

# **Triennial Performance Audit**

*of the*

## **City of Santa Rosa Transit Services (CityBus)**

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

**FINAL AUDIT REPORT**

*prepared for the*



**METROPOLITAN  
TRANSPORTATION  
COMMISSION**

*by*



**Pierlott & Associates, LLC**  
*Management Consulting*

**May 2017**

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NOTE:

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

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## EXECUTIVE SUMMARY

This executive summary highlights the findings from the performance audit of the City of Santa Rosa's transit services. 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 the City, 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 is being conducted for MTC in accordance with its established procedures for performance audits. The draft 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 Santa Rosa'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 Santa Rosa's performance based on the results of the previous sections.

Comments received from Santa Rosa and MTC staff regarding the draft report will be 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 Santa Rosa 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 Santa Rosa is in compliance with the data collection and reporting requirements for four of the five TDA statistics. Santa Rosa is not in compliance with the reporting requirements for operating costs. Errors were identified in the reporting of the operating cost statistics, as discussed in further detail below, and in the Performance Indicators and Trends section of this report. The statistics collected over the six-year review period indicate general consistency in terms of the direction and magnitude of the year-to-year changes across the statistics. While the statistics collected over the period are generally consistent with the TDA definitions, some exceptions were noted.

- Santa Rosa acknowledged discrepancies in both fixed-route and demand response reporting of operating costs, which are discussed in further detail in the TDA Performance Indicators and Trends section of this report.
- During the current audit period (FY2014-FY2016), the demand response vehicle service miles decreased at a slightly higher rate than service hours. City staff explained this was likely due to service efficiency standards that were implemented that resulted higher productivity and shorter trips.
- Demand response ridership for FY2013 erroneously included cancelled trips and no-shows. Santa Rosa staff corrected the error in reporting for the following years FY2014 through FY2016.

Performance Indicators and Trends – Santa Rosa’s performance trends for the five TDA-mandated indicators were analyzed by mode. A six-year analysis period was used for all the indicators. In addition, component operating costs were analyzed.

- Bus Service – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2011 through FY2016:
  - There was an average annual increase in the operating cost per hour of 5.2 percent, or 2.6 percent in inflation adjusted dollars. This reflects a modest increase in operating costs combined with a modest decrease in service hours.
  - The cost per passenger increased on average by 10.2 percent per year, which amounted to an average annual increase of 7.5 percent in constant FY2011 dollars. Cost effectiveness was impacted by the decrease in ridership, attributed to the February 2013 service cut and fare increase.
  - Passenger productivity declined with passengers per vehicle service hour decreasing by 4.6 percent per year overall and passengers per vehicle service mile decreasing by 4.2 percent.
  - Employee productivity decreased an average 3.4 percent per year, reflecting the modest decrease in service hours.

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

- Labor costs increased by 3.1 percent annually, and consistently comprised between about 40 to 42 percent of the total operating costs during the six-year period.
- Fringe benefit costs decreased approximately six percent annually. Fringe benefits share of total costs decreased from about 30 percent in FY2011 to about 20 percent in FY2016.
- Services costs showed the highest increase of 21.7 percent annually, attributed to increases in inter-department costs such as

maintenance costs charged to transit by the City Garage and increases in the overhead rate paid to the City. Services share of total operating costs also increased over the audit period from about 12 percent in FY2011 to 28 percent in FY2016.

- Costs for fuel/lubricants and materials and supplies decreased by an annual average of 10.4 and 21.5 percent respectively. These components share of total operating costs also declined over the period, from about 15 percent in FY2011 to about six percent in FY2016.
- Casualty/liability costs increased just over six percent, purchased transportation costs increased about three percent annually over the period, and other miscellaneous costs decreased about six percent annually. Together, these categories comprised about four percent of total costs during the audit period.
- Reporting errors in FY2015 caused purchased transportation costs to be under-reported in NTD that year. The under-reporting resulted in a 35 percent decrease in purchased transportation costs from FY2014 to FY2015, followed by an increase of over 46 percent in FY2016.
- Paratransit – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2011 through FY2016:
  - Cost efficiency decreased slightly, with an average annual increase in the operating cost per hour of 1.6 percent. This translated to a 0.8 percent decrease in inflation adjusted dollars. A drop in vehicle service hours in FY2016 was responsible for a spike in cost per hour that year, which affected overall cost efficiency.
  - Cost effectiveness exhibited a similar trend with the cost per passenger increasing an average of 1.7 percent per year. In constant FY2011 dollars, cost per passenger showed an average annual decrease of 0.8 percent.
  - Passenger productivity over the analysis period remained unchanged, with passengers per vehicle service hour posting no

change overall and passengers per vehicle service mile increasing an average of 0.3 percent annually.

- Productivity performance was influenced by ridership changes, particularly during the three years of the audit period. Those changes were due to service cuts and fare increase in FY2013 as well as the correction for erroneous reporting of ridership prior to FY2014.

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

- Labor and fringe benefit costs decreased by more than 23 percent annually. The labor and fringe benefits share of total operating costs over the six-year period decreased from about eight percent to about one percent.
- Discussions with Santa Rosa staff indicated there may have been some labor and fringe benefit cost reporting errors within the past three years, as both categories showed significant decreases over the current three-year audit period (FY2014-FY2016). The errors were attributed to changes in the reporting of demand response costs in FY2013 and FY2014, and labor and fringe benefits costs not being charged to the paratransit account at 50 percent, but rather all costs were incorrectly allocated to fixed route service.
- Services costs were mostly unchanged, decreasing 1.2 percent on average per year. Service costs fluctuated throughout the audit period, and their share of total operating costs also fluctuated between two and seven percent from year to year.
- Purchased transportation costs comprised the largest category of operating costs by far, increasing from about 90 percent of total costs in FY2011 to about 95 percent in FY2016. Purchased transportation costs increased an average of 2.3 percent annually.
- Costs for fuel/lubricants, casualty/liability and miscellaneous costs all comprised less than one percent of total costs annually. No casualty/liability costs were reported during the entire period.

- Santa Rosa staff also indicated it was discovered that all fuel/lubricant costs were erroneously allocated to the fixed-route side during the audit period. This error has been corrected and all future costs will be reported by mode beginning with the FY2017 NTD report.

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

Status of Prior Audit Recommendations – There were no recommendations made in Santa Rosa’s prior performance audit.

Functional Performance Indicator Trends - To further assess Santa Rosa’s performance over the past three years, a detailed set of systemwide and modal functional area performance indicators was defined and reviewed.

- Systemwide – The following is a brief summary of the systemwide functional trend highlights between FY2014 and FY2016:
  - Administrative costs were mostly steady at about 17 percent of total operating costs, but costs increased from about \$18 per vehicle service hour to \$21 per vehicle service hour.
  - Marketing costs ranged between 3.0 percent and 3.5 percent each year compared to total administrative costs, while marketing cost per passenger trip increased by one cent over the period.
  - The systemwide farebox recovery ratio decreased from 20 percent to 16 percent.



- Bus Service – The following is a brief summary of the bus service functional trend highlights between FY2014 and FY2016:
  - Service Planning results showed a decreasing operating cost per passenger mile, from \$1.58 to \$1.35 over the audit period. Vehicle miles and hours in service were consistently 96 percent or more, while the rate of both passengers per mile and per hour each declined about 10 percent overall.
  - Vehicle operations cost per total operating cost decreased nine percent, while the vehicle operations cost per hour remained steady around \$86 per hour. The overall farebox recovery ratio decreased from 20 percent to 16 percent, while the TDA recovery ratio decreased from 27.5 percent to 23 percent. Schedule adherence improved to 85 percent, the incidence of complaints increased between FY2014 and FY2015 before decreasing to less than one per 100,000 miles in FY2016. The incidence of missed trips was consistently less than one percent per trip mile between FY2014 and FY2016.
  - Maintenance costs comprised less than 20 percent of total operating costs, but vehicle maintenance costs per service hour increased 45 percent from \$1.32 to \$1.92 per hour. The vehicle spare ratio decreased by over 30 percent. The distance between major mechanical failures decreased about 60 percent overall, however, distance between all failures showed a dramatic improvement of more than 200 percent. Santa Rosa provided the explanation that lack of accurate failure reporting in the daily maintenance logs by CityBus supervisors caused in the variability between major and total failure incidents.
  - In the safety area, there was a very low rate of preventable accidents in each audit year.
- Paratransit – The following is a brief summary of the paratransit functional trend highlights between FY2014 and FY2016:
  - Service Planning showed an eight percent decrease in cost per passenger mile, and a 5 percent decrease in both vehicle miles and

hours in revenue service. Passenger productivity improved from 0.15 to 0.20 passengers per mile and 1.9 to 2.5 passengers per hour.

- There were very little or no vehicle operations costs reported during the audit period, reflecting the contracted service. Total farebox recovery increased slightly overall, from 10 to 12 percent. TDA recovery ratio peaked at 18 percent in FY2015, before decreasing in FY2016 to 12 percent. Schedule adherence was steady at about 98 percent. Complaint data was not available for FY2014, and no complaints were reported in FY2015. There were almost nine complaints per 100,000 passengers in FY2016. There were no reported missed trips or ADA trip denials during the audit period. Trip cancellations increased from 13 percent to 24 percent, and passenger no-shows (including late cancellations) decreased from five percent to four percent over the three years.
- As paratransit is contracted service, no vehicle maintenance costs were reported during this audit period. The vehicle spare ratio remained constant at 23 percent. The distance between total failures increased dramatically between FY2014 and FY2016, but there was a NTD reporting error for FY2015 that resulted in zero failures being reported that year, when in fact, there were seven total failures.
- Safety results showed about a 13 percent improvement in preventable accidents per 100,000 miles over the audit period.

## Recommendations

1. IMPROVE DATA COLLECTION AND REPORTING OF TDA COST AND OPERATING DATA FOR BOTH THE BUS AND PARATRANSIT SERVICES.  
*[Reference Sections: II. Review of TDA Data Collection and Reporting Methods; and III. TDA Performance Indicators and Trends]*

There were numerous data collection and reporting errors identified throughout the audit for Santa Rosa's bus and paratransit services. Inconsistencies and errors in data collection and reporting were noted in the Review of TDA Data Collection

and TDA Performance Indicators sections of the audit. A summary of the errors are presented in the following:

- Under-reporting of purchased transportation costs in FY2015 caused a 35 percent decrease in purchased transportation costs from FY2014 to FY2015.
- Demand response unlinked passenger data for FY2013 erroneously included cancelled trips and no-shows. Santa Rosa staff corrected the error in reporting for the following years FY2014 through FY2016, but these errors caused the fluctuations in the resulting TDA performance indicators.
- Santa Rosa staff indicated there were labor and fringe benefit cost reporting errors for paratransit within the past three years. The errors were attributed to changes in the reporting of demand response costs in FY2013 and FY2014, and labor and fringe benefits costs not being charged to the paratransit account at 50 percent, but rather all costs were incorrectly allocated to fixed route service.
- Santa Rosa staff also indicated that all fuel/lubricant costs were erroneously allocated to the fixed-route side during the audit period. This error has been corrected and all future costs will be reported by mode beginning with the FY2017 NTD report.

Collection and reporting of accurate, complete TDA cost and operating data is vital for a comprehensive analysis of performance for both bus and paratransit services. Santa Rosa should examine their methods for collecting and reporting TDA operating cost and service-related data for both bus and paratransit services, and develop data collection and reporting procedures to ensure the accuracy of TDA operating cost and service statistics.

2. IMPROVE DATA COLLECTION AND REPORTING ACTIVITIES FOR QUALITY OF SERVICE STATISTICS FOR BOTH THE BUS AND PARATRANSIT SERVICES.

*[Reference Section: VI. Functional Performance Indicator Trends]*

Inconsistencies in data collection and reporting also were noted in the Functional Performance Indicator Trends section of the audit. Wide variability in bus service and paratransit mechanical failure rates were noted in the functional performance analysis. Santa Rosa staff explained that for the bus service, lack of accurate failure reporting by maintenance supervisors in the daily maintenance logs caused in the variability in failure rates observed throughout the audit period. Santa Rosa also acknowledged an NTD reporting error for FY2015 paratransit mechanical failures that resulted in zero failures being reported.

Santa Rosa should include quality of service data in the examination of their methods for collecting and reporting service-related data for both bus and paratransit services, and develop a comprehensive set of data collection and reporting procedures to ensure the accuracy of quality of service data.

In response to the draft audit report, Santa Rosa provided evidence that they are in the process of developing a transit reporting instructions document, a comprehensive collection of NTD data reporting processes and responsibilities. The reporting requirements and instructions had not been implemented at the time of this final report.

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## I. INTRODUCTION

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

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

This report has been prepared as part of the performance audit of the City of Santa Rosa's transit services. The two modes operated by the City, 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 Santa Rosa's transit services 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 Santa Rosa's transit services is being conducted for MTC in accordance with its established procedures for performance audits. The audit consists of two discrete steps:

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

This report presents the findings from both phases. Comments received from Santa Rosa and MTC staff regarding this draft report will be incorporated into the final report.



## Exhibit 1: System Overview

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<b>Location</b>	Headquarters: 100 Santa Rosa Avenue, Room 6, Santa Rosa, CA 95404
<b>Establishment</b>	The City of Santa Rosa took over ownership of the local transit system in 1958 and contracted out operations. The City assumed full operational responsibility for the transit system in 1975. Paratransit service was added in 1978.
<b>Board</b>	Policy decisions for CityBus are made by the Santa Rosa City Council, which consists of seven members serving four-year terms of office. CityBus is part of the Santa Rosa Transit Division, which is housed within the City of Santa Rosa Transportation and Public Works Department.
<b>Facilities</b>	The Transit Division's administrative office is located at Santa Rosa City Hall (100 Santa Rosa Avenue), in downtown Santa Rosa near the Transit Mall. Pass and ticket sales and other transactions with the public are handled at this location, as well as phone-based customer service. CityBus operations are based in the Transit Operations Building on the west side of town at 45 Stony Point Road. Staff at the Transit Operations Building provide all logistical support for the fixed-route fleet and additional phone based customer support. The transit fleet is maintained, stored, fueled and staged at the City's Municipal Services Center – North at 55 Stony Point Road. Fixed-route bus service is concentrated around a downtown Transit Mall that features many passenger amenities such as shelters, restrooms, on-site customer service, and real time signs. There are four other transfer centers distributed throughout the CityBus service area.
<b>Service Data</b>	<p>CityBus provides fixed-route service within the City of Santa Rosa and certain adjacent unincorporated areas. Santa Rosa currently operates a fleet of thirty-two buses on 17 fixed-routes. In addition, a flexible fixed-route serves the Oakmont senior community in eastern Santa Rosa. Fixed routes generally operate between 6:00 a.m. and 8:00 p.m. on weekdays. On Saturdays, the routes typically start an hour later and end an hour earlier. On Sundays, routes typically begin around 10:00 a.m. and end between 4:30 and 5:30 p.m. On most routes, thirty-minute service is provided continuously on weekdays, while weekend service typically runs on sixty-minute headways.</p> <p>Most routes originate at the Downtown Transit Mall, following one-way loops back to the Transit Mall, where they connect with other CityBus routes and Sonoma County Transit, Golden Gate Transit and Mendocino Transit routes. Most of the CityBus' routes "pulse" through the Transit Mall and other designated transfer locations on a timed-transfer system, every 30 to 60 minutes.</p>

The adult base cash fare on CityBus is \$1.50. Children and youth aged 5 to 18 years pay \$1.25. The reduced fare for the elderly and persons with disabilities is \$0.75. Children under five ride free. Monthly passes are sold for \$50 to adults, \$25 to elderly persons and persons with disabilities, and \$25 for youths aged 5-18 (currently subsidized at \$10 per pass through the Bay Area Air Quality Management District's Transportation Fund for Clean Air). A 24-hour day pass has also been available since August 2013. Ticket packs are available in all fare categories at a five cent per ride discount. Transfers within the system are free with unlimited transfers within 120 minutes. Passengers also can transfer to and from Sonoma County Transit, Golden Gate Transit, and SMART (when it begins revenue operations in summer 2017) and receive one free ride on CityBus, or a \$1.50 fare credit on other operators.

Santa Rosa Paratransit is operated by MV Transportation under a contract with the City. The contract requires MV Transportation to provide all operational and supervisory staff to provide transportation service and to ensure that all vehicles used are adequately and safely maintained. The City provides eleven cut-away vans and two accessible minivans. The fare for a one-way trip within Santa Rosa is \$3.00—double the current adult fixed-route fare. Fares can be paid with a Paratransit ticket, check or exact cash.

The contract with MV Transportation also includes operating the flexible fixed-route that serves Oakmont with a single vehicle.

In addition to managing CityBus and Santa Rosa Paratransit, the Transit Division provides transportation demand management (TDM) services to employers and the community. The TDM program is a combination of services, subsidies, and actions to improve the capacity of existing transportation services and infrastructure.

### **Recent Changes**

The City introduced a 24-hour day pass for the CityBus system in August 2013. Rates are \$4 for adults, \$2 for the elderly and persons with disabilities, and \$3 for youth. The City implemented a fare increase in February 2013, with base cash fare increasing from \$1.25 to \$1.50, and restricting transfers to two transfers within a 90-minute period. In August 2015, the City reinstated its former policy of unlimited transfers within a two-hour timeframe. Additionally in January 2016 CityBus began to accept fare payment via the Clipper smart card.

The Transit Division implemented a grant-funded automated vehicle location (AVL) system that enables real-time tracking of the CityBus fleet and provides real-time bus arrival information to the public via phone, text, and smartphone app. Four real-time information signs have been installed—three at the Transit Mall and one at the Transit offices at City Hall.

### **Planned Changes**

In August 2016 the Transit Division completed a Comprehensive Operational Analysis known as Reimagining CityBus and is currently preparing to implement a full restructuring of the transit system in the

summer of 2017. The goals of Reimagining CityBus included better matching transit service to current and anticipated mobility needs in Santa Rosa in order to provide a more convenient and useful service for riders, better coordinating transit service planning with land use planning, and preparing for integration of the SMART commuter rail system. The service plan was developed with significant participation by riders; members of the public; stakeholders from education, healthcare, community-based organizations, and the business community; and the Santa Rosa City Council.

In the aftermath of the 2013 service cuts and fare policy changes, CityBus has experienced a dramatic reduction in ridership. The Reimagining CityBus plan includes elements intend to promote an increase in ridership and productivity, including 15-minute weekday service on major corridors, more direct routes, and more bi-directional service throughout the city.

**Staff**

Toward the end of the audit period, CityBus Operations included the following personnel:

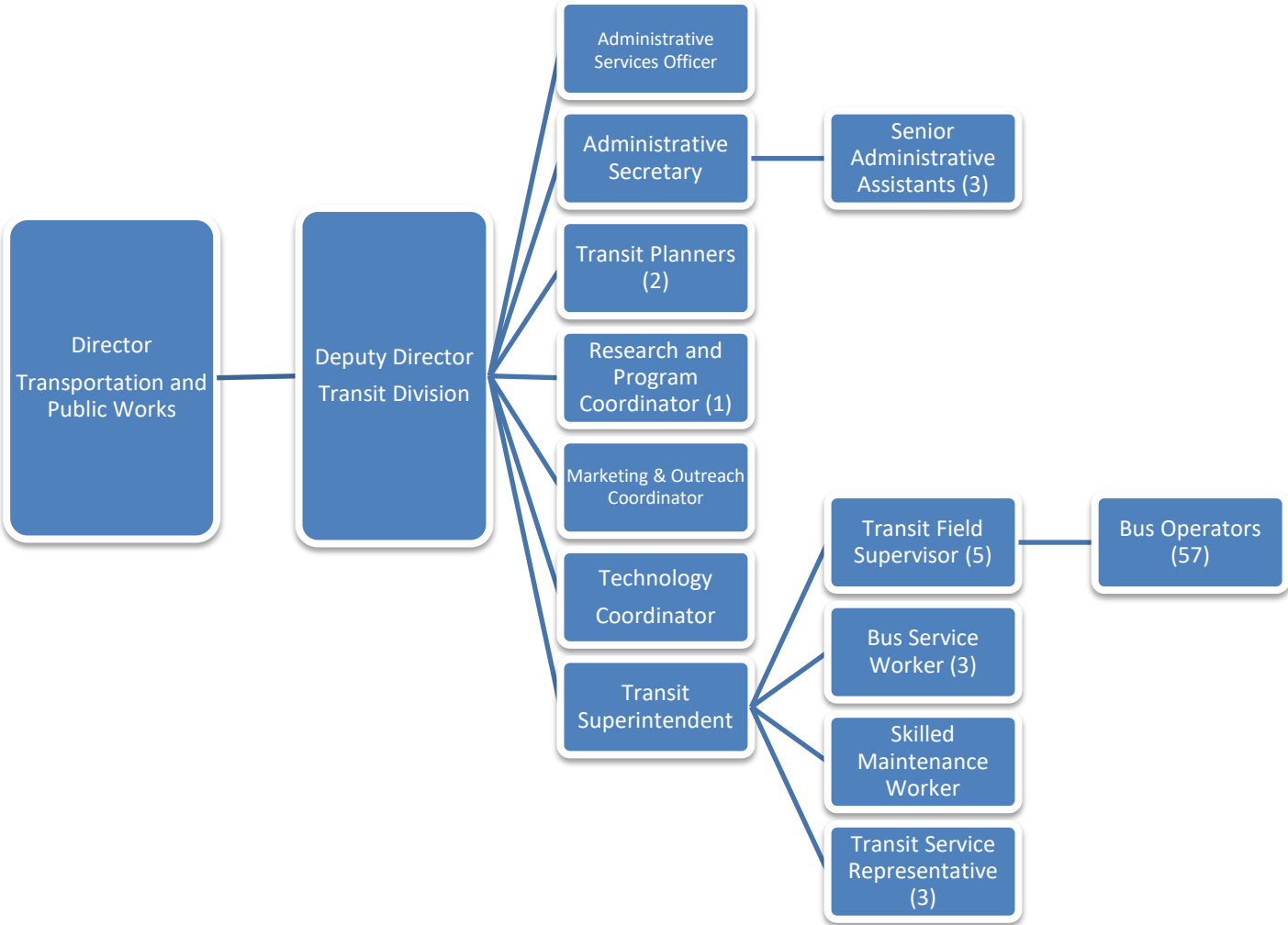
• Deputy Director	1
• Administrative Services Officer	1
• Transit Superintendent	1
• Marketing and Outreach Coordinator	1
• Transit Planners	2
• Transit Field Supervisors	5
• Transit Services Representatives	3
• Bus Service Operators	57
• Administrative Secretary	1
• Senior Administrative Assistants	3
• Technology Coordinator	1
• Bus Service Workers	3
• Skilled Maintenance Worker	1
• Research and Program Coordinator	1
	81
TOTAL	

CityBus is evaluating current staffing levels and anticipates the changes in personnel levels shown below.

• Deputy Director	1
• Transit Superintendent	1
• Marketing and Outreach Coordinator	1
• Transit Planners	2
• Transit Field Supervisors	5
• Transit Services Representatives	3
• Bus Service Operators	57
• Administrative Secretary	1
• Senior Administrative Assistants	2
• Technology Coordinator	1/2

• Bus Service Workers	3
• Skilled Maintenance Worker	1
• Research and Program Coordinator	1
TOTAL	<u>78 1/2</u>

**Exhibit 2: Audit Period Organization Chart**



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## 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 Santa Rosa 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 Santa Rosa covering the audit period has been reviewed.

### Compliance with Requirements

To support this review, Santa Rosa staff confirmed that most of the data collection and reporting procedures remain unchanged from those described in the prior performance audit. The staff indicated that the definitions and procedures used to derive the TDA indicator statistics generally are consistent with those used for the NTD reporting system.

Based on the information provided, as shown in Exhibit 3.1, Santa Rosa is in compliance with the data collection and reporting requirements for four of the five TDA statistics. Santa Rosa is not in compliance with the reporting requirements for operating costs. While the agency's procedures for TDA operating cost collection appear to be consistent with the TDA definition, errors were identified in the reporting of the operating cost statistics, as discussed in further detail below, and in the Performance Indicators and Trends section of this report. Reporting errors also were noted in the unlinked passenger statistics in FY2013, however, Santa Rosa implemented corrective actions to ensure the statistics for the current audit period were accurately reported.

### Consistency of the Reported Statistics

The resulting TDA statistics for Santa Rosa's bus and paratransit services are shown in Exhibits 3.2 and 3.3. 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 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. While the statistics collected over the period are generally consistent with the TDA definitions, some exceptions were noted.

- Santa Rosa acknowledged discrepancies in both fixed-route and demand response reporting of operating costs, which are discussed in further detail in the TDA Performance Indicators and Trends section of this report.
- During the current audit period (FY2014-FY2016), the demand response vehicle service miles decreased at a slightly higher rate than service hours. City staff explained this was likely due to service efficiency standards that were implemented that resulted in higher productivity and shorter trips.



- Demand response ridership for FY2013 erroneously included cancelled trips and no-shows. Santa Rosa staff corrected the error in reporting for the following years FY2014 through FY2016.

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

TDA Statistic	TDA Definition	Compliance Finding	Verification Information
Operating Cost	<p>“Operating cost” means all costs in the operating expense object classes exclusive of the costs in the depreciation and amortization expense object class of the uniform system of accounts and records adopted by the Controller pursuant to Section 99243. Also excluded are all subsidies for commuter rail services operated on railroad lines under the jurisdiction of the Federal Railroad Administration, all direct costs for providing charter services, all vehicle lease costs, and principal and interest payments on capital projects funded with certificates of participation.</p>	Not In Compliance	<ul style="list-style-type: none"> <li>• Fixed-route: Operating costs are formula based and comply with NTD definitions. Tracked as functional expenses (operations, vehicle maintenance, non-vehicle maintenance and general administration) by object class (labor, fringe benefits, services, fuel/lubricants, etc.).</li> <li>• Paratransit and Oakmont: Tracked similarly to fixed route. Costs are entered into a spreadsheet submitted to City staff by the contractor monthly.</li> <li>• Discrepancies acknowledged in reporting of operating costs for both modes.</li> </ul>
Vehicle Service Hours	<p>“Vehicle service hours” means the total number of hours that each transit vehicle is in revenue service, including layover time.</p>	In Compliance	<ul style="list-style-type: none"> <li>• Fixed-route: An Excel spreadsheet containing scheduled vehicle service hours for each route is prepared for each service period. Field Supervisors identify any supplemental service or missed service and the associated hours during each service day in a separate Excel spreadsheet (“Missed Trips Report”). The data from the Missed Trips Report is then used to adjust scheduled service hours to provide actual service hours for each route and time period.</li> <li>• Paratransit and Oakmont: The contractor has both Trapeze scheduling software and a GPS/AVL tracking system available. Manifests are checked at the end of each day and the total service hours for each vehicle are tabulated. A report is submitted monthly by the contractor. Hours are tallied from the start of the first trip of the day and</li> </ul>

TDA Statistic	TDA Definition	Compliance Finding	Verification Information
			continue throughout the service period as trips are performed.
Vehicle Service Miles	“Vehicle service miles” means the total number of miles that each transit vehicle is in revenue service.	In Compliance	<ul style="list-style-type: none"> <li>Fixed-route: An Excel workbook containing scheduled vehicle service miles for each route is prepared for each service period. Field Supervisors identify any supplemental service or missed service and the associated miles on a daily basis in a separate Excel spreadsheet (“Missed Trips Report”). The data from the Missed Trips Report is then used to adjust scheduled service miles to provide actual service miles for each route and time period.</li> <li>Paratransit and Oakmont: Totaled by recording the odometer reading during the Daily Vehicle Inspection process and tallied when each vehicle goes out of service. A report is submitted monthly by the contractor. Miles are tabulated on a gate-to-gate basis.</li> </ul>
Unlinked Passengers	“Unlinked passengers” means the number of boarding passengers, whether revenue producing or not, carried by the public transportation system.	In Compliance	<ul style="list-style-type: none"> <li>Fixed-route: Counted via farebox tally, either manually by drivers or automatically by the farebox. Riders are classified by their fare category as they board the bus. Passengers remaining on a vehicle when it begins a new route are counted as thru rider passengers on the new route. Passenger trip data is downloaded via the Genfare system’s RouteSum report for inclusion in monthly reporting according to the ridership definition established in the Genfare reporting system.</li> <li>Paratransit and Oakmont: Tallied by subtracting the number of cancellations and no-shows from the number of scheduled trips for the day. If a rider travels with an attendant, that individual is counted as a passenger trip as well. A report is submitted monthly by the contractor.</li> </ul>

TDA Statistic	TDA Definition	Compliance Finding	Verification Information
			<ul style="list-style-type: none"> <li>• Errors in over-reporting of demand response ridership discovered by Santa Rosa staff in FY2013. Corrective actions taken to fix problem for FY2014 – FY2016 report years.</li> </ul>
Employee Full-Time Equivalents	2,000 person-hours of work in one year constitute one employee.	In Compliance	<ul style="list-style-type: none"> <li>• To compute the number of employees as required by TDA, the City combines the number of administrative, management, operations and maintenance full-time equivalents. The counts are based on one employee being equivalent to 2,000 annual work hours.</li> </ul>

### Exhibit 3.2: TDA Statistics – Bus Service

TDA Statistic	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
Operating Cost (Actual \$)	\$9,816,813	\$10,115,534	\$10,079,733	\$9,836,836	\$10,315,427	\$10,871,673
<i>Annual Change</i>	- -	3.0%	-0.4%	-2.4%	4.9%	5.4%
Vehicle Service Hours	94,379	93,249	87,625	82,068	82,035	82,066
<i>Annual Change</i>	- -	-1.2%	-6.0%	-6.3%	0.0%	0.0%
Vehicle Service Miles	1,113,976	1,131,705	1,032,691	958,213	952,007	950,398
<i>Annual Change</i>	- -	1.6%	-8.7%	-7.2%	-0.6%	-0.2%
Unlinked Passengers	3,057,986	3,037,860	2,816,210	2,338,423	2,193,577	2,105,846
<i>Annual Change</i>	- -	-0.7%	-7.3%	-17.0%	-6.2%	-4.0%
Employee Full-Time Equivalents	74.9	74.5	72.5	88.1	86.9	77.5
<i>Annual Change</i>	- -	-0.5%	-2.7%	21.6%	-1.4%	-10.8%

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

### Exhibit 3.3: TDA Statistics – Paratransit

TDA Statistic	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016
Operating Cost (Actual \$)	\$1,146,316	\$1,235,153	\$1,269,929	\$1,222,598	\$1,218,174	\$1,215,572
<i>Annual Change</i>	- -	7.7%	2.8%	-3.7%	-0.4%	-0.2%
Vehicle Service Hours	18,539	19,655	22,028	21,473	21,376	18,117
<i>Annual Change</i>	- -	6.0%	12.1%	-0.2%	-0.5%	-15.2%
Vehicle Service Miles	237,236	276,313	319,153	280,069	271,796	228,351
<i>Annual Change</i>	- -	16.5%	15.5%	-2.5%	-3.0%	-16.0%
Unlinked Passengers	46,010	49,482	53,985	41,030	48,102	44,930
<i>Annual Change</i>	- -	7.5%	9.1%	-12.2%	17.2%	-6.6%
Employee Full-Time Equivalent	(a)	(a)	(a)	(a)	(a)	(a)
<i>Annual Change</i>	- -	- -	- -	- -	- -	- -

(a) Contracted service; FTEs not applicable

Sources: FY2011 through FY2013 - Prior Performance Audit Report

FY2014 through FY2016 - NTD Reports

### III. TDA PERFORMANCE INDICATORS AND TRENDS

The performance trends for Santa Rosa'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 developed from the information in the NTD reports filed with the FTA for the three years of the audit period. Santa Rosa's NTD reports were the source of all operating and financial statistics.

In addition to presenting performance for the three years of the audit period (FY2014 through FY2016), this analysis features two enhancements:

- Six-Year Time Period – While the performance audit focuses on the three fiscal years of the audit period, six-year trend lines have been constructed for Santa Rosa'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 Santa Rosa’s performance trends in each of the five TDA performance indicators. The discussion is organized by service mode – Santa Rosa’s 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 Santa Rosa’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 5.2 percent annually during the six-year review period.
  - The cost per hour ranged from a low of \$104.01 in FY2011 to a high of \$133.81 in FY2016. There were increases in every year, the largest (6.0 percent) occurring in FY2013.
  - The increase reflects steady, modest annual average increases in operating costs (2.3 percent) combined with steady, modest decreases in service hours over the audit period (2.8 percent).



- In FY2011 constant dollars, there was an average annual increase in this indicator of 2.6 percent.
- Passengers per Vehicle Service Hour (Exhibit 4.2)
  - A key indicator of passenger productivity, passengers per hour decreased an average of 4.6 percent annually during the six-year period.
  - This decrease reflects an overall average annual decrease of 7.2 percent in passengers combined with a smaller average annual decrease of 2.8 percent in service hours.
  - The decrease in ridership is mostly attributed to the February 2013 service reduction and fare increase which were enacted due to funding constraints.
  - Passengers per hour decreased overall from 32.4 in FY2011 to 25.7 in FY2016.
- Passengers per Vehicle Service Mile (Exhibit 4.2)
  - Similar to passengers per hour, passengers per mile decreased overall, by 4.2 percent annually on average.
  - Passengers per mile decreased from 2.75 in FY2011 to 2.22 in FY2016. There were decreases in every year except a 1.6 percent increase in FY2013.
- Operating Cost per Passenger (Exhibit 4.3)
  - A key measure of cost effectiveness, the cost per passenger increased an average of 10.2 percent annually during the six-year review period.
  - The cost per passenger increased annually, from \$3.21 in FY2011 to \$5.21 in FY2016.
  - As with passenger productivity, cost effectiveness was greatly impacted by the decrease in ridership during the period, while operating costs increased over the six years.

- In FY2011 constant dollars, there was an average annual increase in this indicator of 7.5 percent.
- Vehicle Service Hours per Employee (FTE) (Exhibit 4.4)
  - A measure of employee productivity, this indicator decreased by an average 3.4 percent per year over the six years.
  - Hours per FTE decreased overall from 1,260 in FY2011 to 1,059 in FY2016.
  - Annual FTEs decreased in each year except FY2014, when a FTEs increased almost 22 percent. The increase was attributed to City garage staff being included in the FTE calculation beginning that year. Overall, FTEs remained fairly steady, with an annual average increase of just 0.7 percent.

\* \* \* \* \*

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

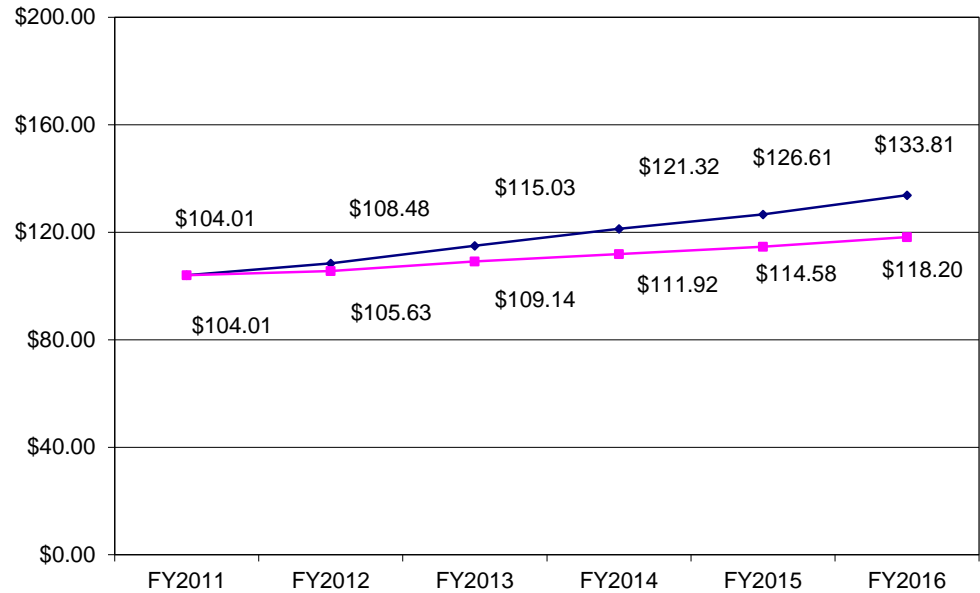
- There was an average annual increase in the operating cost per hour of 5.2 percent, or 2.6 percent in inflation adjusted dollars. This reflects a modest increase in operating costs combined with a modest decrease in service hours.
- The cost per passenger increased on average by 10.2 percent per year, which amounted to an average annual increase of 7.5 percent in constant FY2011 dollars. Cost effectiveness was impacted by the decrease in ridership, attributed to the February 2013 service cut and fare increase.
- Passenger productivity declined with passengers per vehicle service hour decreasing by 4.6 percent per year overall and passengers per vehicle service mile decreasing by 4.2 percent.
- Employee productivity decreased an average 3.4 percent per year, reflecting the modest decrease in service hours.

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

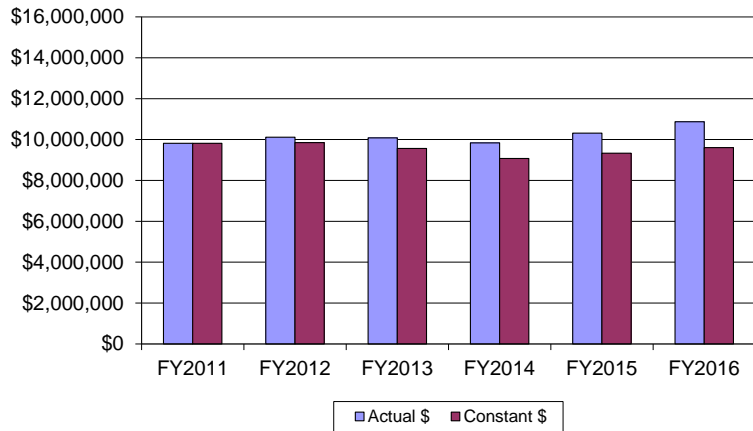
	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	Av. Ann. Chg.
<b>Performance Indicators</b>							
Op. Cost per Vehicle Svc. Hour (Actual \$)	\$104.01	\$108.48	\$115.03	\$121.32	\$126.61	\$133.81	- -
<i>Annual Change</i>	- -	4.3%	6.0%	5.5%	4.4%	5.7%	5.2%
Op. Cost per Vehicle Svc. Hour (Constant \$)	\$104.01	\$105.63	\$109.14	\$111.92	\$114.58	\$118.20	- -
<i>Annual Change</i>	- -	1.5%	3.3%	2.5%	2.4%	3.2%	2.6%
Passengers per Vehicle Service Hour	32.4	32.6	32.1	28.5	26.7	25.7	- -
<i>Annual Change</i>	- -	0.5%	-1.3%	-11.3%	-6.2%	-4.0%	-4.6%
Passengers per Vehicle Service Mile	2.75	2.68	2.73	2.44	2.30	2.22	- -
<i>Annual Change</i>	- -	-2.2%	1.6%	-10.5%	-5.6%	-3.8%	-4.2%
Op. Cost per Passenger (Actual \$)	\$3.21	\$3.33	\$3.58	\$4.26	\$4.74	\$5.21	- -
<i>Annual Change</i>	- -	3.7%	7.5%	19.0%	11.2%	10.1%	10.2%
Op. Cost per Passenger (Constant \$)	\$3.21	\$3.24	\$3.40	\$3.93	\$4.29	\$4.61	- -
<i>Annual Change</i>	- -	1.0%	4.7%	15.7%	9.1%	7.5%	7.5%
Vehicle Service Hours per FTE	1,260	1,252	1,209	932	944	1,059	- -
<i>Annual Change</i>	- -	-0.7%	-3.4%	-23.0%	1.3%	12.2%	-3.4%
<b>Input Data</b>							
Operating Cost (Actual \$)	\$9,816,813	\$10,115,534	\$10,079,733	\$9,956,226	\$10,386,611	\$10,981,051	- -
<i>Annual Change</i>	- -	3.0%	-0.4%	-1.2%	4.3%	5.7%	2.3%
Operating Cost (Constant \$)	\$9,816,813	\$9,849,595	\$9,563,314	\$9,184,710	\$9,399,648	\$9,700,575	- -
<i>Annual Change</i>	- -	0.3%	-2.9%	-4.0%	2.3%	3.2%	-0.2%
Vehicle Service Hours	94,379	93,249	87,625	82,068	82,035	82,066	- -
<i>Annual Change</i>	- -	-1.2%	-6.0%	-6.3%	0.0%	0.0%	-2.8%
Vehicle Service Miles	1,113,976	1,131,705	1,032,691	958,213	952,007	950,398	- -
<i>Annual Change</i>	- -	1.6%	-8.7%	-7.2%	-0.6%	-0.2%	-3.1%
Unlinked Passengers	3,057,986	3,037,860	2,816,210	2,338,423	2,193,577	2,105,846	- -
<i>Annual Change</i>	- -	-0.7%	-7.3%	-17.0%	-6.2%	-4.0%	-7.2%
Employee Full-Time Equivalents	74.9	74.5	72.5	88.1	86.9	77.5	- -
<i>Annual Change</i>	- -	-0.5%	-2.7%	21.6%	-1.4%	-10.8%	0.7%
Bay Area CPI - Annual Change	- -	2.7%	2.6%	2.9%	1.9%	2.5%	- -
- Cumulative Change	- -	2.7%	5.4%	8.4%	10.5%	13.2%	2.5%

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

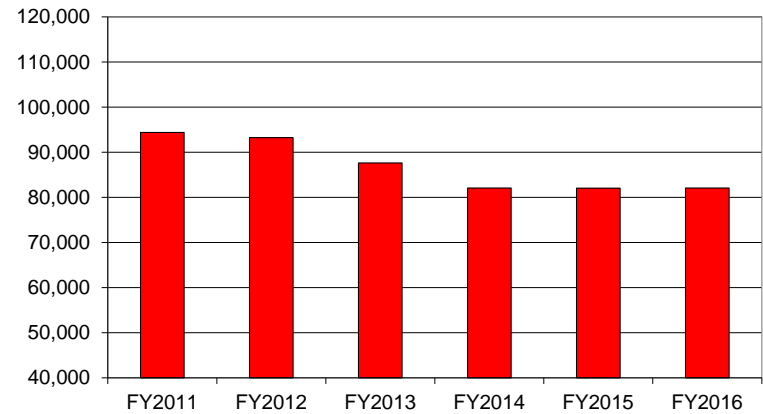
### Exhibit 4.1: Operating Cost per Vehicle Service Hour - Bus Service



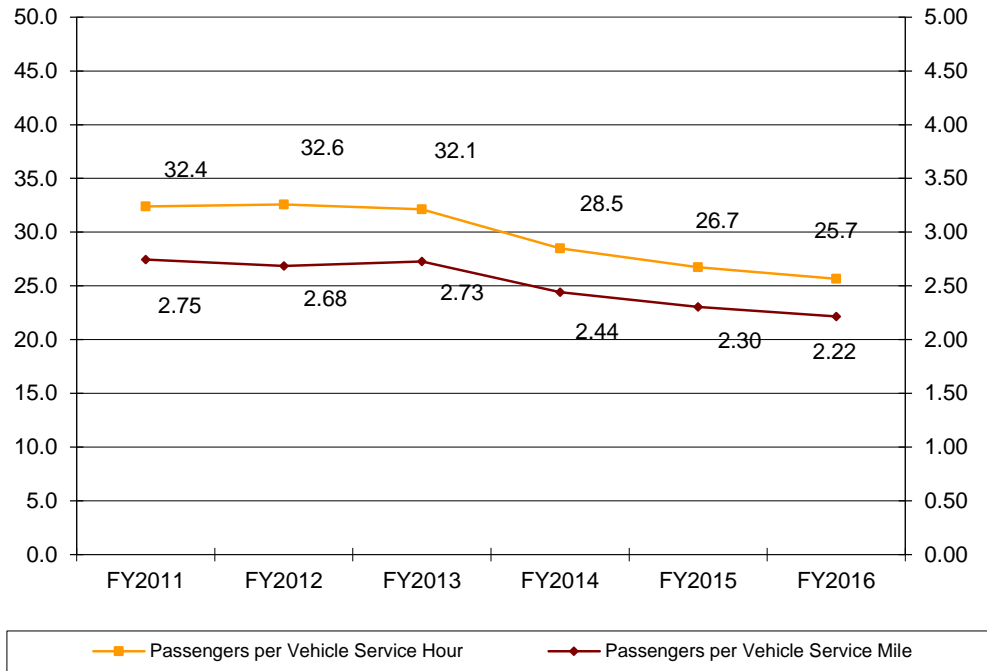
**Operating Cost**



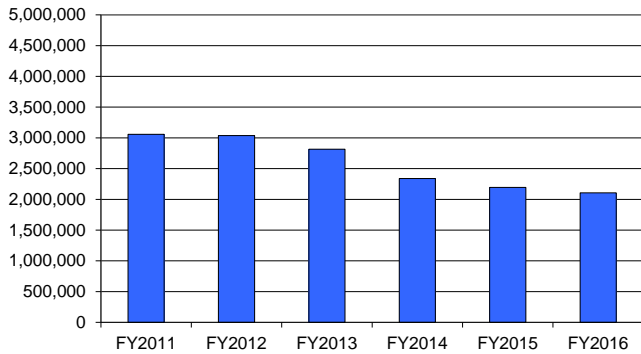
**Vehicle Service Hours**



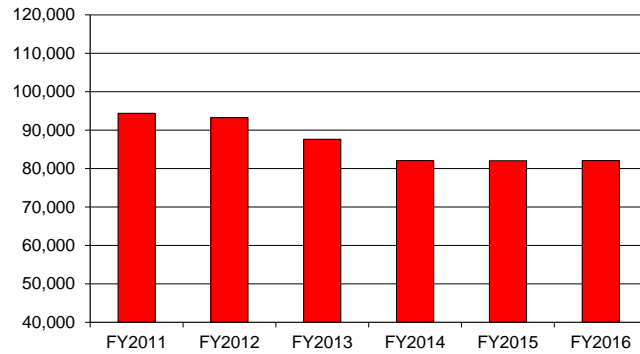
### Exhibit 4.2: Passengers per Hour and per Mile – Bus Service



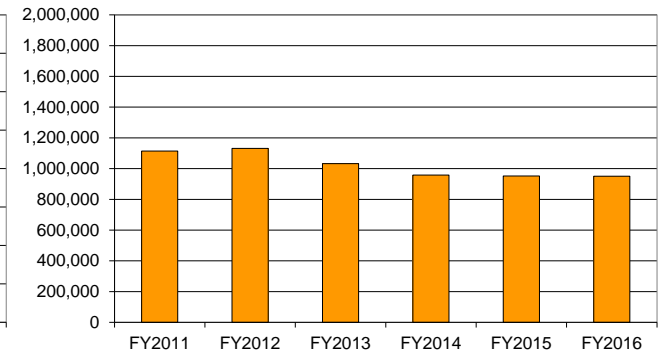
**Unlinked Passengers**



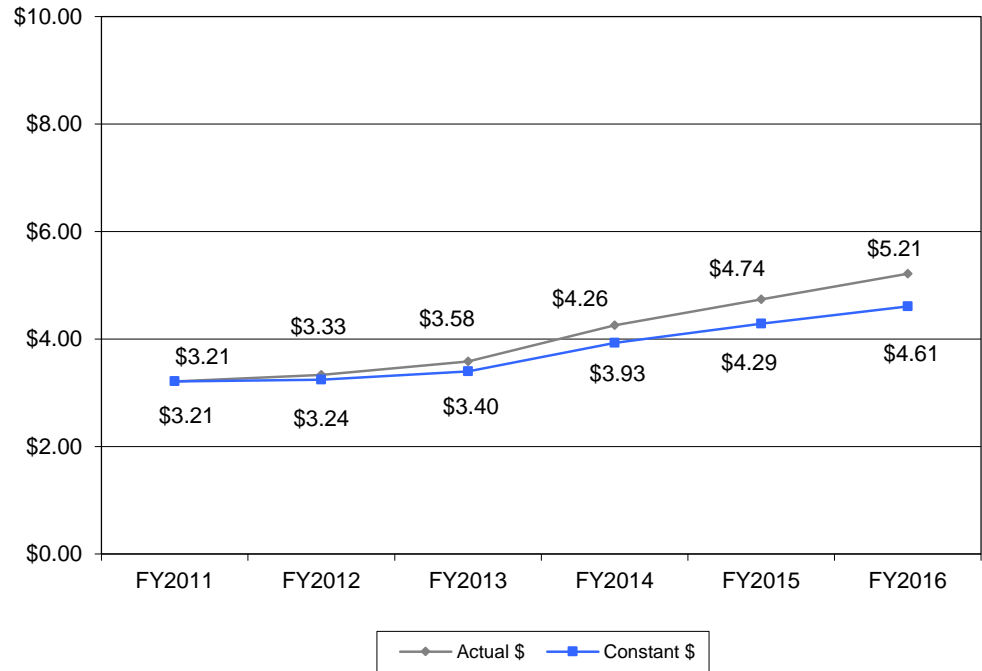
**Vehicle Service Hours**



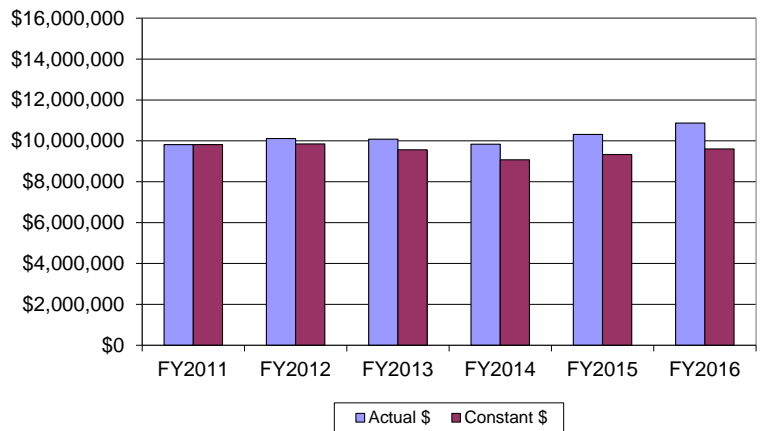
**Vehicle Service Miles**



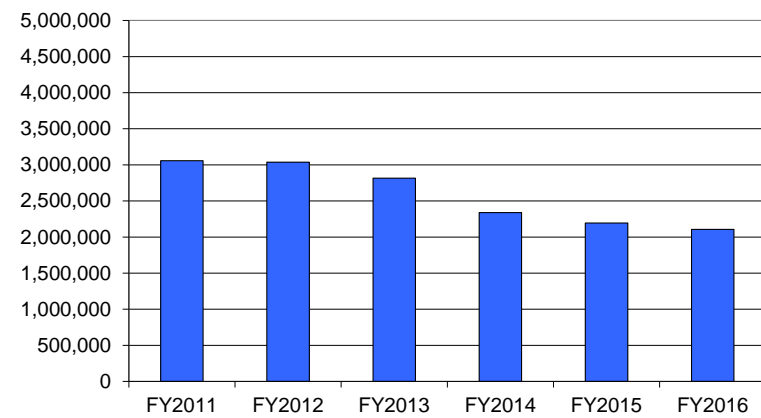
### Exhibit 4.3: Operating Cost per Passenger – Bus Service



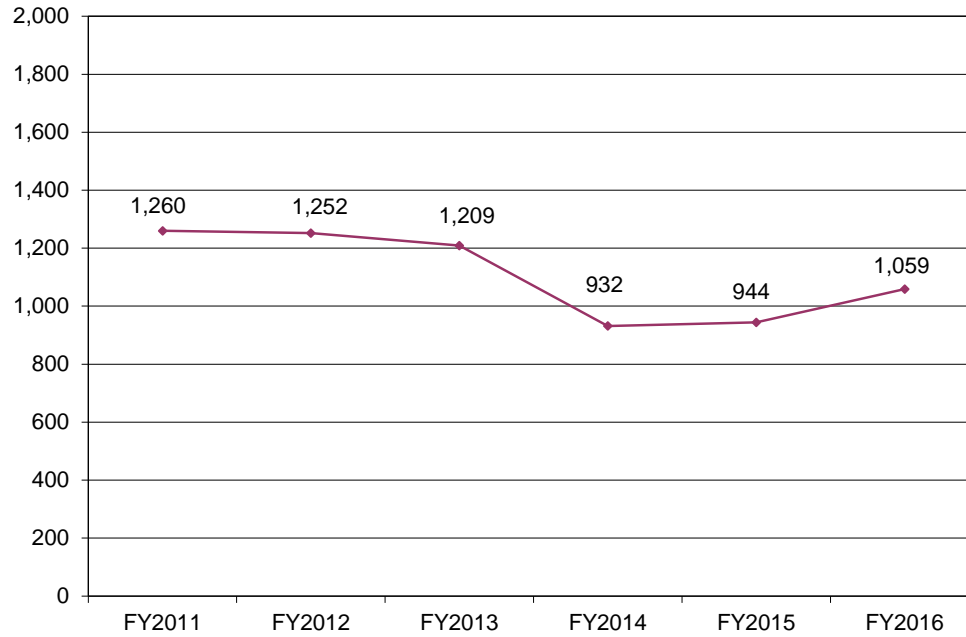
#### Operating Cost



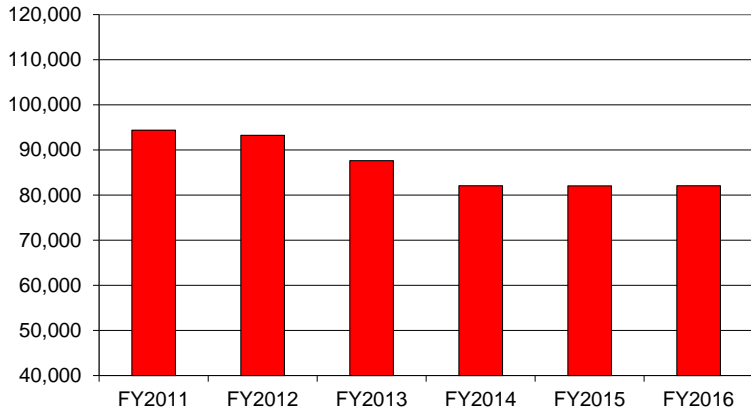
#### Unlinked Passengers



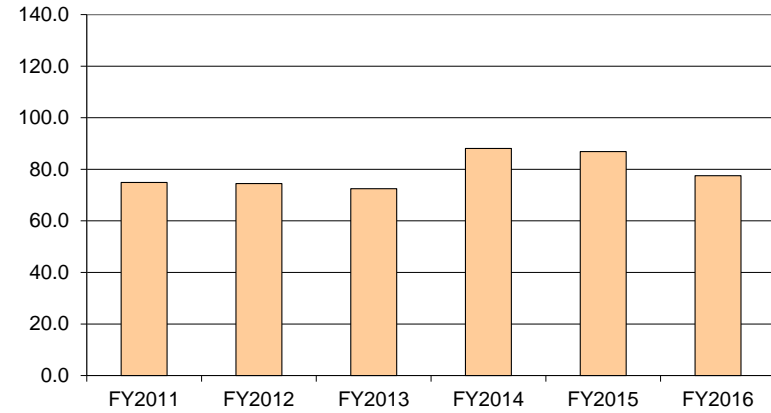
### Exhibit 4.4: Vehicle Service Hours per FTE – Bus Service



**Vehicle Service Hours**



**Full-time Equivalents**



## Bus Service Component Costs

Year-to-year changes in selected operating cost categories over the past six years are presented in Exhibit 4.5. Examining components of operating costs (e.g., labor, fringes, fuel, and casualty/liability) may determine what particular components had the most significant impacts on the operating costs. Exhibit 4.5 also shows the concurrent changes in vehicle service hours, and Exhibit 4.6 illustrates the portion of the cost per bus service hour that can be attributed to each included cost component.

- Labor costs increased moderately over the past six years, averaging an annual increase of 3.1 percent. Fringe benefit costs decreased almost six percent annually over the same period.
- Services costs had the largest increase, averaging 21.7 percent annually from FY2011 through FY2016, with an 87 percent increase in FY2013, and increases of almost 15 percent and 35 percent coming in the last two years. The increases in FY2015 and FY2016 were the result of increases in inter-department costs charged to transit by the City Garage and increases in the overhead rate paid to the City. For example, the hourly rate for bus maintenance increased 15 percent between FY2015 and FY2016.
- Costs for fuel/lubricants and materials/supplies decreased by 10.4 percent and 21.5 percent, respectively over the audit period.
- There were modest annual average increases in casualty/liability costs (6.7 percent) and purchased transportation costs (2.8 percent), while all other costs decreased an average of 6.2 percent annually over the period.
- There was an error in purchased transportation costs reported in FY2015, in which over \$42,000 in operating expenses were omitted causing a 35 percent decrease in costs from the prior year followed by an increase of over 46 percent in FY2016.

\* \* \* \* \*



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

- Labor costs increased by 3.1 percent annually, and consistently comprised between about 40 to 42 percent of the total operating costs during the six-year period.
- Fringe benefit costs decreased approximately six percent annually. Fringe benefits share of total costs decreased from about 30 percent in FY2011 to about 20 percent in FY2016.
- Services costs showed the highest increase of 21.7 percent annually, attributed to increases in inter-department costs such as maintenance costs charged to transit by the City Garage and increases in the overhead rate paid to the City. Services share of total operating costs also increased over the audit period from about 12 percent in FY2011 to 28 percent in FY2016.
- Costs for fuel/lubricants and materials and supplies decreased by an annual average of 10.4 and 21.5 percent respectively. These components share of total operating costs also declined over the period, from about 15 percent in FY2011 to about six percent in FY2016.
- Casualty/liability costs increased just over six percent, purchased transportation costs increased about three percent annually over the period, and other miscellaneous costs decreased about six percent annually. Together, these categories comprised about four percent of total costs during the audit period.
- Reporting errors in FY2015 caused purchased transportation costs to be under-reported in NTD that year. The under-reporting resulted in a 35 percent decrease in purchased transportation costs from FY2014 to FY2015, followed by an increase of over 46 percent in FY2016.

### Exhibit 4.5: TDA Component Cost Trends – Bus Service

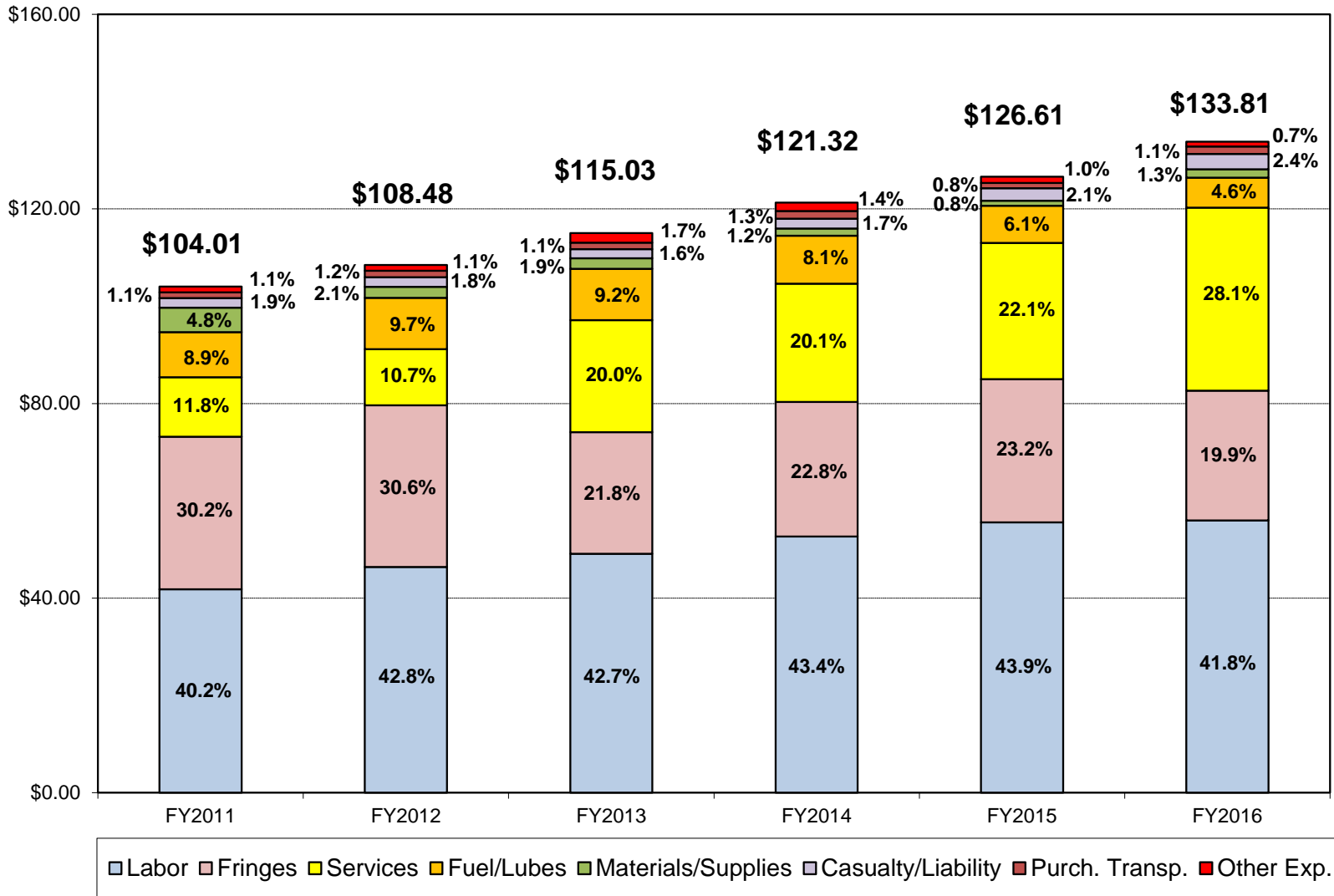
	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	Av. Ann. Chg.
COST CATEGORIES							
Labor - (Salaries, Wages)	\$3,945,377	\$4,325,711	\$4,301,676	\$4,322,938	\$4,560,070	\$4,593,167	--
<i>Annual Change</i>	--	9.6%	-0.6%	0.5%	5.5%	0.7%	3.1%
Fringe Benefits	\$2,959,816	\$3,097,688	\$2,193,244	\$2,267,338	\$2,414,868	\$2,189,456	--
<i>Annual Change</i>	--	4.7%	-29.2%	3.4%	6.5%	-9.3%	-5.9%
Services	\$1,156,703	\$1,077,931	\$2,017,949	\$1,996,633	\$2,294,238	\$3,087,811	--
<i>Annual Change</i>	--	-6.8%	87.2%	-1.1%	14.9%	34.6%	21.7%
Fuel/Lubricants	\$871,335	\$983,473	\$922,968	\$810,282	\$629,773	\$503,107	--
<i>Annual Change</i>	--	12.9%	-6.2%	-12.2%	-22.3%	-20.1%	-10.4%
Materials/Supplies	\$475,243	\$210,448	\$190,126	\$118,182	\$81,840	\$141,247	--
<i>Annual Change</i>	--	-55.7%	-9.7%	-37.8%	-30.8%	72.6%	-21.5%
Casualty/Liability	\$187,995	\$186,539	\$166,310	\$167,253	\$214,263	\$260,367	--
<i>Annual Change</i>	--	-0.8%	-10.8%	0.6%	28.1%	21.5%	6.7%
Purchased Transportation	\$109,233	\$123,106	\$114,692	\$131,997	\$85,433	\$125,428	--
<i>Annual Change</i>	--	12.7%	-6.8%	15.1%	-35.3%	46.8%	2.8%
Other Expenses (a)	\$111,111	\$110,638	\$172,768	\$141,603	\$106,126	\$80,468	--
<i>Annual Change</i>	--	-0.4%	56.2%	-18.0%	-25.1%	-24.2%	-6.2%
<b>Total</b>	<b>\$9,816,813</b>	<b>\$10,115,534</b>	<b>\$10,079,733</b>	<b>\$9,956,226</b>	<b>\$10,386,611</b>	<b>\$10,981,051</b>	<b>--</b>
<i>Annual Change</i>	--	3.0%	-0.4%	-1.2%	4.3%	5.7%	2.3%
OPERATING STATISTICS							
Vehicle Service Hours	94,379	93,249	87,625	82,068	82,035	82,066	--
<i>Annual Change</i>	--	-1.2%	-6.0%	-6.3%	0.0%	0.0%	-2.8%

Source: FY 2011 –FY2013 prior audit report; FY2014 through FY2016 NTD Reports

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

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

*Operating Cost per Vehicle Service Hour*



## Paratransit Performance Trends

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

- Operating Cost per Vehicle Service Hour (Exhibit 5.1)
  - A key indicator of cost efficiency, the overall cost per hour of paratransit service increased an average of 1.6 percent annually during the six-year review period.
  - The main cause for the increase was a 15 percent drop in service hours in FY2016, with no corresponding decrease in operating costs. Santa Rosa staff suggested improved scheduling of paratransit trips was accountable for the drop in hours, along with a revised operations contract that included performance based incentives and penalties.
  - The cost per hour ranged from \$61.83 in FY2011 to \$67.10 in FY2016. Cost per hour decreased or was flat between FY2012 and FY2015, before increasing 17 percent in FY2016.
  - In FY2011 constant dollars, there was a minimal average annual decrease in this indicator of 0.8 percent.
- Passengers per Vehicle Service Hour (Exhibit 5.2)
  - A key indicator of passenger productivity, passengers per hour reflected no average annual change over the six-year period, remaining constant overall at 2.5 in FY2011 and 2.5 in FY2016.
  - Vehicle service hours and miles increased during the first three years of the period, before decreasing in the last three years. This likely is due to the service decrease and fare increase in 2013. Ridership numbers were down in FY2014 due to the correction made to erroneous reporting prior to that year.

- As mentioned above, a significant decrease (greater than 15 percent) in service levels was observed in FY2016. Additional information on this decline is pending, but Santa Rosa staff initially attribute this decrease to:
  - Improved scheduling of paratransit trips in the first year of the new operating contract with MV Transportation.
  - A six percent drop in ridership, which would also result in a decrease in service levels.
- Passengers per Vehicle Service Mile (Exhibit 5.2)
  - Similar to passengers per hour, passengers per vehicle service mile posted a nominal average increase of 0.3 percent annually over the six-year period.
  - Passengers per mile increased from 0.19 in FY2011 to 0.20 in FY2016. There were decreases each year from FY2011 through FY2014, with increases in FY2015 and FY2016.
- Operating Cost per Passenger (Exhibit 5.3)
  - A key measure of cost effectiveness, the cost per passenger increased an average of 1.7 percent annually during the six-year review period.
  - The cost per passenger ranged from \$24.91 in FY2011 to \$27.05 in FY2016. During intervening years cost per passenger fluctuated with the rise and fall of ridership.
  - In FY2011 constant dollars, there was an average annual decrease in this indicator of 0.8 percent.

\* \* \* \* \*

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

- Cost efficiency decreased slightly, with an average annual increase in the operating cost per hour of 1.6 percent. This translated to a 0.8 percent decrease in inflation adjusted dollars. A drop in vehicle service hours in FY2016 was responsible for a spike in cost per hour that year, which affected overall cost efficiency.
- Cost effectiveness exhibited a similar trend with the cost per passenger increasing an average of 1.7 percent per year. In constant FY2011 dollars, cost per passenger showed an average annual decrease of 0.8 percent.
- Passenger productivity over the analysis period remained unchanged, with passengers per vehicle service hour posting no change overall and passengers per vehicle service mile increasing an average of 0.3 percent annually.
- Productivity performance was influenced by ridership changes, particularly during the three years of the audit period. Those changes were due to service cuts and fare increase in FY2013 as well as the correction for erroneous reporting of ridership prior to FY2014.

### Exhibit 5: TDA Indicator Performance – Paratransit

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	Av. Ann. Chg.
<b>Performance Indicators</b>							
Op. Cost per Vehicle Svc. Hour (Actual \$)	\$61.83	\$62.84	\$57.65	\$56.94	\$56.99	\$67.10	- -
<i>Annual Change</i>	- -	1.6%	-8.3%	-1.2%	0.1%	17.7%	1.6%
Op. Cost per Vehicle Svc. Hour (Constant \$)	\$61.83	\$61.19	\$54.70	\$52.52	\$51.57	\$59.27	- -
<i>Annual Change</i>	- -	-1.0%	-10.6%	-4.0%	-1.8%	14.9%	-0.8%
Passengers per Vehicle Service Hour	2.5	2.5	2.5	1.9	2.3	2.5	- -
<i>Annual Change</i>	- -	1.4%	-2.7%	-22.0%	17.8%	10.2%	0.0%
Passengers per Vehicle Service Mile	0.19	0.18	0.17	0.15	0.18	0.20	- -
<i>Annual Change</i>	- -	-7.7%	-5.5%	-13.4%	20.8%	11.2%	0.3%
Op. Cost per Passenger (Actual \$)	\$24.91	\$24.96	\$23.52	\$29.80	\$25.32	\$27.05	- -
<i>Annual Change</i>	- -	0.2%	-5.8%	26.7%	-15.0%	6.8%	1.7%
Op. Cost per Passenger (Constant \$)	\$24.91	\$24.31	\$22.32	\$27.49	\$22.92	\$23.90	- -
<i>Annual Change</i>	- -	-2.4%	-8.2%	23.2%	-16.6%	4.3%	-0.8%
Vehicle Service Hours per FTE	(a)	(a)	(a)	(a)	(a)	(a)	- -
<i>Annual Change</i>	- -	- -	- -	- -	- -	- -	- -
<b>Input Data</b>							
Operating Cost (Actual \$)	\$1,146,316	\$1,235,153	\$1,269,929	\$1,222,598	\$1,218,174	\$1,215,572	- -
<i>Annual Change</i>	- -	7.7%	2.8%	-3.7%	-0.4%	-0.2%	1.2%
Operating Cost (Constant \$)	\$1,146,316	\$1,202,681	\$1,204,866	\$1,127,858	\$1,102,420	\$1,073,827	- -
<i>Annual Change</i>	- -	4.9%	0.2%	-6.4%	-2.3%	-2.6%	-1.3%
Vehicle Service Hours	18,539	19,655	22,028	21,473	21,376	18,117	- -
<i>Annual Change</i>	- -	6.0%	12.1%	-2.5%	-0.5%	-15.2%	-0.5%
Vehicle Service Miles	237,236	276,313	319,153	280,069	271,796	228,351	- -
<i>Annual Change</i>	- -	16.5%	15.5%	-12.2%	-3.0%	-16.0%	-0.8%
Unlinked Passengers	46,010	49,482	53,985	41,030	48,102	44,930	- -
<i>Annual Change</i>	- -	7.5%	9.1%	-24.0%	17.2%	-6.6%	-0.5%
Employee Full-Time Equivalents	(a)	(a)	(a)	(a)	(a)	(a)	- -
<i>Annual Change</i>	- -	- -	- -	- -	- -	- -	- -
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%

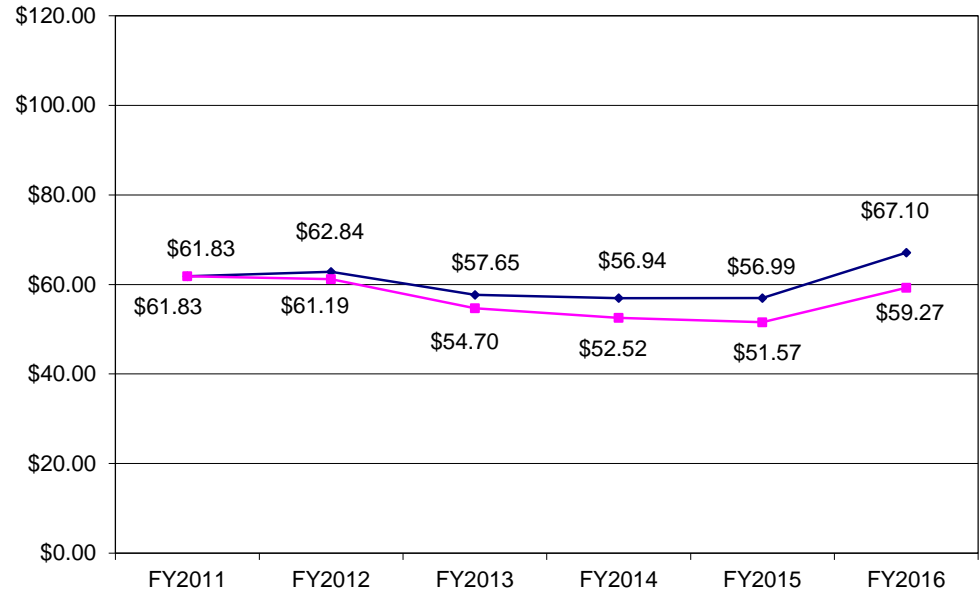
(a) - Contracted service; FTEs not applicable

Sources: FY2011 through FY2013 - Prior Performance Audit Report

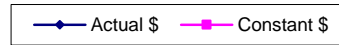
FY2014 through FY2016 - NTD Reports

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

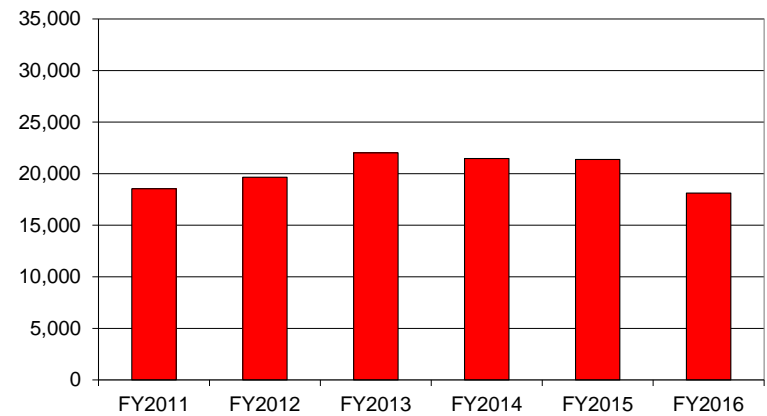
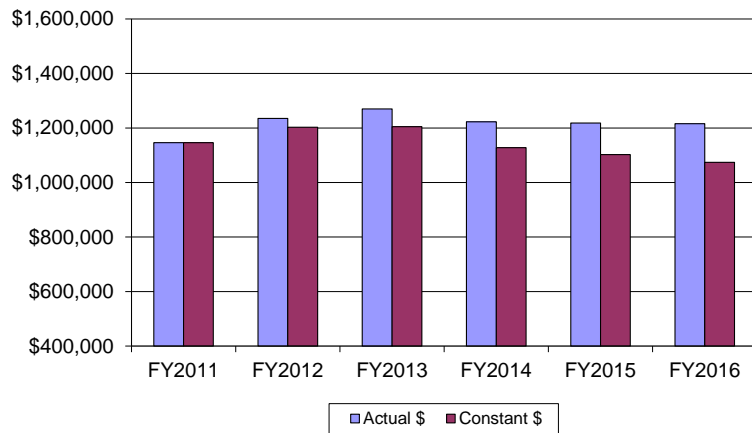
### Exhibit 5.1: Operating Cost per Vehicle Service Hour – Paratransit



**Operating Cost**

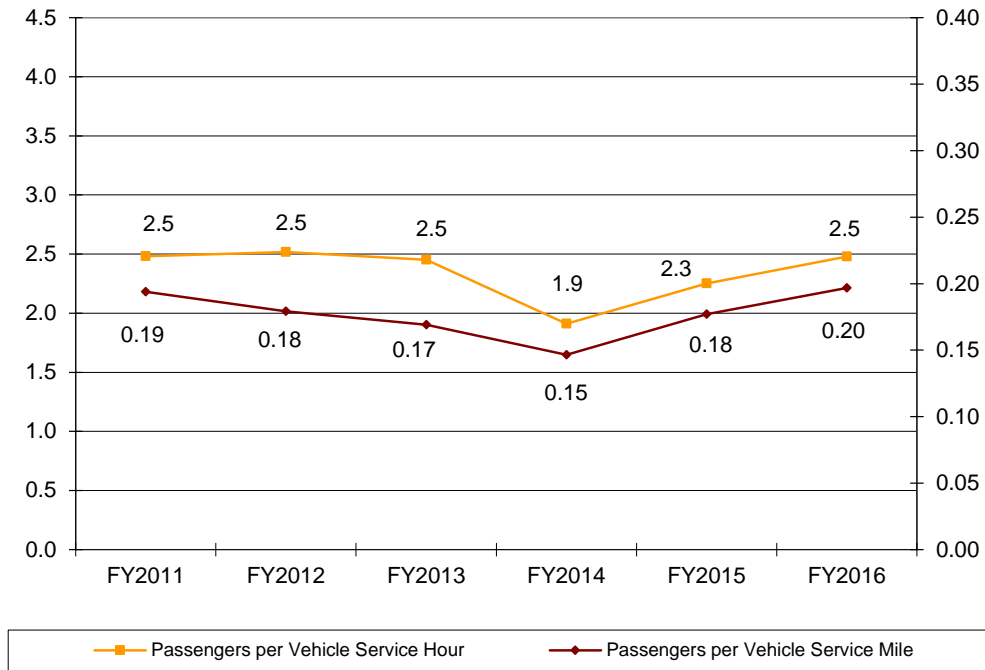


**Vehicle Service Hours**

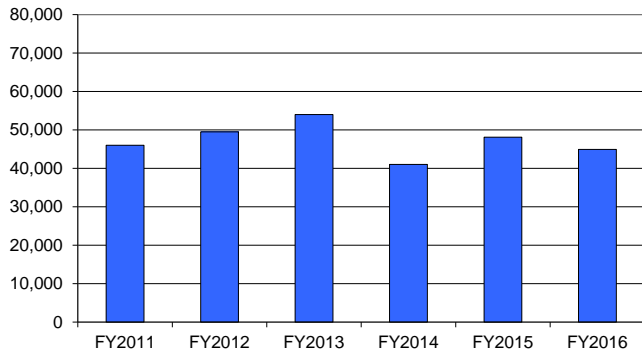




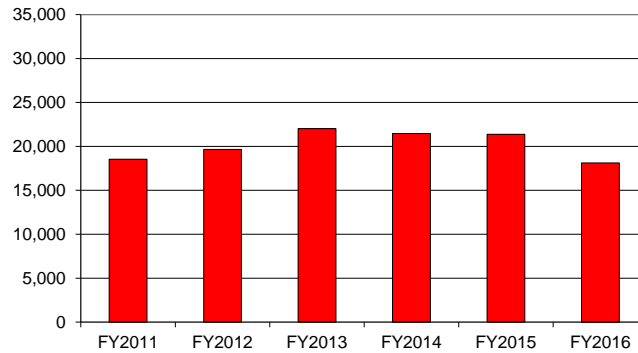
### Exhibit 5.2: Passengers per Hour and per Mile – Paratransit



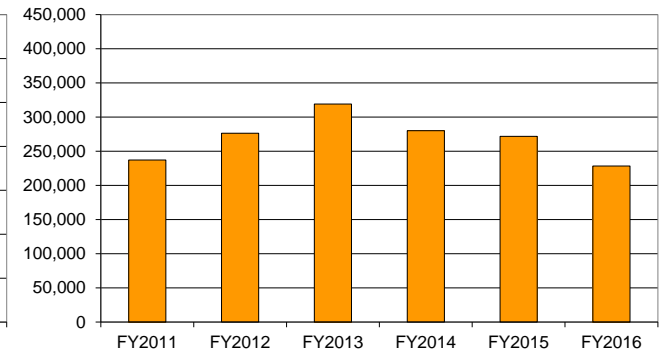
**Unlinked Passengers**



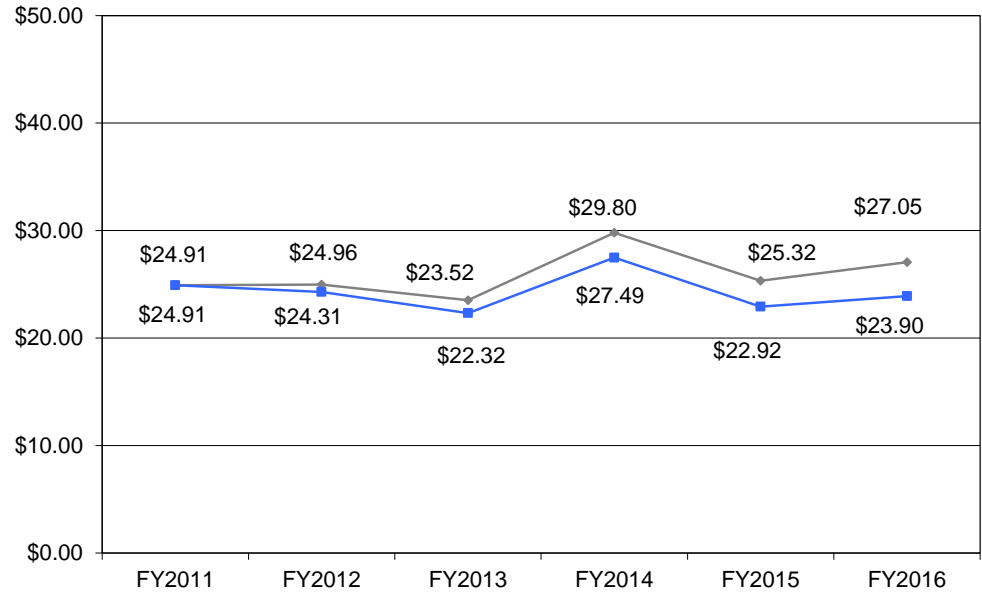
**Vehicle Service Hours**



**Vehicle Service Miles**



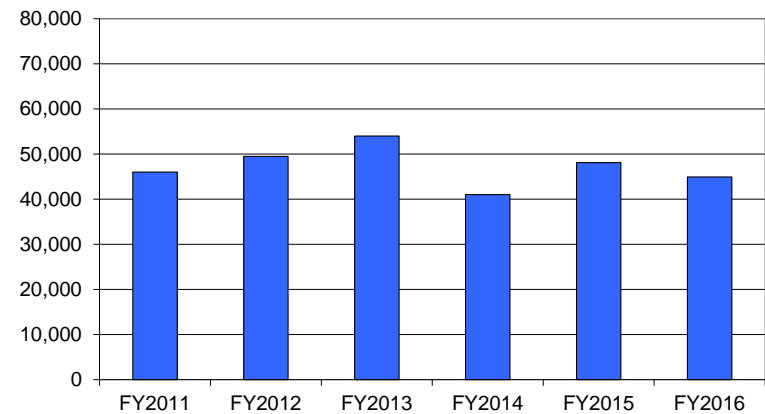
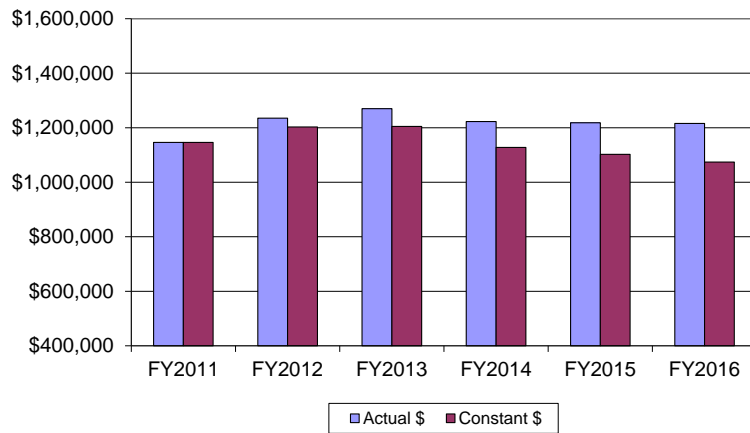
### Exhibit 5.3: Operating Cost per Passenger – Paratransit



**Operating Cost**

— Actual \$ — Constant \$

**Unlinked Passengers**



## Paratransit Component Costs

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

- Labor and fringe benefit costs both decreased significantly over the past six years, averaging an annual decrease of more than 23 percent. No labor or fringe benefit costs were included in the FY2015 NTD report, but costs were reported in all other years. Discussions with Santa Rosa staff indicated there were changes in the reporting of demand response costs in the FY2013 and FY2014 NTD reports. Also, due to repeated turnover in staffing, the labor and fringe benefits costs were not being charged to the paratransit account as they should have been (50% of the time). Instead, all charges were incorrectly allocated to fixed route.
- Services costs were largely unchanged overall, decreasing an average of 1.2 percent annually from FY2011 through FY2016. Service costs fluctuated throughout the period, especially between FY2013 and FY2014, which may be related to the reporting issue mentioned above.
- Purchased transportation costs rose modestly, with an annual average increase of 2.3 percent.
- Costs for fuel/lubricants were only reported in FY2014, and only a minimal amount (\$847). Discussions with Santa Rosa staff indicated that the FY2014 reporting was an error, but that fuel and lubricants costs should have been reported by mode during the entire audit period. City Garage staff had been erroneously instructed to allocate all fuel/lubricants costs to the fixed-route fleet. This error has been corrected and all future fuel costs will be reported by mode beginning with the FY2017 NTD report.
- There were no reported costs for the casualty/liability category, while all other costs showed only minimal amounts charged sporadically over the six-year period. No other costs were reported for FY2012, FY2013 and FY2016.

\* \* \* \* \*

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

- Labor and fringe benefit costs decreased by more than 23 percent annually. The labor and fringe benefits share of total operating costs over the six-year period decreased from about eight percent to about one percent.
- Discussions with Santa Rosa staff indicated there were some labor and fringe benefit cost reporting errors within the past three years, as both categories showed significant decreases over the current three-year audit period (FY2014-FY2016). The errors were attributed to changes in the reporting of demand response costs in FY2013 and FY2014, and labor and fringe benefits costs not being charged to the paratransit account at 50 percent, but rather all costs were incorrectly allocated to fixed route service.
- Services costs were mostly unchanged, decreasing 1.2 percent on average per year. Service costs fluctuated throughout the audit period, and their share of total operating costs also fluctuated between two and seven percent from year to year.
- Purchased transportation costs comprised the largest category of operating costs by far, increasing from about 90 percent of total costs in FY2011 to about 95 percent in FY2016. Purchased transportation costs increased an average of 2.3 percent annually.
- Costs for fuel/lubricants, casualty/liability and miscellaneous costs all comprised less than one percent of total costs annually. No casualty/liability costs were reported during the entire period.
- Santa Rosa staff also indicated it was recently discovered that all fuel/lubricant costs were erroneously allocated to the fixed-route side during the audit period. This error has been corrected and all future costs will be reported by mode beginning with the FY2017 NTD report.

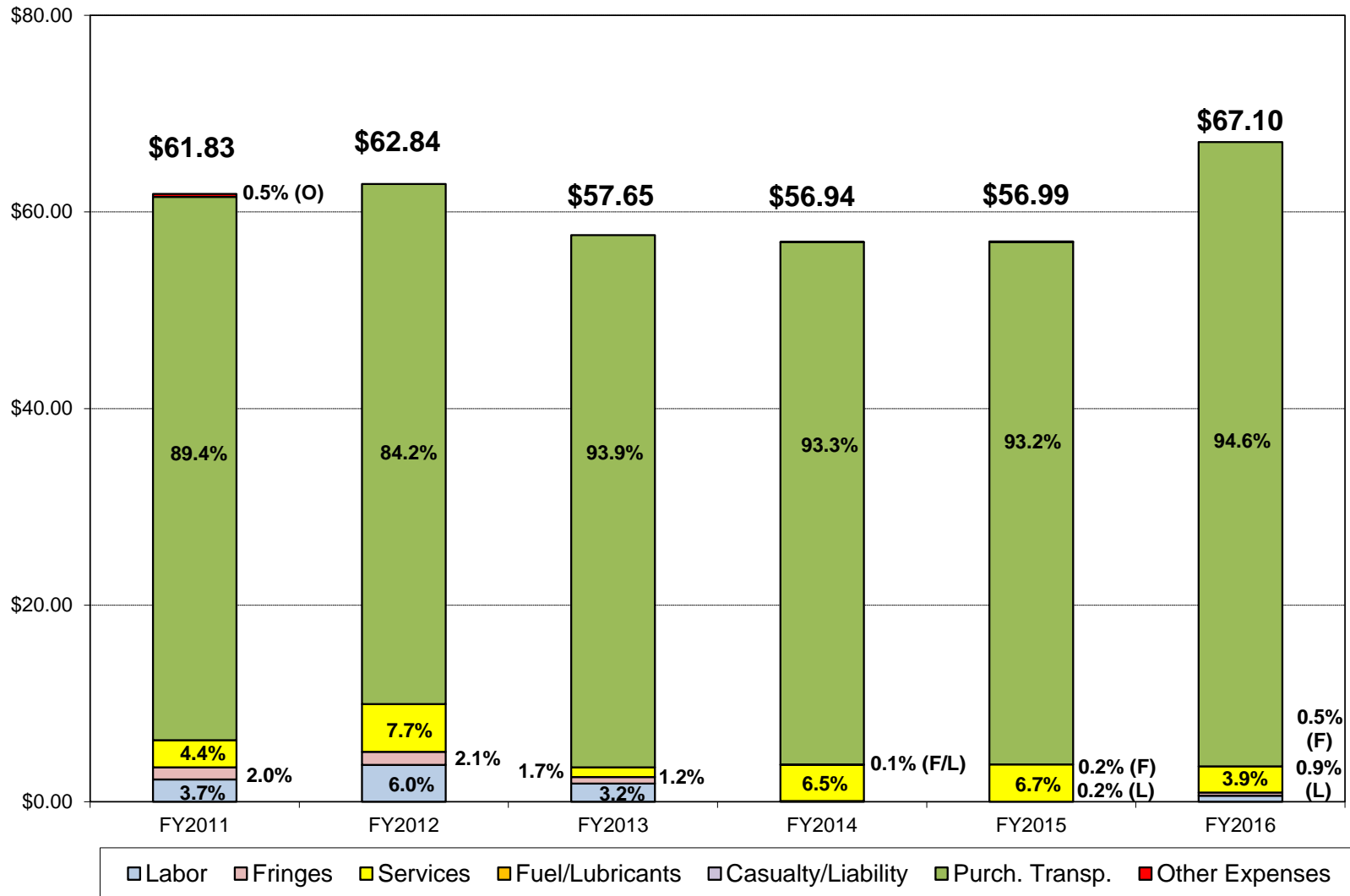
### Exhibit 5.4: TDA Component Costs Trends – Paratransit

	FY2011	FY2012	FY2013	FY2014	FY2015	FY2016	Av. Ann. Chg.
COST CATEGORIES							
Labor - (Salaries, Wages)	\$41,866	\$73,723	\$40,880	\$1,161	\$0	\$11,143	--
<i>Annual Change</i>	--	76.1%	-44.5%	-97.2%	-100.0%	--	-23.3%
Fringe Benefits	\$23,241	\$25,968	\$14,777	\$478	\$0	\$5,985	--
<i>Annual Change</i>	--	11.7%	-43.1%	-96.8%	-100.0%	--	-23.8%
Services	\$50,911	\$95,396	\$21,553	\$78,929	\$81,223	\$47,940	--
<i>Annual Change</i>	--	87.4%	-77.4%	266.2%	2.9%	-41.0%	-1.2%
Fuel/Lubricants	\$0	\$0	\$0	\$847	\$0	\$0	--
<i>Annual Change</i>	--	--	--	--	-100.0%	--	--
Casualty/Liability	\$0	\$0	\$0	\$0	\$0	\$0	--
<i>Annual Change</i>	--	--	--	--	--	--	--
Purchased Transportation	\$1,024,887	\$1,040,066	\$1,192,719	\$1,141,178	\$1,135,773	\$1,150,504	--
<i>Annual Change</i>	--	1.5%	14.7%	-4.3%	-0.5%	1.3%	2.3%
Other Expenses (a)	\$5,411	\$0	\$0	\$5	\$1,278	\$0	--
<i>Annual Change</i>	--	-100.0%	--	--	25460.0%	--	-100.0%
<b>Total</b>	\$1,140,905	\$1,235,153	\$1,269,929	\$1,222,598	\$1,218,274	\$1,215,572	--
<i>Annual Change</i>	--	8.3%	2.8%	-3.7%	-0.4%	-0.2%	1.3%
OPERATING STATISTICS							
Vehicle Service Hours	18,539	19,655	22,028	21,473	21,376	18,117	--
<i>Annual Change</i>	--	6.0%	12.1%	-2.5%	-0.5%	-15.2%	-0.5%

Source: FY2011 - FY2013, prior audit; FY2014 through FY2016 – NTD Reports

(a) Includes other materials/supplies

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



## IV. COMPLIANCE WITH PUC REQUIREMENTS

An assessment of Santa Rosa'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 Santa Rosa's TDA-STA claim application.

The results from this review are detailed by individual requirement in Exhibit 6. Santa Rosa is in compliance with all 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	<u>CHP Certification</u> - The CHP has, within the 13 months prior to each TDA claim submitted by an operator, certified the operator's compliance with Vehicle Code Section 1808 following a CHP inspection of the operator's terminal	In Compliance	Satisfactory Facility Inspections: <ul style="list-style-type: none"> <li>• 07/10/2014</li> <li>• 08/03/2015</li> <li>• 07/12/2016</li> </ul>
PUC99264	<u>Operator-to-Vehicle Staffing</u> - The operator does not routinely staff with two or more persons public transportation vehicles designed to be operated by one person	In Compliance	<ul style="list-style-type: none"> <li>• No provision for excess staffing in Agreement with SEIU Local 1021, effective 10/01/13.</li> <li>• No provision for excess staffing in Agreement for Professional Services with MV Transportation, effective 07/01/10 and 07/30/15.</li> </ul>
PUC99314.5 (e)(1)(2)	<u>Part Time Drivers and Contracting</u> - Operators receiving STA funds are not precluded by contract from employing part-time drivers or from contracting with common carriers	In Compliance	<ul style="list-style-type: none"> <li>• <u>Part Time Drivers</u> – Regular part-time employees recognized in Agreement SEIU Local 1021, effective 10/01/13.</li> <li>• <u>Contracting</u> – Santa Rosa contracts with MV Transportation to operate the Santa Rosa Paratransit and Oakmont deviated fixed-route service.</li> </ul>
PUC99155	<u>Reduced Fare Eligibility</u> - For any operator who received TDA Article 4 funds, if the operator offers reduced fares to senior citizens and disabled persons, applicant will honor the federal Medicare identification card, the California Department of Motor Vehicles disability ID card, the Regional Transit Connection Discount Card, or any other current identification card issued by another transit operator that is valid for the type of transportation service or discount requested; and if the operator offers reduced fares to senior citizens, it also offers the same reduced fare to disabled patrons	In Compliance	Reduced fare information in public information materials: <ul style="list-style-type: none"> <li>• City Bus System Map and Time Schedules – February 2015.</li> <li>• City of Santa Rosa website: <a href="http://ci.santa-rosa.ca.us/departments/transit/citybus/Pages/Fares.aspx">http://ci.santa-rosa.ca.us/departments/transit/citybus/Pages/Fares.aspx</a></li> </ul>



Code Reference	Operator Compliance Requirements	Compliance Finding	Verification Information
PUC99155.1 (a)(1)(2)	<u>Welfare to Work Coordination</u> - Operators must coordinate with county welfare departments in order to ensure that transportation monies available for purposes of assisting recipients of aid are expended efficiently for the benefit of that population; if a recipient of CalWORKs program funds by the county, the operator shall give priority to the enhancement of public transportation services for welfare-to-work purposes and to the enhancement of transportation alternatives, such as, but not limited to, subsidies or vouchers, van pools, and contract paratransit operations, in order to promote welfare-to-work purposes	In Compliance	Coordination efforts include: <ul style="list-style-type: none"> <li>• Santa Rosa is a stakeholder in the MTC Coordinated Public Transit-Human Services Transportation Plan, directed by MTC as the RTAP and MPO for the Bay Area.</li> </ul>
PUC99314.7, Govt Code 66516, MTC Res. Nos. 3837, 4073	<u>Joint Revenue Sharing Agreement</u> - The operator has current joint fare revenue sharing agreements in place with transit operators in the MTC region with which its service connects, and submitted copies of agreements to MTC	In Compliance	Valid transfer/revenue sharing agreements with connecting operators: Cities of Cloverdale, Healdsburg, Petaluma, Sebastopol, Sonoma County Transit, GGBHTD (SuperPass agreement).
PUC99246(d)	<u>Process for Evaluation of Passenger Needs</u> - The operator has an established process in place for evaluating the needs and types of passengers being served	In Compliance	<ul style="list-style-type: none"> <li>• “Reimagining CityBus” Comprehensive Operational Analysis and public involvement process.</li> <li>• Public meetings and outreach events.</li> <li>• Onboard surveys (next scheduled for 2017).</li> <li>• “Tell Us” comment cards.</li> <li>• Consultations with CityBus operators, customer service agents, etc.</li> <li>• Travel training, participation in community events and meetings.</li> </ul>

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## V. STATUS OF PRIOR AUDIT RECOMMENDATIONS

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

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## VI. FUNCTIONAL PERFORMANCE INDICATOR TRENDS

To further assess Santa Rosa'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 Santa Rosa or for which input data were maintained by Santa Rosa on an on-going basis, such as performance reports, contractor reports, annual financial reports and NTD reports. As such, there may be some overlap with the TDA indicators examined earlier in the audit process, but most indicators will be different. Some indicators were selected from the California Department of Transportation's Performance Audit Guidebook for Transit Operators and Regional Transportation Planning Entities as being appropriate for this evaluation. The input statistics for the indicators, along with their sources, are contained in Appendix A at the end of this report.

The trends in performance are presented over the three-year audit period to give an indication of which direction performance is moving for these indicators. The remainder of this section presents the findings from this review. The discussion presents

the highlights of performance by mode (Systemwide, Bus Service and Paratransit), each followed by an exhibit illustrating the indicators by function as applicable.

Systemwide

For the purposes of this review, Santa Rosa’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 per total operating costs increased from 16.3 percent in FY2014 to 17.6 percent in FY2015, before decreasing to 16.9 percent in FY2016.
- Administrative costs per service hour increased from about \$18 to \$21 over the audit period.
- The portion of marketing costs to administrative costs decreased slightly, with a range between a high of 3.5 percent in FY2015 to a low of 3.0 percent in FY2016.
- Marketing costs per passenger trip increased slightly from \$0.02 in FY2014 to \$0.03 in FY2015 and FY2016.
- Systemwide farebox recovery ratio decreased from just under 20 percent to 16 percent.

\* \* \* \* \*

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

- Administrative costs were mostly steady at about 17 percent of total operating costs, but costs increased from about \$18 per vehicle service hour to \$21 per vehicle service hour.
- Marketing costs ranged between 3.0 percent and 3.5 percent each year compared to total administrative costs, while marketing cost per passenger trip increased by one cent over the period.
- The systemwide farebox recovery ratio decreased from 20 percent to 16 percent.

## Exhibit 7: Functional Performance Trends – Systemwide

FUNCTION/Indicator	Actual Performance		
	FY2014	FY2015	FY2016
<b>MANAGEMENT, ADMINISTRATION &amp; MARKETING</b>			
Administrative Cost/Total Operating Cost	16.3%	17.6%	16.9%
<i>Annual Percent Change</i>	--	8.3%	-3.9%
<i>Three Year Percent Change</i>	--	--	4.0%
Administrative Cost/Vehicle Service Hour	\$17.55	\$19.82	\$20.59
<i>Annual Percent Change</i>	--	12.9%	3.9%
<i>Three Year Percent Change</i>	--	--	17.3%
Marketing Cost/Total Administrative Cost	3.3%	3.5%	3.0%
<i>Annual Percent Change</i>	--	6.3%	-13.4%
<i>Three Year Percent Change</i>	--	--	-7.9%
Marketing Cost/Unlinked Passenger Trip	\$0.02	\$0.03	\$0.03
<i>Annual Percent Change</i>	--	27.3%	-9.2%
<i>Three Year Percent Change</i>	--	--	15.6%
Farebox Revenue/Operating Cost	18.9%	17.9%	16.0%
<i>Annual Percent Change</i>	--	-5.6%	-10.8%
<i>Three Year Percent Change</i>	--	--	-15.7%



## Bus Service

Santa Rosa'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
  - Total operating cost per passenger mile fluctuated over the period, from \$1.58 in FY2014, to \$1.66 in FY2015, before decreasing to \$1.35 in FY2016.
  - About 97 percent of all vehicle miles traveled were in service, as were about 98 percent of all vehicle hours in all three years.
  - The number of passengers per service mile and service hour each decreased approximately 10 percent over the audit period, from 2.44 to 2.22 passengers per service mile and 28.5 to 25.6 passengers per service hour.
  
- Operations
  - Vehicle operations cost per total operating costs decreased from 72 percent to 65 percent.
  - Vehicle operations costs per service hour remained steady over the three-year period at around \$86 to \$87 per hour.
  - The overall bus service farebox recovery ratio decreased from 20 percent in FY2014 to 16 percent in FY2016.
  - The TDA recovery ratio, calculated as farebox revenue plus local support divided by operating costs less allowable exclusions, also decreased, from 27.5 percent to 23 percent during the audit period.
  - Schedule adherence improved from 82 percent to almost 86 percent between FY2014 and FY2016.

- Complaints per 100,000 miles fluctuated over the audit period from 1.39 in FY2014 to 2.75 in FY2015, before declining to 0.64 in FY2016.
- The incidence of missed trips increased over the audit period, but was still less than one percent per trip mile, ranging between 0.02 percent in FY2014 to 0.04 percent in FY2016.
- Maintenance
  - Overall maintenance costs increased from 14 percent to 18 percent of total operating costs over the audit period.
  - Vehicle maintenance cost per service mile increased over the audit period from \$1.32 to \$1.92, over 45 percent.
  - The vehicle spare ratio decreased from almost 40 percent in FY2014 to just over 27 percent in FY2016.
  - The mean distance between major failures increased 69 percent between FY2014 and FY2015, followed by a decrease of more than 70 percent in FY2016, due to a significant increase in reported major failures. However, the mean distance between all failures increased steadily throughout the audit period (more than 200 percent). Santa Rosa explained they found that CityBus maintenance supervisors were not reporting failures accurately in their daily logs, resulting in the variability between major and total failure incidents.
- Safety
  - The rate of preventable accidents remained steady at less than one per 100,000 miles for the first two years. No preventable accidents were reported for FY2016.

\* \* \* \* \*

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

- Service Planning showed a decreasing operating cost per passenger mile, from \$1.58 to \$1.35 over the audit period. Vehicle miles and hours in service were consistently 96 percent or more, while the rate of both passengers per mile and per hour each declined about 10 percent overall.
- Vehicle operations cost per total operating cost decreased nine percent, while the vehicle operations cost per hour remained steady around \$86 per hour. The overall farebox recovery ratio decreased from 20 percent to 16 percent, while the TDA recovery ratio decreased from 27.5 percent to 23 percent. Schedule adherence improved to 85 percent, the incidence of complaints increased between FY2014 and FY2015 before decreasing to less than one per 100,000 miles in FY2016. The incidence of missed trips doubled over the over the audit period, but the indicator was still less than one percent per trip mile between FY2014 and FY2016.
- Maintenance costs comprised less than 20 percent of total operating costs, but vehicle maintenance costs per service hour increased 45 percent from \$1.32 to \$1.92 per hour. The vehicle spare ratio decreased by over 30 percent. The distance between major mechanical failures decreased about 60 percent overall, however, distance between all failures showed a dramatic improvement of more than 200 percent. Santa Rosa provided the explanation that lack of accurate failure reporting in the daily maintenance logs by CityBus supervisors caused in the variability between major and total failure incidents.
- In the safety area, there was a very low rate of preventable accidents in each audit year.

## Exhibit 8: Functional Performance Trends – Bus Service

FUNCTION/Indicator	Actual Performance		
	FY2014	FY2015	FY2016
<b>SERVICE PLANNING</b>			
Total Operating Cost/Passenger Mile	\$1.58	\$1.66	\$1.35
<i>Annual Percent Change</i>	--	5.0%	-18.6%
<i>Three Year Percent Change</i>	--	--	-14.5%
Vehicle Service Miles/Total Miles	96.7%	96.6%	96.4%
<i>Annual Percent Change</i>	--	-0.1%	-0.2%
<i>Three Year Percent Change</i>	--	--	-0.3%
Vehicle Service Hours/Total Hours	98.2%	98.5%	98.7%
<i>Annual Percent Change</i>	--	0.3%	0.2%
<i>Three Year Percent Change</i>	--	--	0.5%
Passengers/Vehicle Service Mile	2.44	2.30	2.22
<i>Annual Percent Change</i>	--	-5.6%	-3.8%
<i>Three Year Percent Change</i>	--	--	-9.2%
Passengers/Vehicle Service Hour	28.49	26.74	25.66
<i>Annual Percent Change</i>	--	-6.2%	-4.0%
<i>Three Year Percent Change</i>	--	--	-9.9%
<b>OPERATIONS</b>			
Vehicle Operations Cost/Total Operating Cost	71.8%	69.2%	65.2%
<i>Annual Percent Change</i>	--	-3.6%	-5.8%
<i>Three Year Percent Change</i>	--	--	-9.2%
Vehicle Operations Cost/Vehicle Service Hour	\$86.09	\$87.04	\$86.40
<i>Annual Percent Change</i>	--	1.1%	-0.7%
<i>Three Year Percent Change</i>	--	--	0.4%
Farebox Revenue/Operating Cost	20.2%	18.1%	15.9%
<i>Annual Percent Change</i>	--	-10.6%	-11.9%
<i>Three Year Percent Change</i>	--	--	-21.3%
TDA Recovery Ratio (a)	27.5%	24.3%	23.1%
<i>Annual Percent Change</i>	--	-11.7%	-4.6%
<i>Three Year Percent Change</i>	--	--	-15.8%
Trips On-Time Percentage	82.1%	84.5%	85.5%
<i>Annual Percent Change</i>	--	2.9%	1.2%
<i>Three Year Percent Change</i>	--	--	4.1%
Complaints/100,000 miles	1.39	2.75	0.64
<i>Annual Percent Change</i>	--	97.8%	-76.7%
<i>Three Year Percent Change</i>	--	--	-54.0%
Percent Missed Trips per Trip Mile	0.02%	0.01%	0.04%
<i>Annual Percent Change</i>	--	-46.7%	337.5%
<i>Three Year Percent Change</i>	--	--	133.3%

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

FUNCTION/Indicator	Actual Performance		
	FY2014	FY2015	FY2016
<b>MAINTENANCE</b>			
Vehicle + Non-Veh. Maint. Cost/Total Operating Cost	14.4%	15.4%	18.6%
<i>Annual Percent Change</i>	--	7.0%	21.1%
<i>Three Year Percent Change</i>	--	--	29.6%
Vehicle Maintenance Cost/Vehicle Service Mile	\$1.32	\$1.49	\$1.92
<i>Annual Percent Change</i>	--	13.4%	28.2%
<i>Three Year Percent Change</i>	--	--	45.4%
Spare Vehicles/Total Vehicles	39.5%	34.3%	27.3%
<i>Annual Percent Change</i>	--	-13.1%	-20.5%
<i>Three Year Percent Change</i>	--	--	-30.9%
Mean Distance between Major Failures (Miles)	29,151	49,290	11,599
<i>Annual Percent Change</i>	--	69.1%	-76.5%
<i>Three Year Percent Change</i>	--	--	-60.2%
Mean Distance between All Failures (Miles)	3,406	4,268	11,204
<i>Annual Percent Change</i>	--	25.3%	162.5%
<i>Three Year Percent Change</i>	--	--	228.9%
<b>SAFETY</b>			
Preventable Accidents/100,000 Vehicle Miles	1.5	1.5	0
<i>Annual Percent Change</i>	--	0.0%	-100.0%
<i>Three Year Percent Change</i>	--	--	-100.0%

## Paratransit

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

- Service Planning
  - Total operating cost per passenger mile decreased overall from \$5.42 in FY2014 to \$4.99 in FY2016.
  - Vehicle miles traveled in service decreased from 94 percent to 89 percent over the audit period, while vehicle hours travelled also decreased from 96 percent to 92 percent.
  - Passengers carried per service mile improved from 0.15 passengers to 0.20 passengers and passengers per service hour increased from 1.91 passengers to 2.48 passengers over the three-year period.
  
- Operations
  - As a contracted service, paratransit vehicle operations cost per total costs were less than one percent in the first two years, with no FY2016 vehicle operations costs reported.
  - Similarly, vehicle operations costs per service hour were about \$0.05 in the first two years, and zero in the last audit year.
  - The overall farebox recovery ratio improved from 10 percent to 12 percent over the period.
  - TDA recovery ratio peaked in FY2015 at nearly 18 percent with performance for both FY2014 and FY2016 at 12 percent.
  - Schedule adherence remained steady at about 98 percent throughout the audit period.

- Complaints were not reported by the operating contractor in FY2014, and zero were reported in FY2015. In FY2016, almost nine complaints were received per every 100,000 passengers.
  - There were no missed trips or ADA trip denials reported in any of the audit years.
  - The rate of trip cancellations increased from about 13 percent in the first two years to more than 24 percent in the last year.
  - Passenger no-show trips (including late trip cancellations) decreased overall from 4.7 percent to 3.6 percent.
- Maintenance
    - As a contracted service, no vehicle maintenance costs were reported for the entire audit period.
    - The vehicle spare ratio remained constant at 23.1 percent over the audit period.
    - The mean distance between major failures was 12,377 miles in FY2014, with no major failures reported in NTD for the following two years. Mean distance between total failures increased over 700 percent during the audit period, from 7,817 in FY2014 to 63,825 in FY2016. Failure data for FY2015 was provided by Santa Rosa staff, but was not reported in the FY2015 NTD report.
  - Safety
    - The rate of preventable accidents per 100,000 miles improved from 1.35 preventable accidents to 1.18 preventable accidents.

\* \* \* \* \*

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

- Service Planning showed an eight percent decrease in cost per passenger mile, and a 5 percent decrease in both vehicle miles and hours in revenue service. Passenger productivity improved from 0.15 to 0.20 passengers per mile and 1.9 to 2.5 passengers per hour.
- There were very little or no vehicle operations costs reported during the audit period, reflecting the contracted service. Total farebox recovery increased slightly overall, from 10 to 12 percent. TDA recovery ratio peaked at 18 percent in FY2015, before decreasing in FY2016 to 12 percent. Schedule adherence was steady at about 98 percent. Complaint data was not available for FY2014, and no complaints were reported in FY2015. There were almost nine complaints per 100,000 passengers in FY2016. There were no reported missed trips or ADA trip denials during the audit period. Trip cancellations increased from 13 percent to 24 percent, and passenger no-shows (including late cancellations) decreased from five percent to four percent over the three years.
- As paratransit is contracted service, no vehicle maintenance costs were reported during this audit period. The vehicle spare ratio remained constant at 23 percent. The distance between total failures increased dramatically between FY2014 and FY2016, but there was a NTD reporting error for FY2015 that resulted in zero failures being reported that year, when in fact, there were seven total failures.
- Safety results showed about a 13 percent improvement in preventable accidents per 100,000 miles over the audit period.



## Exhibit 9: Functional Performance Trends – Paratransit

FUNCTION/Indicator	Actual Performance		
	FY2014	FY2015	FY2016
<b>SERVICE PLANNING</b>			
Total Operating Cost/Passenger Mile	\$5.42	\$4.37	\$4.99
<i>Annual Percent Change</i>	--	-19.3%	14.3%
<i>Three Year Percent Change</i>	--	--	-7.8%
Vehicle Service Miles/Total Miles	94.3%	94.5%	89.4%
<i>Annual Percent Change</i>	--	0.3%	-5.4%
<i>Three Year Percent Change</i>	--	--	-5.1%
Vehicle Service Hours/Total Hours	96.5%	96.0%	92.1%
<i>Annual Percent Change</i>	--	-0.6%	-4.1%
<i>Three Year Percent Change</i>	--	--	-4.6%
Passengers/Vehicle Service Mile	0.15	0.18	0.20
<i>Annual Percent Change</i>	--	20.8%	11.2%
<i>Three Year Percent Change</i>	--	--	34.3%
Passengers/Vehicle Service Hour	1.91	2.25	2.48
<i>Annual Percent Change</i>	--	17.8%	10.2%
<i>Three Year Percent Change</i>	--	--	29.8%

FUNCTION/Indicator	Actual Performance		
	FY2014	FY2015	FY2016
<b>OPERATIONS</b>			
Vehicle Operations Cost/Total Operating Cost	0.1%	0.1%	0.0%
<i>Annual Percent Change</i>	--	51.4%	-100.0%
<i>Three Year Percent Change</i>	--	--	-100.0%
Vehicle Operations Cost/Vehicle Service Hour	\$0.04	\$0.06	\$0.00
<i>Annual Percent Change</i>	--	51.6%	-100.0%
<i>Three Year Percent Change</i>	--	--	-100.0%
Farebox Revenue/Operating Cost	10.3%	11.8%	12.0%
<i>Annual Percent Change</i>	--	15.4%	1.4%
<i>Three Year Percent Change</i>	--	--	17.0%
TDA Recovery Ratio (a)	12.1%	17.8%	12.0%
<i>Annual Percent Change</i>	--	46.9%	-32.5%
<i>Three Year Percent Change</i>	--	--	-0.9%
Trips On-Time Percentage	97.5%	98.0%	98.7%
<i>Annual Percent Change</i>	--	0.5%	0.7%
<i>Three Year Percent Change</i>	--	--	1.2%
Complaints/100,000 Passenger Trips	(b)	0.0	8.9
<i>Annual Percent Change</i>	--	--	--
<i>Three Year Percent Change</i>	--	--	--
Missed Trips/Total Trips	0.0	0.0	0.0
<i>Annual Percent Change</i>	--	--	--
<i>Three Year Percent Change</i>	--	--	--
ADA Trip Denials/Total ADA Trips	0.0%	0.0%	0.0%
<i>Annual Percent Change</i>	--	--	--
<i>Three Year Percent Change</i>	--	--	--
Trip Cancellations/Total ADA Trips	13.5%	12.7%	24.4%
<i>Annual Percent Change</i>	--	-5.6%	91.8%
<i>Three Year Percent Change</i>	--	--	81.0%
No-Shows/Total ADA Trips	4.7%	4.2%	3.6%
<i>Annual Percent Change</i>	--	-11.7%	-13.6%
<i>Three Year Percent Change</i>	--	--	-23.7%

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

(b) Not reported

FUNCTION/Indicator	Actual Performance		
	FY2014	FY2015	FY2016
<b>MAINTENANCE</b>			
Spare Vehicles/Total Vehicles	23.1%	23.1%	23.1%
<i>Annual Percent Change</i>	--	0.0%	0.0%
<i>Three Year Percent Change</i>	--	--	0.0%
Mean Dist. betw. Major Failures (Miles)	12,377	(a)	(a)
<i>Annual Percent Change</i>	--	--	--
<i>Three Year Percent Change</i>	--	--	--
Mean Dist. betw. All Failures (Miles)	7,817	41,078	63,825
<i>Annual Percent Change</i>	--	425.5%	55.4%
<i>Three Year Percent Change</i>	--	--	716.5%
<b>SAFETY</b>			
FTA Reportable Accidents/100,000 Vehicle Miles	1.35	1.74	1.18
<i>Annual Percent Change</i>	--	29.1%	-32.4%
<i>Three Year Percent Change</i>	--	--	-12.7%

(a) - No major failures reported

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## VII. CONCLUSIONS AND RECOMMENDATIONS

The preceding sections presented a review of Santa Rosa'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:

- Data Collection – Santa Rosa is in compliance with the data collection and reporting requirements for four of the five TDA statistics. Santa Rosa is not in compliance with the reporting requirements for operating costs. Errors were identified in the reporting of the operating cost statistics, as discussed in further detail below, and in the Performance Indicators and Trends section of this report. The statistics indicate general consistency in terms of the direction and magnitude of the year-to-year changes across the statistics. While the statistics collected over the period appear to be consistent with the TDA definitions, some reporting consistency exceptions were noted.
  - Santa Rosa acknowledged discrepancies in both fixed-route and demand response reporting of operating costs, which are discussed in further detail in the TDA Performance Indicators and Trends section of this report.

- During the current audit period (FY2014-FY2016), the demand response vehicle service miles decreased at a slightly higher rate than service hours. City staff explained this was likely due to service efficiency standards that were implemented that resulted in higher productivity and shorter trips.
- Demand response ridership for FY2013 erroneously included cancelled trips and no-shows. Santa Rosa staff corrected the error in reporting for the following years FY2014 through FY2016.

- TDA Performance Trends

Santa Rosa’s performance trends for the five TDA-mandated indicators were analyzed by mode. A six-year analysis period was used for all the indicators. In addition, component operating costs were analyzed.

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

- There was an average annual increase in the operating cost per hour of 5.2 percent, or 2.6 percent in inflation adjusted dollars. This reflects a modest increase in operating costs combined with a modest decrease in service hours.
- The cost per passenger increased on average by 10.2 percent per year, which amounted to an average annual increase of 7.5 percent in constant FY2011 dollars. Cost effectiveness was impacted by the decrease in ridership, attributed to the February 2013 service cut and fare increase.
- Passenger productivity declined with passengers per vehicle service hour decreasing by 4.6 percent per year overall and passengers per vehicle service mile decreasing by 4.2 percent.
- Employee productivity decreased an average 3.4 percent per year, reflecting the modest decrease in service hours.

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

- Labor costs increased by 3.1 percent annually, and consistently comprised between about 40 to 42 percent of the total operating costs during the six-year period.
- Fringe benefit costs decreased approximately six percent annually. Fringe benefits share of total costs decreased from about 30 percent in FY2011 to about 20 percent in FY2016.
- Services costs showed the highest increase of 21.7 percent annually, attributed to increases in inter-department costs such as maintenance costs charged to transit by the City Garage and increases in the overhead rate paid to the City. Services share of total operating costs also increased over the audit period from about 12 percent in FY2011 to 28 percent in FY2016.
- Costs for fuel/lubricants and materials and supplies decreased by an annual average of 10.4 and 21.5 percent respectively. These components share of total operating costs also declined over the period, from about 15 percent in FY2011 to about six percent in FY2016.
- Casualty/liability costs increased just over six percent and purchased transportation costs increased about three percent annually over the period, while other miscellaneous costs decreased about six percent annually. Together, these categories comprised about four percent of total costs during the audit period.
- Reporting errors in FY2015 caused purchased transportation costs to be under-reported in NTD that year. The under-reporting resulted in a 35 percent decrease in purchased transportation costs from FY2014 to FY2015, followed by an increase of over 46 percent in FY2016.

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

- Cost efficiency decreased slightly, with an average annual increase in the operating cost per hour of 1.6 percent. This translated to a 0.8 percent decrease in inflation adjusted dollars. A drop in vehicle service hours in FY2106 was responsible for a spike in cost per hour that year, which affected overall cost efficiency.
- Cost effectiveness exhibited a similar trend with the cost per passenger increasing an average of 1.7 percent per year. In constant FY2011 dollars, cost per passenger showed an average annual decrease of 0.8 percent.
- Passenger productivity over the analysis period remained unchanged, with passengers per vehicle service hour posting no change overall and passengers per vehicle service mile increasing an average of 0.3 percent annually.
- Productivity performance was influenced by ridership changes, particularly during the three years of the audit period. Those changes were due to service cuts and fare increase in FY2013 as well as the correction for erroneous reporting of ridership prior to FY2014.

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

- Labor and fringe benefit costs decreased by more than 23 percent annually. The labor and fringe benefits share of total operating costs over the six-year period decreased from about eight percent to about one percent.
- Discussions with Santa Rosa staff indicated there may have been some labor and fringe benefit cost reporting errors within the past three years, as both categories showed significant decreases over the current three-year audit period (FY2014-FY2016). The errors were attributed to changes in the reporting of demand response costs in FY2013 and FY2014, and labor and fringe benefits costs not being charged to the paratransit account at 50 percent, but rather all costs were incorrectly allocated to fixed route service.



- Services costs were mostly unchanged, decreasing 1.2 percent on average per year. Service costs fluctuated throughout the audit period, and their share of total operating costs also fluctuated between two and seven percent from year to year.
  - Purchased transportation costs comprised the largest category of operating costs by far, increasing from about 90 percent of total costs in FY2011 to about 95 percent in FY2016. Purchased transportation costs increased an average of 2.3 percent annually.
  - Costs for fuel/lubricants, casualty/liability and miscellaneous costs all comprised less than one percent of total costs annually. No casualty/liability costs were reported during the entire period.
  - Santa Rosa staff also indicated it was discovered that all fuel/lubricant costs were erroneously allocated to the fixed-route side during the audit period. This error has been corrected and all future costs will be reported by mode beginning with the FY2017 NTD report.
- PUC Compliance – Santa Rosa is in compliance with the sections of the state PUC that were reviewed as part of this performance audit. These sections included requirements concerning CHP terminal safety inspections, labor contracts, reduced fares, Welfare-to-Work, revenue sharing, and evaluating passenger needs.
  - Status of Prior Audit Recommendations – There were no recommendations made in Santa Rosa’s prior performance audit.
  - Functional Performance Indicator Trends

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

Systemwide – The following is a brief summary of the systemwide

functional trend highlights between FY2014 and FY2016:

- Administrative costs were mostly steady at about 17 percent of total operating costs, but costs increased from about \$18 per vehicle service hour to \$21 per vehicle service hour.
- Marketing costs ranged between 3.0 percent and 3.5 percent each year compared to total administrative costs, while marketing cost per passenger trip increased by one cent over the period.
- The systemwide farebox recovery ratio decreased from 20 percent to 16 percent.

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

- Service Planning showed a decreasing operating cost per passenger mile, from \$1.58 to \$1.35 over the audit period. Vehicle miles and hours in service were consistently 96 percent or more, while the rate of both passengers per mile and per hour each declined about 10 percent overall.
- Vehicle operations cost per total operating cost decreased nine percent, while the vehicle operations cost per hour remained steady around \$86 per hour. The overall farebox recovery ratio decreased from 20 percent to 16 percent, while the TDA recovery ratio decreased from 27.5 percent to 23 percent. Schedule adherence improved to 85 percent, the incidence of complaints increased between FY2014 and FY2015 before decreasing to less than one per 100,000 miles in FY2016. The incidence of missed trips was consistently less than one percent per trip mile between FY2014 and FY2016.
- Maintenance costs comprised less than 20 percent of total operating costs, but vehicle maintenance costs per service hour increased by 45 percent from \$1.32 to \$1.92 per hour. The vehicle spare ratio decreased by over 30 percent. The distance between major mechanical failures decreased about 60 percent overall, however, distance between all failures showed a dramatic improvement of more than 200 percent. Santa Rosa provided the explanation that

lack of accurate failure reporting in the daily maintenance logs by CityBus supervisors caused in the variability between major and total failure incidents.

- In the safety area, there was a very low rate of preventable accidents in each audit year.

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

- Service Planning showed an eight percent decrease in cost per passenger mile, and a 5 percent decrease in both vehicle miles and hours in revenue service. Passenger productivity improved from 0.15 to 0.20 passengers per mile and 1.9 to 2.5 passengers per hour.
- There were very little or no vehicle operations costs reported during the audit period, reflecting the contracted service. Total farebox recovery increased slightly overall, from 10 to 12 percent. TDA recovery ratio peaked at 18 percent in FY2015, before decreasing in FY2016 to 12 percent. Schedule adherence was steady at about 98 percent. Complaint data was not available for FY2014, and no complaints were reported in FY2015. There were almost nine complaints per 100,000 passengers in FY2016. There were no reported missed trips or ADA trip denials during the audit period. Trip cancellations increased from 13 percent to 24 percent, and passenger no-shows (including late cancellations) decreased from five percent to four percent over the three years.
- As paratransit is contracted service, no vehicle maintenance costs were reported during this audit period. The vehicle spare ratio remained constant at 23 percent. The distance between total failures increased dramatically between FY2014 and FY2016, but there was a NTD reporting error for FY2015 that resulted in zero failures being reported that year, when in fact, there were seven total failures.
- Safety results showed about a 13 percent improvement in preventable accidents per 100,000 miles over the audit period.

## Recommendations

1. IMPROVE DATA COLLECTION AND REPORTING OF TDA COST AND OPERATING DATA FOR BOTH THE BUS AND PARATRANSIT SERVICES.  
*[Reference Sections: II. Review of TDA Data Collection and Reporting Methods; and III. TDA Performance Indicators and Trends]*

There were numerous data collection and reporting errors identified throughout the audit for Santa Rosa's bus and paratransit services. Inconsistencies and errors in data collection and reporting were noted in the Review of TDA Data Collection and TDA Performance Indicators sections of the audit. A summary of the errors are presented in the following:

- Under-reporting of purchased transportation costs in FY2015 caused a 35 percent decrease in purchased transportation costs from FY2014 to FY2015.
- Demand response unlinked passenger data for FY2013 erroneously included cancelled trips and no-shows. Santa Rosa staff corrected the error in reporting for the following years FY2014 through FY2016, but these errors caused the fluctuations in the resulting TDA performance indicators.
- Santa Rosa staff indicated there were labor and fringe benefit cost reporting errors for paratransit within the past three years. The errors were attributed to changes in the reporting of demand response costs in FY2013 and FY2014, and labor and fringe benefits costs not being charged to the paratransit account at 50 percent, but rather all costs were incorrectly allocated to fixed route service.
- Santa Rosa staff also indicated that all fuel/lubricant costs were erroneously allocated to the fixed-route side during the audit period. This error has been corrected and all future costs will be reported by mode beginning with the FY2017 NTD report.

Collection and reporting of accurate, complete TDA cost and operating data is vital for a comprehensive analysis of performance for both bus and paratransit services. Santa Rosa should examine their methods for collecting and reporting TDA operating cost and service-related data for both bus and paratransit services, and develop data collection and reporting procedures to ensure the accuracy of TDA operating costs and operating statistics.

2. IMPROVE DATA COLLECTION AND REPORTING ACTIVITIES FOR QUALITY OF SERVICE STATISTICS FOR BOTH THE BUS AND PARATRANSIT SERVICES.

*[Reference Section: VI. Functional Performance Indicator Trends]*

Inconsistencies in data collection and reporting also were noted in the Functional Performance Indicator Trends section of the audit. Wide variability in bus service and paratransit mechanical failure rates were noted in the functional performance analysis. Santa Rosa staff explained that for the bus service, lack of accurate failure reporting by maintenance supervisors in the daily maintenance logs caused in the variability in failure rates observed throughout the audit period. Santa Rosa also acknowledged an NTD reporting error for FY2015 paratransit mechanical failures that resulted in zero failures being reported.

Santa Rosa should include quality of service data in the examination of their methods for collecting and reporting service-related data for both bus and paratransit services, and develop data collection and reporting procedures to ensure the accuracy of quality of service data.

In response to the draft audit report, Santa Rosa provided evidence that they are in the process of developing a transit reporting instructions document, a

comprehensive collection of NTD data reporting processes and responsibilities. The reporting requirements and instructions had not been implemented at the time of this final report.

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

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## Functional Performance Inputs - Systemwide (All Modes)

Data Item	FY2014	FY2015	FY2016	Source
Total Operating Costs	\$11,178,824	\$11,647,035	\$12,196,623	NTD F-40
Administrative Costs	\$1,816,857	\$2,049,544	\$2,062,278	NTD F-40
Vehicle Service Hours	103,541	103,411	100,181	NTD S-10 (all modes)
Marketing Costs	\$59,189	\$71,003	\$61,861	City accounting system
Unlinked Passenger Trips	2,379,453	2,241,679	2,150,776	NTD S-10 (all modes)
Farebox Revenue (All Modes)	\$2,116,954	\$2,082,391	\$1,946,109	NTD F-10



## Functional Performance Inputs – Bus Service

Data Item	FY2014	FY2015	FY2016	Source
Vehicle Service Miles	958,213	952,007	950,398	NTD S-10 MB
Total Vehicle Miles	991,149	985,794	985,951	NTD S-10 MB
Vehicle Service Hours	82,068	82,035	82,064	NTD S-10 MB
Total Vehicle Hours	83,554	83,285	83,147	NTD S-10 MB
Unlinked Passenger Trips	2,338,423	2,193,577	2,105,846	NTD S-10 MB
Farebox Revenue	\$1,991,523	\$1,866,944	\$1,732,863	NTD F-10
Total Operating Costs	\$9,836,836	\$10,315,427	\$10,871,673	NTD F-30 MB
Farebox Revenue (TDA Article 4 services only)	\$2,036,197	\$1,866,944	\$1,732,863	State Controllers Report
Local Support - Taxes Directly Levied (Measure M)	\$648,306	\$617,007	\$764,415	State Controllers Report
Local Support - Local Cash Grants (General Fund)	\$10,000	\$10,000	\$10,000	State Controllers Report
TDA Cost Exclusions - (Depreciation/Amortization)	\$28,386	\$37,847	\$37,847	State Controllers Report
Passenger Miles	6,234,172	6,229,014	8,062,777	NTD S-10 MB
Vehicle Operations Costs	\$7,065,080	\$7,140,727	\$7,090,117	NTD F-30 MB
Trips On-Time	82.1%	84.5%	85.5%	AVAIL System
Complaints	1.39	2.75	0.64	Annual report/100,000 mi.
Percent Missed Trips per Trip Mile	0.02%	0.01%	0.04%	CityBus Ann. Perf. Reports
Vehicle Maintenance Costs	\$1,262,091	\$1,422,026	\$1,820,210	NTD F-30 MB
Non-Vehicle Maintenance Costs	\$151,132	\$164,114	\$204,040	NTD F-30 MB
Spare Vehicles (Total less Maximum Service)	15	12	9	NTD S-10 MB
Total Vehicles	38	35	33	NTD S-10 MB
Revenue Vehicle Mechanical System Failures - Total	291	231	88	NTD R-20
Revenue Vehicle Mechanical System Failures - Major	34	20	85	NTD R-20
Preventable Accidents	1.50	1.50	0.00	Annual report/100k miles

## Functional Performance Inputs – Paratransit

Data Item	FY2014	FY2015	FY2016	Source
Vehicle Service Miles	280,069	271,796	228,351	NTD S-10 DR
Total Vehicle Miles	297,046	287,547	255,299	NTD S-10 DR
Vehicle Service Hours	21,473	21,376	18,117	NTD S-10 DR
Total Vehicle Hours	22,252	22,276	19,678	NTD S-10 DR
Unlinked Passenger Trips	41,030	48,102	44,930	NTD S-10 DR
Farebox Revenue	\$125,431	\$144,263	\$145,898	NTD F-10
Total Operating Costs	\$1,222,598	\$1,218,274	\$1,215,572	NTD F-30 DR
Farebox Revenue (TDA Article 4 services only)	\$86,760	\$144,263	\$145,898	State Controllers report
Local Support - Taxes Directly Levied (Measure M)	\$61,342	\$72,485	\$0	State Controllers report
Operating Cost Exclusions	\$0	\$0	\$0	State Controllers report
Passenger Miles	225,665	278,705	243,360	NTD S-10 DR
Vehicle Operations Costs	\$847	\$1,278	\$0	NTD F-30 DR
Trips On-Time	97.5%	98.0%	98.7%	ADA reports-MV
Total Trips	41,030	48,102	44,930	ADA Para. Ops. Report
Complaints	(a)	0	4	ADA Para. Ops. Report
Missed Trips	0	0	0	ADA reports-MV
Total ADA Trips	38,785	44,270	41,979	ADA Para. Ops. Report
ADA Trip Denials	0	0	0	ADA reports-MV
Trip Cancellations	5,239	5,644	10,263	ADA Para. Ops. Report
No Shows	1,823	1,838	1,505	ADA Para. Ops. Report
Spare Vehicles (Total less Maximum Service)	3	3	3	NTD S-10 DR
Total Vehicles	13	13	13	NTD S-10 DR
Revenue Vehicle Mechanical System Failures - Total (b)	38	7	4	NTD R-20/City Staff (2015)
Revenue Vehicle Mechanical System Failures - Major	24	0	0	NTD R-20
Preventable Accidents	4	5	3	ADA Para. Ops. Report

(a) Not reported

(b) FY2015 failures provided by City staff, not reported in NTD