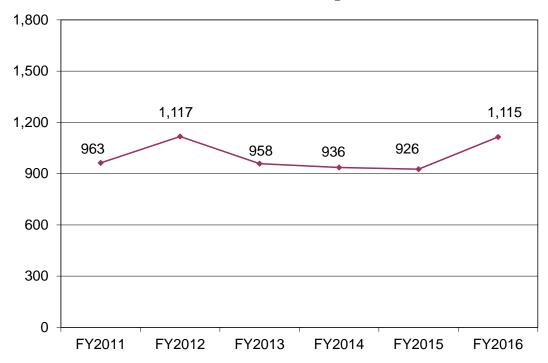






**Exhibit 5.3: Operating Cost per Passenger – Paratransit** 

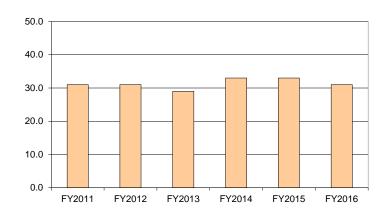
**Exhibit 5.4: Vehicle Service Hours per FTE – Paratransit** 



#### **Vehicle Service Hours**

# 50,000 40,000 20,000 10,000 FY2011 FY2012 FY2013 FY2014 FY2015 FY2016

#### **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 about seven percent on average.
- The most significant change in the component costs was a 19 percent average annual increase in services.
- In-house labor costs and fringe benefits costs both decreased over the review period, by about ten and 15 percent per year respectively, on average. They generally trended similarly from year to year as well, most closely earlier in the review period.
- Purchased transportation costs increased on average by 6.8 percent annually, and comprised by far the largest share of total cost per vehicle hour ranging between 60 and 65 percent depending on the year.
- A 15 percent purchased transportation cost increase in FY2015 resulted from wages being increased by the operating contractor for paratransit drivers to attract and retain employees, and to comply with Sonoma County's recently adopted Living Wage Ordinance. A further 13 percent increase in FY2016 corresponded with an increase in service hours.
- Otherwise, there was a 1.7 percent annual reduction in fuel/lubricants costs, but a 12.8 percent annual increase in the "other expenses" category, and an annual increase of nearly eight percent in casualty/liability costs.
- After purchased transportation, services costs represented the largest portion of the total cost per vehicle service hour in most years, increasing its share from nine to more than 15 percent over the period.

• Other cost categories generally contributed shares of less than ten percent in all years.

\* \* \* \* \*

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

- Total annual costs increased by about seven percent on average, with the most significant component cost change being a 19 percent annual increase in the services area.
- There was a 12.8 percent annual increase in the "other expenses" category, and an annual increase of nearly eight percent in casualty/liability costs.
- In-house labor and fringe benefits costs both decreased overall, as did fuel/lubricants costs.
- Purchased transportation costs increased on average by 6.8 percent annually, and comprised by far the largest share of total costs. A 15 percent increase in FY2015 resulted from wages being increased by the operating contractor for paratransit drivers.
- Services costs contributed more than 15 percent of total costs by the end of the period, with the remaining areas generally contributing less than ten percent in all years.

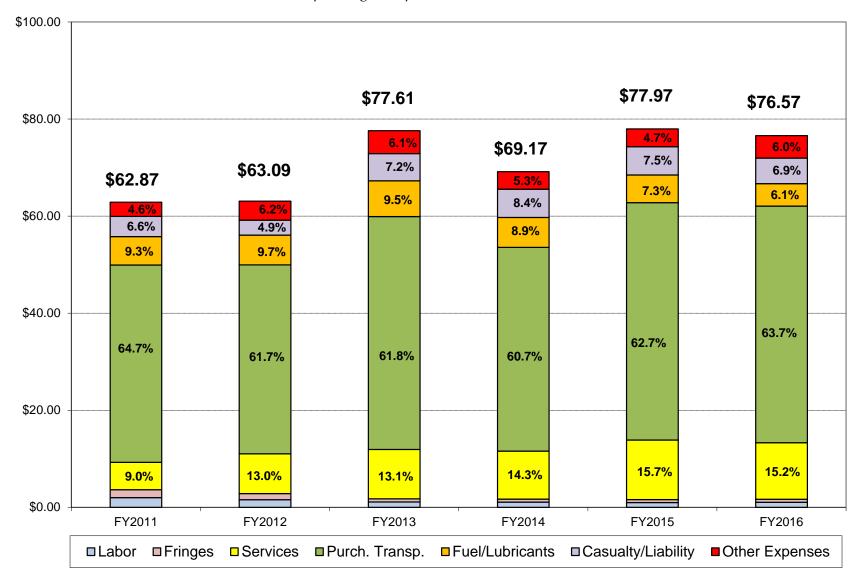
**Exhibit 5.5: Component Costs Trends – Paratransit** 

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	Av. Ann. Chg.
		(	COST CATEGORIE	S			
	<b>***</b>	<b>4</b> = 4 000	<b>*</b>	***	<b>***</b>		
Labor - (Salaries, Wages)	\$59,345	\$54,603	\$31,103	\$33,664	\$30,495	\$36,039	
Annual Change		-8.0%	-43.0%	8.2%	-9.4%	18.2%	-9.5%
Fringe Benefits	\$48,956	\$43,519	\$17,514	\$19,152	\$18,816	\$21,316	
Annual Change		-11.1%	-59.8%	9.4%	-1.8%	13.3%	-15.3%
Services	\$168,316	\$284,112	\$282,781	\$304,742	\$374,651	\$402,433	
Annual Change		68.8%	-0.5%	7.8%	22.9%	7.4%	19.0%
Purchased Transportation	\$1,213,368	\$1,348,001	\$1,333,642	\$1,296,535	\$1,494,507	\$1,685,100	
Annual Change		11.1%	-1.1%	-2.8%	15.3%	12.8%	6.8%
Fuel/Lubricants	\$174,869	\$212,443	\$204,121	\$190,376	\$173,873	\$160,237	
Annual Change		21.5%	-3.9%	-6.7%	-8.7%	-7.8%	-1.7%
Casualty/Liability	\$124,803	\$107,299	\$156,301	\$179,745	\$178,497	\$182,167	
Annual Change		-14.0%	45.7%	15.0%	-0.7%	2.1%	7.9%
Other Expenses (a)	\$87,121	\$135,526	\$131,212	\$112,240	\$112,066	\$158,995	
Annual Change		55.6%	-3.2%	-14.5%	-0.2%	41.9%	12.8%
Total	\$1,876,778	\$2,185,503	\$2,156,674	\$2,136,454	\$2,382,905	\$2,646,287	
Annual Change		16.4%	-1.3%	-0.9%	11.5%	11.1%	7.1%
		OP	ERATING STATIST				
Vehicle Service Hours	29,853	34,641	27,788	30,888	30,561	34,560	
Annual Change		16.0%	-19.8%	11.2%	-1.1%	13.1%	3.0%

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

**Exhibit 5.6: Distribution of Component Costs – Paratransit** 

Operating Cost per Vehicle Service Hour



#### IV. COMPLIANCE WITH PUC REQUIREMENTS

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

The results from this review are detailed by individual requirement in Exhibit 6. SCT 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: 08/23/14  • 2015: 08/31/15  • 2016: 09/15/16
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 Transit Services Agreement with Veolia Transportation Services, Inc. (now Transdev) of 06/06/2006, amended 05/17/2011 and 05/06/14.
			No provision for excess staffing in ADA Paratransit service agreements with Volunteer Center of Sonoma County (FYs 2014-2016).
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	SCT contracts with Veolia Transportation Services/Transdev to provide its fixed- route services, and with the Volunteer Center of Sonoma County 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	Discount Fare Categories page on SCT website.

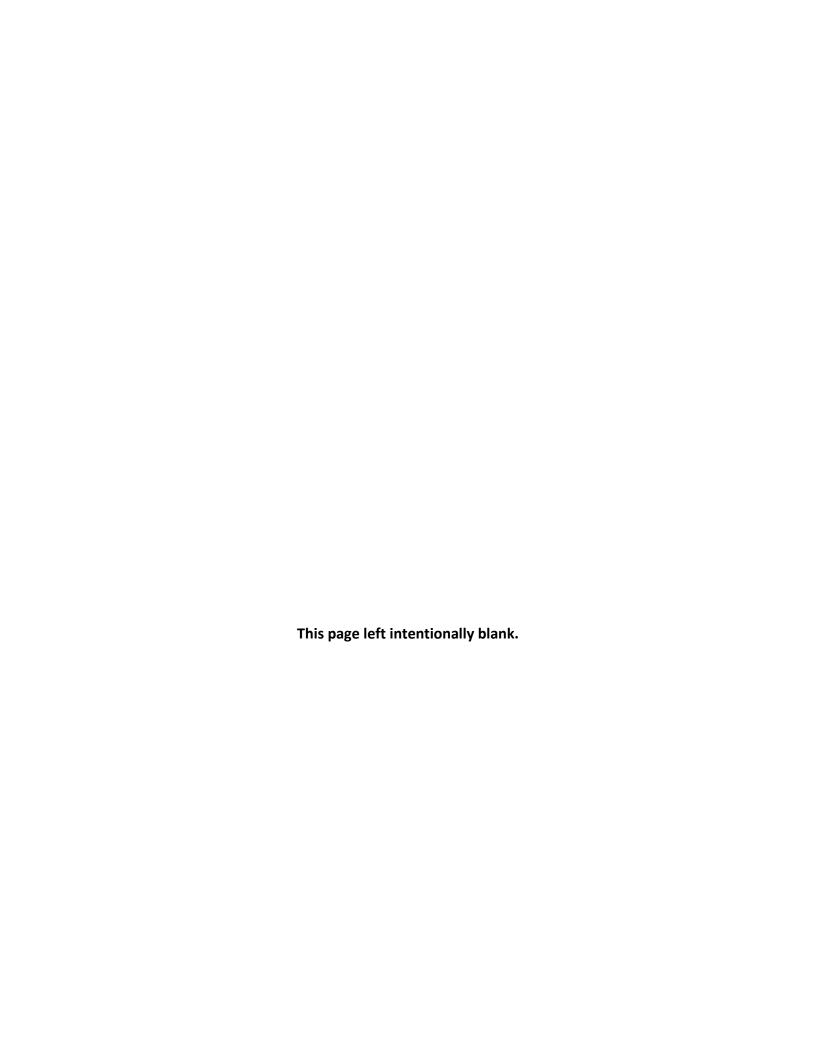
Code Reference	Operator Compliance Requirements	Compliance Finding	Verification Information
PUC99155.1 (a)(1)(2)	Welfare to Work Coordination - Operators must coordinates with county welfare departments in order to ensure that transportation moneys available for purposes of assisting recipients of aid 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	SCT participates in the regional Coordinated Public Transit–Human Services Transportation Plan that is developed by MTC.
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	Signatory participant in Sonoma County SuperPass Agreement – June 1992 to present. Agreement includes: Cloverdale Transit, Golden Gate Transit, Healdsburg Transit, Petaluma Transit, Sonoma County Transit, and Sebastopol Transit.

Code Reference	Operator Compliance Requirements	Compliance Finding	Verification Information
PUC99246(d)	<u>Process for Evaluation of Passenger Needs</u> - The operator has an established process in place for evaluating the needs and types of passengers being served	In Compliance	Passenger comment cards and written comments submitted via e- mail through SCT's website.
			On-Board Surveys conducted by staff and/or vehicle operators and then analyzed to determine the productivity and effectiveness of services.
			Public Forums: Bi-monthly Sonoma County Transportation Authority's Transit & Paratransit Coordinating Committee (TPCC) meetings. Short Range Transit Plan (SRTP) public hearings held before the Sonoma County Board of Supervisors.
			Through monthly ridership statistics and real-time schedule adherence data, staff analyzes various trends and recommends implementation of route changes and/or schedule adjustments as necessary.
			Triennial Federal Title VI Civil Rights Assessment to ensure that services are provided to minorities and low- income populations in an equitable manner.

#### V. STATUS OF PRIOR AUDIT RECOMMENDATIONS

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



#### VI. FUNCTIONAL PERFORMANCE INDICATOR TRENDS

To further assess SCT'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 SCT 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.

#### <u>Systemwide</u>

For the purposes of this review, SCT'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 were almost steady at just over 20 percent of total operating costs.
- Administrative costs rose from \$22.97 per vehicle service hour in the first two years to \$23.49 in FY2016 (2.3 percent)
- The portion of administrative costs attributed to marketing activities increased overall from about five percent in the first two years to 7.2 percent in FY2016. The latter reflects costs of an expanded pilot free ride program for veterans and local college students.
- Marketing expenditures also increased in relation to passenger trips; the result of \$0.18 per passenger in FY2016 represented a 57 percent period increase. Again, the FY2016 results were impacted by the expanded free ride pilot program costs.
- The systemwide farebox recovery ratio declined steadily, from 15.8 percent in FY2014 to 13.9 percent in the last year. The trend may reflect fare changes including fewer fare zones and replacing student fares with youth fares for all passengers age 18 and younger.

\* \* \* \* \*

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

- Administrative costs remained at about 20 percent of total operating costs, but increased moderately to \$23.49 per vehicle service hour in FY2016.
- Marketing costs increased overall compared to total administrative costs and passenger trips, reflecting costs of an expanded free ride pilot program for veterans and local college students.
- The systemwide farebox recovery ratio declined from 15.4 to 13.9 percent, a trend likely impacted by fare structure changes during the period.

**Exhibit 7: Functional Performance Trends - Systemwide** 

	Actual Performance		
FUNCTION/Indicator	FY2014	FY2015	FY2016
MANAGEMENT, ADMINISTRATION & MARKETING			
Administrative Cost/Total Operating Cost	20.2%	20.1%	20.5%
Annual Percent Change		-0.7%	2.3%
Three Year Percent Change			1.5%
Adminstrative Cost/Vehicle Service Hour	\$22.97	\$22.97	\$23.49
Annual Percent Change		0.0%	2.3%
Three Year Percent Change			2.3%
Marketing Cost/Total Administrative Cost	5.5%	5.3%	7.2%
Annual Percent Change		-2.9%	35.1%
Three Year Percent Change			31.3%
Marketing Cost/Unlinked Passenger Trip	\$0.11	\$0.12	\$0.18
Annual Percent Change		3.6%	51.7%
Three Year Percent Change			57.2%
Farebox Recovery Ratio (Farebox Rev./Oper. Cost)	15.8%	14.7%	13.9%
Annual Percent Change		-7.2%	-5.1%
Three Year Percent Change			-11.9%

#### **Bus Service**

SCT'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 increased from \$1.07 in the first year to \$1.23 in FY2016 (15 percent).
- The farebox recovery ratio declined from 17.2 percent in the first year to 15.5 percent in FY2016. At the same time, the TDA recovery ratio decreased from 33.8 percent to 30.1 percent. For this calculation, farebox revenue is augmented with local support and operating costs reflect various allowable exclusions.
- Nearly 80 percent of all vehicle miles traveled were in service, as were about 85 percent of all vehicle hours in all three years.
- Passengers carried per service mile and per service hour both declined by nearly 14 percent over the three years. As noted previously, these decreases reflected a general decline in passengers combined with increased service from SCT's recent takeover of two local shuttle routes, and changes made to several other routes.

#### Operations

- Vehicle operations costs comprised between 57 and 60 percent of total operating costs.
- Vehicle operations costs per service hour remained in a range of \$74 to \$76 through the period.
- Schedule adherence improved from almost 96 percent in FY2014 to 98 percent by FY2016.

- The rate of complaints increased overall by about 12 percent, with the most complaints received in the middle year, FY2015.
- Missed trips remained below one percent, though there was some increase in each year. SCT's definition of a missed trip is when a trip is not completed within 15 minutes of the scheduled time. These "missed trips" are in actuality almost always completed the operations contractor deploys another bus if it appears that a trip may not be completed. Service for passengers is generally not missed, even if the originally assigned vehicle does not complete a particular trip.

#### Maintenance

- Total maintenance costs comprised about 25 percent of total operating costs throughout the period.
- Vehicle maintenance costs per service mile increased overall from \$1.60 to \$1.65 (3.4 percent), thought there was an interim reduction in FY2015 to \$1.49.
- The vehicle spare ratio remained in a range of 20 to 21 percent.
- The mean distance between major failures improved overall by 32 percent, with even better results in FY2015. When looking at all failures, there was a relatively similar trend.

#### Safety

The rate of preventable accidents, though low overall, increased in each audit year. It more than doubled in FY2015 compared to FY2014. There were 0.68 preventable accidents per 100,000 miles traveled in FY2016, comparing unfavorably with 0.66 in FY2015 and 0.32 in FY2014. SCT staff indicated that the accident rate during FY2014 appeared unusually low, and that the operations contractor has a robust safety and training program in place.

\* \* \* \* \*

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

- Service Planning results showed operating cost per passenger mile increasing by 15 percent, the farebox recovery ratio decreasing from 17 to 15.5 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) decreasing from 34 to 30 percent. Consistently 80 percent or more vehicle miles and hours were in service, but various service adjustments and generally declining ridership resulted in passenger productivity declining by nearly 14 percent.
- Operations results showed relatively steady vehicle operations costs per service hour and compared to total costs, with schedule adherence improving to 98 percent. At the same time, there was some increase in the rate of complaints, and the missed trip rate (reflecting SCT's definition of any trip not completed within 15 minutes of the scheduled time) increased but remained below one percent.
- Maintenance results showed total maintenance costs remaining at about 25 percent of total costs but vehicle maintenance costs per service mile increasing overall by 3.4 percent. The spare ratio was steady near 20 percent, and there was overall improvement in the mechanical failure rates.
- Safety results showed the preventable accident rate more than doubling over the period, though reportedly beginning unusually low in FY2014 and remaining very low overall.

**Exhibit 8: Functional Performance Trends – Bus Service** 

	Actual Performance			
FUNCTION/Indicator	FY2014	FY2015	FY2016	
SERVICE PLANNING				
Total Operating Cost/Passenger Mile	\$1.07	\$1.13	\$1.23	
Annual Percent Change		5.5%	9.4%	
Three Year Percent Change			15.4%	
Farebox Recovery Ratio (Farebox Rev./Oper. Cost)	17.2%	16.2%	15.5%	
Annual Percent Change		-6.1%	-4.5%	
Three Year Percent Change			-10.3%	
TDA Recovery Ratio (a)	33.8%	32.9%	30.1%	
Annual Percent Change		-2.4%	-8.5%	
Three Year Percent Change			-10.8%	
Vehicle Service Miles/Total Miles	79.0%	78.2%	78.4%	
Annual Percent Change		-1.0%	0.4%	
Three Year Percent Change			-0.7%	
Vehicle Service Hours/Total Hours	84.9%	83.9%	86.1%	
Annual Percent Change		-1.1%	2.6%	
Three Year Percent Change			1.4%	
Passengers/Vehicle Service Mile	0.90	0.84	0.78	
Annual Percent Change		-6.1%	-8.2%	
Three Year Percent Change			-13.7%	
Passengers/Vehicle Service Hour	14.68	13.73	12.71	
Annual Percent Change		-6.5%	-7.5%	
Three Year Percent Change			-13.4%	
OPERATIONS				
Vehicle Operations Cost/Total Operating Cost	57.0%	60.0%	58.3%	
Annual Percent Change		5.3%	-2.9%	
Three Year Percent Change			2.2%	
Vehicle Operations Cost/Vehicle Service Hour	\$73.52	\$76.38	\$75.08	
Annual Percent Change		3.9%	-1.7%	
Three Year Percent Change			2.1%	
Trips On-Time/Total Trips	95.6%	97.5%	98.0%	
Annual Percent Change		2.0%	0.5%	
Three Year Percent Change			2.6%	
Complaints/100,000 Unlinked Passenger Trips	1.52	1.75	1.71	
Annual Percent Change		15.0%	-2.1%	
Three Year Percent Change			12.6%	
Missed Trips/Total Trips	0.81%	0.85%	0.95%	
Annual Percent Change		4.1%	11.8%	
Three Year Percent Change		<u> </u>	16.4%	

	Actual Performance		
FUNCTION/Indicator	FY2014	FY2015	FY2016
MAINTENANCE			
Vehicle + Non-Veh. Maint. Cost/Total Operating Cost	25.1%	23.5%	24.6%
Annual Percent Change		-6.2%	4.7%
Three Year Percent Change			-1.8%
Vehicle Maintenance Cost/Vehicle Service Mile	\$1.60	\$1.49	\$1.65
Annual Percent Change		-6.9%	11.0%
Three Year Percent Change			3.4%
Spare Vehicles/Total Vehicles	21.2%	20.0%	21.2%
Annual Percent Change		-5.5%	5.8%
Three Year Percent Change			0.0%
Mean Distance between Major Failures (Miles)	23,477	36,410	30,992
Annual Percent Change		55.1%	-14.9%
Three Year Percent Change			32.0%
Mean Distance between All Failures (Miles)	17,833	23,044	22,343
Annual Percent Change		29.2%	-3.0%
Three Year Percent Change			25.3%
SAFETY			
Preventable Accidents/100,000 Vehicle Miles	0.32	0.66	0.68
Annual Percent Change		103.8%	2.6%
Three Year Percent Change			109.1%

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

#### <u>Paratransit</u>

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

#### • <u>Service Planning</u>

- Operating costs per passenger mile increased from \$3.73 in the first year to \$4.06 in FY2016 (8.7 percent).
- The farebox recovery ratio declined from eight percent in the first year to seven percent in FY2016. At the same time, the TDA recovery ratio (farebox revenue augmented with local support and operating costs reflecting allowable exclusions) remained at about 22 percent.
- About 73 percent of all vehicle miles traveled were in service in all three years, as were about 75 percent of all vehicle hours.
- Passengers carried per service mile and per service hour both increased overall, by eight percent and two percent, respectively.

#### Operations

- Vehicle operations costs consistently comprised just under 50 percent of total operating costs.
- Vehicle operations costs per service hour increased overall from \$33.20 to \$37.50 (13 percent).
- Schedule adherence decreased in each year, from 90 percent in FY2014 to 86 percent in FY2016.
- The rate of complaints also decreased in each year, by 78 percent over the period.
- The incidence of missed trips remained very low throughout the period, though there was an overall increase.

- There were no ADA trip denials.
- The rates of trip cancellations, late trip cancellations, and passenger noshows increased overall -- by 18 percent, 32 percent, and 41 percent respectively, though late cancellations and no-shows remained at comparatively low levels. Passenger cancellations reached nearly 20 percent of all ADA trips by FY2016. SCT staff indicated that a large portion of these cancellations are weather-related (e.g., rain storms).

#### Maintenance

- Total maintenance costs increased over the period from 13 to 15 percent of total operating costs.
- Vehicle maintenance costs per service mile increased steadily from \$0.43 to \$0.67 (55 percent).
- The vehicle spare ratio decreased from 13.8 percent in the first year to 10.7 percent subsequently.
- The mean distance between major failures improved significantly, driven by very positive FY2016 results. When looking at all failures, there was also a very positive trend.

#### • <u>Safety</u>

 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 8.7 percent, the farebox recovery ratio decreasing from eight

to seven percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) remaining at about 22 percent. Consistently 73 percent or more vehicle miles and hours were in service, and passenger productivity improved.

- Operations results showed relatively steady vehicle operations costs per hour but a 13 percent increase compared to total costs. Schedule adherence decreased from 90 to 86 percent, but at the same time there was a significant decrease in the rate of complaints. The missed trip rate increased but remained very low, and there were no ADA trip denials. Trip cancellations, late trip cancellations, and passenger no-shows all increased by significant percentages, though late cancellations and no-shows remained at comparatively low levels. Passenger cancellations reached nearly 20 percent of all ADA trips by FY2016.
- Maintenance results showed total maintenance costs increasing from 13 to 15 percent of total costs and vehicle maintenance costs per service mile increasing from \$0.43 to \$0.67. The spare ratio decreased to 10.7 percent, and there was significant overall 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** 

	Actual Performance			
FUNCTION/Indicator	FY2014	FY2015	FY2016	
SERVICE PLANNING				
Total Operating Cost/Passenger Mile	\$3.73	\$3.86	\$4.06	
Annual Percent Change		3.4%	5.1%	
Three Year Percent Change			8.7%	
Farebox Recovery Ratio (Farebox Rev./Oper. Cost)	8.0%	7.5%	7.0%	
Annual Percent Change		-5.7%	-6.7%	
Three Year Percent Change			-12.0%	
TDA Recovery Ratio (a)	22.0%	22.7%	21.7%	
Annual Percent Change		3.3%	-4.3%	
Three Year Percent Change			-1.2%	
Vehicle Service Miles/Total Miles	72.9%	72.4%	73.4%	
Annual Percent Change		-0.7%	1.3%	
Three Year Percent Change			0.6%	
Vehicle Service Hours/Total Hours	75.0%	74.6%	75.4%	
Annual Percent Change		-0.5%	1.0%	
Three Year Percent Change			0.6%	
Passengers/Vehicle Service Mile	0.095	0.104	0.102	
Annual Percent Change		9.8%	-1.8%	
Three Year Percent Change			7.8%	
Passengers/Vehicle Service Hour	1.47	1.60	1.50	
Annual Percent Change		9.0%	-6.5%	
Three Year Percent Change			1.9%	
OPERATIONS				
Vehicle Operations Cost/Total Operating Cost	48.0%	49.5%	49.0%	
Annual Percent Change		3.0%	-1.0%	
Three Year Percent Change			2.0%	
Vehicle Operations Cost/Vehicle Service Hour	\$33.20	\$38.57	\$37.50	
Annual Percent Change		16.2%	-2.8%	
Three Year Percent Change			12.9%	
Trips On-Time/Total Trips	90.0%	89.0%	86.0%	
Annual Percent Change		-1.1%	-3.4%	
Three Year Percent Change			-4.4%	
Complaints/10,000 Unlinked Passenger Trips	1.8	0.8	0.4	
Annual Percent Change		-53.6%	-52.7%	
Three Year Percent Change			-78.1%	
Missed Trips/Total Trips	0.002%	0.008%	0.006%	
Annual Percent Change		270.9%	-29.1%	
Three Year Percent Change			163.1%	

	Actual Performance			
FUNCTION/Indicator	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	16.2%	17.6%	19.1%	
Annual Percent Change		9.2%	8.5%	
Three Year Percent Change			18.4%	
Late Trip Cancellations/Total ADA Trips	0.04%	0.02%	0.05%	
Annual Percent Change		-30.5%	89.2%	
Three Year Percent Change			31.6%	
No-Show Passengers/Total ADA Trips	1.4%	1.7%	2.0%	
Annual Percent Change		23.9%	13.9%	
Three Year Percent Change			41.1%	
MAINTENANCE				
Vehicle + Non-Veh. Maint. Cost/Total Operating Cost	12.9%	13.5%	15.1%	
Annual Percent Change		4.6%	11.2%	
Three Year Percent Change			16.3%	
Vehicle Maintenance Cost/Vehicle Service Mile	\$0.43	\$0.57	\$0.67	
Annual Percent Change		31.8%	18.1%	
Three Year Percent Change			55.6%	
Spare Vehicles/Total Vehicles	13.8%	10.7%	10.7%	
Annual Percent Change		-22.3%	0.0%	
Three Year Percent Change			-22.3%	
Mean Dist. betw. Major Failures (Miles)	164,145	162,320	689,964	
Annual Percent Change		-1.1%	325.1%	
Three Year Percent Change			320.3%	
Mean Dist. betw. All Failures (Miles)	65,658	92,754	137,993	
Annual Percent Change		41.3%	48.8%	
Three Year Percent Change			110.2%	
SAFETY				
FTA Reportable Accidents/100,000 Vehicle Miles	0.76	1.54	0.72	
Annual Percent Change		102.2%	-52.9%	
Three Year Percent Change			-4.8%	

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

#### VII. CONCLUSIONS AND RECOMMENDATIONS

The preceding sections presented a review of SCT'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 SCT'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:

 <u>Data Collection</u> – SCT 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, the trends in paratransit vehicle service hours and miles were not always commensurate. This was especially noticeable with the reported increases in FY2014 (11 percent for hours versus one percent for miles) and in FY2016 (13 percent for hours versus less than eight percent for miles). Hours and miles would normally be expected to trend in a relatively similar fashion from year to year. SCT staff attributed these results to increases in those years in the number of shorter distance trips provided, causing hours to increase at a higher rate than miles.

Also, for the paratransit service, there was a significant operating cost increase in FY2015 that does not appear to be the result of additional service. SCT staff indicated this resulted from wages being increased by the operating contractor for paratransit drivers during FY2015 to attract and retain employees, and to comply with Sonoma County's recently adopted Living Wage Ordinance.

#### • TDA Performance Trends

SCT'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.

<u>Bus Service</u> – 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 0.7 percent, which amounted to a 1.8 percent decrease in inflation adjusted dollars.
- The cost per passenger increased on average by five percent per year, which amounted to an average annual increase of 2.4 percent in constant FY2011 dollars.
- Passenger productivity showed negative trends, with passengers per vehicle service hour decreasing by 4.1 percent per year overall, and passengers per vehicle service mile decreasing by 3.3 percent annually. Decreases reflect a general decline in passengers combined with increased service from SCT's recent takeover of two local shuttle routes, and changes made to several other routes.
- Employee productivity increased an average 2.3 percent per year.

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

 In-house labor and fringe benefits costs both decreased overall, by six percent or more on average per year. In FY2016, labor costs were down somewhat but fringe benefits costs increased by 21 percent – driven by a one-time payment for fringe benefits to the City of Cloverdale.

- There was a five percent annual reduction in fuel/lubricants costs, but a 7.8 percent annual increase in the "other expenses" category. Casualty and liability costs saw almost no net change.
- Purchased transportation costs increased on average by 3.3 percent annually, and comprised by far the largest share of total costs.
- Services costs and "other expenses" both contributed about ten percent of total costs in all years, with the remaining areas generally contributing five percent or less.

<u>Paratransit</u> – 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 four percent (1.5 percent in inflation adjusted dollars).
- The operating cost per passenger achieved an annual decrease of 2.8 percent when normalized in FY2011 dollars.
- Passenger productivity improved, with passengers per hour and passengers per mile increasing by 4.4 percent and 5.3 percent per year on average, respectively.
- The net result for employee productivity was an average annual increase of three percent.

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

 Total annual costs increased by about seven percent on average, with the most significant component cost change being a 19 percent annual increase in the services area.

- There was a 12.8 percent annual increase in the "other expenses" category, and an annual increase of nearly eight percent in casualty/liability costs.
- In-house labor and fringe benefits costs both decreased overall, as did fuel/lubricants costs.
- Purchased transportation costs increased on average by 6.8 percent annually, and comprised by far the largest share of total costs. A 15 percent increase in FY2015 resulted from wages being increased by the operating contractor for paratransit drivers.
- Services costs contributed more than 15 percent of total costs by the end of the period, with the remaining areas generally contributing less than ten percent in all years.
- <u>PUC Compliance</u> SCT 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.
- <u>Status of Prior Audit Recommendations</u> There were no recommendations made in SCT's prior performance audit.

#### • Functional Performance Indicator Trends

To further assess SCT's performance over the past three years, a detailed set of systemwide and modal functional area performance indicators was defined and reviewed.

<u>Systemwide</u> – The following is a brief summary of the systemwide functional trend highlights between FY2014 and FY2016:

 Administrative costs remained at about 20 percent of total operating costs, but increased moderately to \$23.49 per vehicle service hour in FY2016.

- Marketing costs increased overall compared to total administrative costs and passenger trips, reflecting costs of an expanded free ride pilot program for veterans and local college students.
- The systemwide farebox recovery ratio declined from 15.4 to 13.9 percent, a trend likely impacted by fare structure changes during the period.

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

- Service Planning results showed operating cost per passenger mile increasing by 15 percent, the farebox recovery ratio decreasing from 17 to 15.5 percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) decreasing from 34 to 30 percent. Consistently 80 percent or more vehicle miles and hours were in service, but various service adjustments and generally declining ridership resulted in passenger productivity declining by nearly 14 percent.
- Operations results showed relatively steady vehicle operations costs per service hour and compared to total costs, with schedule adherence improving to 98 percent. At the same time, there was some increase in the rate of complaints, and the missed trip rate (reflecting SCT's definition of any trip not completed within 15 minutes of the scheduled time) increased but remained below one percent.
- Maintenance results showed total maintenance costs remaining at about 25 percent of total costs but vehicle maintenance costs per service mile increasing overall by 3.4 percent. The spare ratio was steady near 20 percent, and there was overall improvement in the mechanical failure rates.
- Safety results showed the preventable accident rate more than doubling over the period. While not inordinately high, the recent increase points to a potentially burgeoning safety issue.

<u>Paratransit</u> – 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 8.7 percent, the farebox recovery ratio decreasing from eight to seven percent, and the TDA recovery ratio (reflecting local support and operating cost exclusions) remaining at about 22 percent. Consistently 73 percent or more vehicle miles and hours were in service, and passenger productivity improved.
- Operations results showed relatively steady vehicle operations costs per hour but a 13 percent increase compared to total costs. Schedule adherence decreased from 90 to 86 percent, but at the same time there was a significant decrease in the rate of complaints. The missed trip rate increased but remained very low, and there were no ADA trip denials. Trip cancellations, late trip cancellations, and passenger no-shows all increased by significant percentages, though late cancellations and no-shows remained at comparatively low levels. Passenger cancellations reached nearly 20 percent of all ADA trips by FY2016.
- Maintenance results showed total maintenance costs increasing from 13 to 15 percent of total costs and vehicle maintenance costs per service mile increasing from \$0.43 to \$0.67. The spare ratio decreased to 10.7 percent, and there was significant overall 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. <u>CONTINUE EFFORTS TO IMPROVE PERFORMANCE IN THE PREVENTABLE</u> ACCIDENT RATE FOR SCT'S BUS SERVICE.

[Reference Section: VI. Functional Performance Indicator Trends]

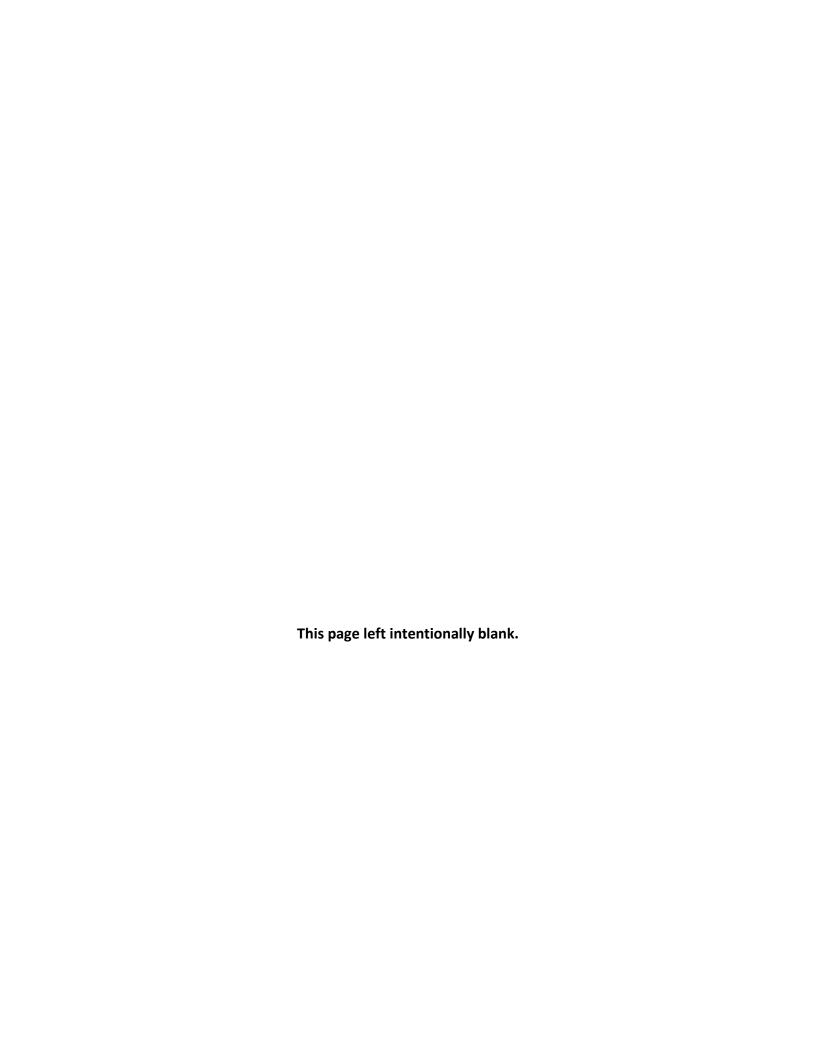
It was found that the rate of preventable accidents, though low overall, increased in each audit year. It more than doubled in FY2015 compared to FY2014. There were 0.68 preventable accidents per 100,000 bus miles traveled in FY2016, comparing unfavorably with 0.66 in FY2015 and 0.32 in FY2014. Safety

performance at SCT has been historically excellent, and SCT staff report that the operations contractor has a robust safety and training program in place. Although the number of accidents is not inordinately high, the recent increases in FY2015 and FY2016 points to a potentially burgeoning safety issue which SCT should address in coordination with its operating contractor. Efforts should include additional strategies to improve operator training and enhance monitoring activities to ensure that safety issues are identified and corrected before they have a chance to escalate.

# 2. <u>DEVELOP AND IMPLEMENT STRATEGIES TO REDUCE TRIP</u> <u>CANCELLATIONS ON THE PARATRANSIT SERVICE.</u>

[Reference Section: VI. Functional Performance Indicator Trends]

Over the audit period, the rates of passenger trip cancellations on SCT's paratransit service increased overall by 18 percent, reaching nearly 20 percent of all ADA trips by FY2016. SCT staff indicated that a large portion of these cancellations are weather-related (e.g., rain storms). Nonetheless, in order to provide service more efficiently and productively, SCT should expand its efforts toward mitigating cancellations. These efforts should include additional paratransit passenger outreach and education.



# APPENDIX A: INPUT STATISTICS FOR FUNCTIONAL PERFORMANCE MEASURES

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

Data Item	FY2014	FY2015	FY2016	Source
Total Operating Costs	\$13,696,677	\$13,513,770	\$14,486,588	NTD F-40
Administrative Costs	\$2,769,522	\$2,712,126	\$2,972,858	NTD F-40
Vehicle Service Hours	120,563	118,051	126,534	NTD S-10 MB + DR
Marketing Costs	\$151,849	\$144,451	\$213,956	Sonoma County Auditor
Unlinked Passenger Trips	1,361,533	1,250,167	1,220,331	NTD S-10 MB + DR
Farebox Revenue	\$2,164,901	\$1,982,889	\$2,018,139	NTD F-10 (All Modes)

## Functional Performance Inputs – Bus Service

Data Item	FY2014	FY2015	FY2016	Source
Vehicle Service Miles	1,464,366	1,422,769	1,507,162	NTD S-10 MB
Total Vehicle Miles	1,854,650	1,820,508	1,921,485	NTD S-10 MB
Vehicle Service Hours	89,675	87,490	91,974	NTD S-10 MB
Total Vehicle Hours	105,638	104,240	106,807	NTD S-10 MB
Unlinked Passenger Trips	1,316,113	1,201,186	1,168,548	NTD S-10 MB
Farebox Revenue	\$1,993,994	\$1,803,061	\$1,831,861	NTD F-10
Local Support - Auxiliary Transp. Rev. (Advertising)	\$63,885	\$54,245	\$38,230	State Controller's Report
Local Support - Taxes Directly Levied (Measure M)	\$817,261	\$869,774	\$871,985	State Controller's Report
Total Operating Costs	\$11,560,223	\$11,130,865	\$11,842,489	NTD F-30 MB
TDA Cost Exclusions - Depreciation/Amortization	\$3,041,860	\$2,848,591	\$2,737,504	State Controller's Report
Passenger Miles	10,832,446	9,886,154	9,617,233	NTD S-10 MB
Vehicle Operations Costs	\$6,592,489	\$6,682,149	\$6,905,291	NTD F-30 MB
Trips On-Time	76,687	80,821	82,888	Performance Reports
Total Trips	80,252	82,883	84,547	Performance Reports
Complaints	20	21	20	Performance Reports
Missed Trips	654	703	802	Performance Reports
Vehicle Maintenance Costs	\$2,343,070	\$2,119,658	\$2,492,887	NTD F-30 MB
Non-Vehicle Maintenance Costs	\$555,871	\$498,491	\$423,150	NTD F-30 DR
Spare Vehicles (Total less Maximum Service)	11	10	11	NTD S-10 MB
Total Vehicles	52	50	52	NTD S-10 MB
Revenue Vehicle Mechanical System Failures - Total	104	79	86	NTD R-20
Revenue Vehicle Mechanical System Failures - Major	79	50	62	NTD R-20
Preventable Accidents	6	12	13	Performance Reports

## **Functional Performance Inputs – Paratransit**

Data Item	FY2014	FY2015	FY2016	Source
Vehicle Service Miles	478,761	470,075	506,150	NTD S-10 DR
Total Vehicle Miles	656,579	649,281	689,964	NTD S-10 DR
Vehicle Service Hours	30,888	30,561	34,560	NTD S-10 DR
Total Vehicle Hours	41,185	40,947	45,827	NTD S-10 DR
Unlinked Passenger Trips	45,420	48,981	51,783	NTD S-10 DR
Farebox Revenue	\$170,907	\$179,828	\$186,278	NTD F-10
Local Support - Taxes Directly Levied (Measure M)	\$261,180	\$271,387	\$304,009	State Controller's Report
Total Operating Costs	\$2,136,454	\$2,382,905	\$2,646,287	NTD F-30 DR
TDA Cost Exclusions - Depreciation	\$171,107	\$183,062	\$181,824	State Controller's Report
TDA Cost Exclusions - Fed. ADA Required Increases	\$0	\$212,966	\$207,960	FAMIS/EFS Financial Sys.
Passenger Miles	572,778	617,685	652,591	NTD S-10 DR
Vehicle Operations Costs	\$1,025,593	\$1,178,687	\$1,296,088	NTD F-30 DR (2016 Rev 3)
Trips On-Time	40,878	43,593	44,533	Paratransit Software Reports
Total Trips	45,420	48,981	51,783	NTD S-10 DR
Complaints	8	4	2	Management Reports
Missed Trips	1	4	3	Paratransit Software Reports
Total ADA Trips	45,420	48,981	51,783	NTD S-10 DR
ADA Trip Denials	0	0	0	Paratransit Software Reports
Trip Cancellations	7,339	8,639	9,905	Paratransit Software Reports
Late Trip Cancellations	16	12	24	Paratransit Software Reports
No Shows	637	851	1,025	Paratransit Software Reports
Vehicle Maintenance Costs	\$206,115	\$266,735	\$339,069	NTD F-30 DR (2016 Rev 3)
Non-Vehicle Maintenance Costs	\$70,453	\$55,924	\$59,433	NTD F-30 DR (2016 Rev 3)
Spare Vehicles (Total less Maximum Service)	4	3	3	NTD S-10 DR (2016 Rev 3)
Total Vehicles	29	28	28	NTD S-10 DR (2016 Rev 3)
Revenue Vehicle Mechanical System Failures - Total	10	7	5	NTD R-20
Revenue Vehicle Mechanical System Failures - Major	4	4	1	NTD R-20
Preventable Accidents	5	10	5	Management Reports