

Triennial Performance Audit

of the

Napa County Transportation and Planning Agency (NCTPA)

Fiscal Years 2011/12, 2012/13 and 2013/14

FINAL AUDIT REPORT



prepared for the

Metropolitan Transportation Commission

by



Pierlott & Associates, LLC
Management Consulting

May 2015

This page left intentionally blank.

EXECUTIVE SUMMARY

This executive summary highlights the findings from the performance audit of the Napa County Transportation and Planning Agency (NCTPA). 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. NCTPA operates bus service under the banner of The Vine. NCTPA also operates several community demand-response services as well as ADA complementary paratransit under the banner of VINE Go. The audit covers the period of fiscal years 2012 through 2014 (from July 1, 2011 through June 30, 2014).

Performance Audit and Report Organization

The performance audit was conducted for MTC in accordance with its established procedures for performance audits. The final audit report consists of these sections:

- An assessment of data collection reporting procedures;
- A review of performance trends in TDA-mandated indicators;
- A review of compliance with selected PUC requirements;
- An evaluation of NCTPA's actions to implement the recommendations from the last performance audit; and
- Findings, conclusions, and recommendations to further improve NCTPA's performance based on the results of the previous sections.

Comments received from NCTPA and MTC staff regarding the draft report have been incorporated into the final report as applicable. 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 NCTPA 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 NCTPA is in compliance with the data collection and reporting requirements for the five TDA statistics.

Performance Indicators and Trends – NCTPA’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 to be analyzed for the current audit period.

- Bus Service – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2009 through FY2014:
 - There was an overall average annual increase in the operating cost per hour of seven percent, or a 4.4 percent annual increase in inflation adjusted dollars.
 - The cost per passenger increased on average by 4.8 percent per year, which amounted to an average annual increase of 2.2 percent in constant FY2009 dollars.
 - Passenger productivity was generally reduced through FY2013, followed by a significant turnaround in FY2014 that reflected a substantial increase in annual passengers following the major VINE service expansion and restructuring.
 - Employee productivity decreased an average 4.8 percent per year.

The following is a brief summary of the component operating costs trend highlights for the bus service between FY2012 and FY2014:

- Total operating costs increased by 16.2 percent per year, principally reflecting average annual increases in purchased transportation costs (23.6 percent), and materials/supplies costs (6.7 percent).
- Purchased transportation costs represented the largest portion of the total cost per vehicle service hour, increasing from about 65 percent in FY2012 to 73 percent in FY2014.

- The next largest share was materials/supplies costs, which decreased from about 24 percent to 20 percent, followed by casualty/liability (down from about six percent in the first two years to 3.5 percent in FY2014).
- In-house labor, fringe benefit and casualty/liability costs decreased overall, while services/utilities and miscellaneous costs increased at high rates. However, all of these component cost changes represented relatively small dollar amounts.
- Demand-Response – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2009 through FY2014:
 - Cost efficiency improved overall, with an average annual decrease in the operating cost per hour of 0.6 percent (3.0 percent in inflation adjusted dollars).
 - The operating cost per passenger averaged an annual decrease of 10.6 percent, or 12.8 percent when normalized in FY2009 dollars. Both operating costs and ridership increased over the period, but ridership increased at a much higher rate.
 - Passenger productivity trends were positive, with passengers per service hour increasing on average by more than eleven percent per year, and passengers per service mile by nearly 13 percent per year.
 - Employee productivity increased an average 6.4 percent per year.

The following is a brief summary of the component operating costs trend highlights for the demand-response services between FY2012 and FY2014:

- Total operating costs increased by 25 percent per year on average. Almost all component cost categories increased at substantial rates as well, though certain of these cost changes represented relatively small dollar amounts.
- Purchased transportation costs went up by about 25 percent annually, and remained by far the largest portion of the total cost per vehicle service hour (more than 80 percent) in all three years.
- The second highest contribution to total costs was materials/supplies, in a range of 11 to 15 percent during the period. Other categories each contributed three percent or less.

Compliance with Statutory Requirements – NCTPA 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, revenue sharing, and evaluation of passenger needs.

Status of Prior Audit Recommendations – NCTPA implemented the first recommendation, which called for expedited completion of joint fare revenue sharing agreements with all connecting operators in order to be in compliance with the requirements of the California Public Utilities Code. During the current audit period, NCTPA entered into an agreement with MTC and connecting operators including BART, SolTrans and WETA that is being completed in conjunction with implementation of the Clipper smartcard on Napa, Solano and Contra Costa County operators’ systems. A new transfer agreement was also signed with the Lake Transit Authority.

NCTPA also implemented the second recommendation, which called for continuing strategies to address the declining passenger productivity and cost effectiveness of NCTPA’s bus service. A primary focus during the current audit period was on implementation of its restructured public transit service throughout the Napa Valley, which was highlighted by a new service model for the VINE bus system. This produced significant ridership increases that have driven fixed-route TDA trend results toward the end of the current review period. In the last year, FY2014, which was also the first full year of the new service pattern, there were notable improvements compared with the immediately preceding years in the operating cost per passenger as well as passengers per service hour and passengers per service mile. The operating cost per hour also stabilized.

Recommendations

No recommendations are suggested for NCTPA based on the results of this triennial performance audit.

Table of Contents

	<u>Page No.</u>
Executive Summary	i
I. Introduction	1
Performance Audit and Report Organization	1
II. Review of TDA Data Collection and Reporting Methods	8
III. TDA Performance Indicators and Trends	12
Bus Service Performance Trends	13
Paratransit Performance Trends	24
IV. Compliance With PUC Requirements	34
V. Status of Prior Audit Recommendations	37
VI. Conclusions and Recommendations	41
Conclusions	41
Recommendations	43

List of Exhibits

	<u>Page No.</u>
Exhibit 1: System Overview	3
Exhibit 2.1: Organization Chart – July 2011	6
Exhibit 2.2: Organization Chart – Current.....	7
Exhibit 3: Compliance with TDA Data Collection and Reporting Requirements.....	10
Exhibit 4: TDA Indicator Performance – Bus Service	17
Exhibit 4.1: Operating Cost per Vehicle Service Hour – Bus Service	18
Exhibit 4.2: Passengers per Hour and per Mile – Bus Service	19
Exhibit 4.3: Operating Cost per Passenger – Bus Service	20
Exhibit 4.4: Vehicle Service Hours per FTE – Bus Service	21
Exhibit 4.5: TDA Component Costs Trends – Bus Service.....	21
Exhibit 5: TDA Indicator Performance – Demand-Response	27
Exhibit 5.1: Operating Cost per Vehicle Service Hour – Demand-Response	28
Exhibit 5.2: Passengers per Hour and per Mile – Demand-Response	29
Exhibit 5.3: Operating Cost per Passenger – Demand-Response	30
Exhibit 5.4: Vehicle Service Hours per FTE – Demand-Response	31
Exhibit 5.5: TDA Component Costs Trends – Demand-Response.....	32
Exhibit 6: Compliance with State PUC Requirements	35
Exhibit 7: Status of Prior Audit Recommendations.....	39

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 Napa County Transportation and Planning Agency (NCTPA). NCTPA operates bus service under the banner of The VINE and several community demand-response services as well as paratransit under the banner of VINE Go. The audit period is Fiscal Years 2012 through 2014 (from July 1, 2011 through June 30, 2014).

An overview of NCTPA is provided in Exhibit 1. This is followed by organization charts in Exhibits 2.1 and 2.2, which reflect moderate changes to the basic organizational structure that occurred during and after the audit period.

Performance Audit and Report Organization

This is the final audit report for the performance audit of NCTPA. Following this introduction, the report consists of these sections:

- An assessment of data collection reporting procedures;

- A review of performance trends in TDA-mandated indicators;
- A review of compliance with selected PUC requirements;
- An evaluation of NCTPA's actions to implement the recommendations from the last performance audit; and
- Findings, conclusions, and recommendations to further improve NCTPA's performance based on the results of the previous sections.

Comments received from NCTPA and MTC staff regarding the draft report have been incorporated into this final report as applicable.

Exhibit 1: System Overview

Location	Headquarters: 625 Burnell Street, Napa CA 94559
Establishment	In 1998, Napa Country Transportation & Planning Agency (NCTPA) was formed by the cities of American Canyon, Calistoga, Napa, St. Helena, the town of Yountville, and the County of Napa. It administers transportation services and serves as the planning agency for Napa County. Day-to-day operations and maintenance for all of NCTPA's transit services are provided by contract with Veolia Transportation (known as Transdev Services since August 2014). NCTPA owns all facilities and equipment.
Board	The 13-member board is comprised of 12 voting members and one ex-officio member. The board is made up of two representatives from Napa County, two representatives from each member community, and one non-voting representative from the Paratransit Coordinating Council. The voting representatives must be elected officials in their communities; if the community is a city or town, one of these representatives must be the Mayor.
Facilities	<p>NCTPA administrative staff is located at 625 Burnell Street in Napa, which is also the location of the recently opened Soscol Gateway Transit Center. NCTPA has two other Park and Ride facilities in Napa and one in Yountville.</p> <p>Near the end of the audit period, NCTPA's fixed-route fleet included 41 vehicles, with six additional 35' buses on order, and 18 cutaway paratransit vehicles. Most of these vehicles are maintained, fueled, and stored at a maintenance facility on Jackson Street in Napa, which also houses the contract operations staff. Eight additional community shuttle vehicles are stored and fueled in other cities but return to the Jackson Street yard for maintenance. Due to space limitations, back up vehicles are stored at rented space at the Napa Valley Fairgrounds.</p>
Service Data	<p>NCTPA operates local and regional fixed route service, deviated fixed route shuttle/trolley service, on-demand transit service, and paratransit service, as well as offering travel training, shared vehicle, contract transportation and lifeline taxi programs.</p> <p>Fixed-route VINE service operates local in the City of Napa on eight routes (Routes 1 through 8). In addition, there are five regional routes. Routes 10 and 11 provide regional service between Calistoga and the Vallejo Ferry Terminal, Route 21 between Napa and Fairfield/Suisun, Route 25 between Napa and Sonoma, and Route 29 commuter express service from Calistoga to El Cerrito del Norte BART station.</p> <p>Local fixed-route service operates Monday to Saturday with no service on Sunday. Regional Routes 10 and 11 are available seven days a week; Routes 21, 25 and 29 operate only on weekdays. Current local cash fares are \$1.50 for passengers age 19 through 64, \$1.00 for youth age 6 through 18, and \$0.75 for disabled passengers and seniors age 65 or over. Children under age six ride free with a paying customer. The one-way adult cash fare on regional VINE routes ranges from</p>

\$1.50 to \$5.50. Free transfers between routes and various discounted passes (single day, 20-ride, and 31-day) are available as well. They can be used on all local routes, and the regional routes with some limitations.

NCTPA also currently operates four community shuttles: American Canyon Transit, Calistoga Shuttle, St. Helena VINE Shuttle, and Yountville Trolley. All except the Calistoga Shuttle are deviated fixed-route services, which operate on a fixed-route and schedule but will deviate from the route upon request. The Calistoga shuttle is an on-demand service within the City Limits for the general public, no advance reservations are required. Each of the shuttle services has two dedicated vehicles. Service hours and fares vary by shuttle.

VINEGo paratransit offers curb-to-curb service for ADA certified individuals within $\frac{3}{4}$ of a mile of most VINE fixed-routes. Passengers may call one to seven days in advance to make a reservation. Same day service requests are filled based on vehicle availability. VINEGo will not duplicate services available via community shuttles. VINEGo service is available from 6:20 AM to 7:30 PM Monday through Friday, 7:30 AM to 8:00 PM on Saturdays, and 8:00 AM to 6:00 PM on Sundays. Since VINEGo provides service to the entire Napa Valley, fares are zoned based on the distance traveled (\$3.00 or \$6.00). A \$17.00 pass featuring a 15 percent discount is also available.

Recent Changes

In December 2012, VINE service underwent a major restructuring. This included increasing frequencies, shortening travel times, reducing fares, and improving connections between routes. As part of the restructuring, a “pulse” system was introduced, to minimize transfer times between routes. The restructuring resulted in significantly expanded service levels and additional staff.

Also in December 2012, the new Soscol Gateway Transit Center opened in Napa, replacing the Pearl Street Transit Center. NCTPA also moved its administrative headquarters to the second floor of the new center.

In 2012, significant changes were made in the Vine GO ADA paratransit program resulting in increased enrollments and a reduction in trip cancellations.

In 2013, weekday commuter service to Solano and Sonoma counties was introduced, via new Routes 21 and 25.

In 2013, new fareboxes were installed on VINE buses. They feature automatic coin counters, information display screens, paper transfer printers/readers, and automatically validate and report ridership and payment data.

Planned Changes

A feasibility study was recently conducted to locate and construct a new consolidated maintenance and operations facility and CNG fueling station large enough to accommodate the existing fleet and future growth.

Automatic Passenger Counters (APCs) for the fixed-route fleet will provide useful information to make the system more efficient. The data will be used for understanding passenger loads by route and time of day; defining parameters for locating bus stops; prioritizing enhancements at bus stops; schedule adherence; and cross validating ridership, on-time performance, and farebox information.

The deployment of a Computer Aided Dispatch/Automatic Vehicle Locator (CAD/AVL) intelligent transportation system is expected to launch early in 2016. Every vehicle, including community shuttles and ADA paratransit will have the system installed. Implementation will increase the availability of accurate data in real time to enhance customer satisfaction, efficiently manage growing operations, and make informed decisions for all of NCTPA's transit services.

Staff

The NCTPA administrative staff at the end of the audit period was comprised of thirteen full-time employees. Transit services are overseen by one of the five program managers, who all report to the Executive Director. NCTPA's contractor employs approximately 80 full and part-time employees for the operations and maintenance of NCTPA's transit services.

Exhibit 2.1: Organization Chart – July 2011

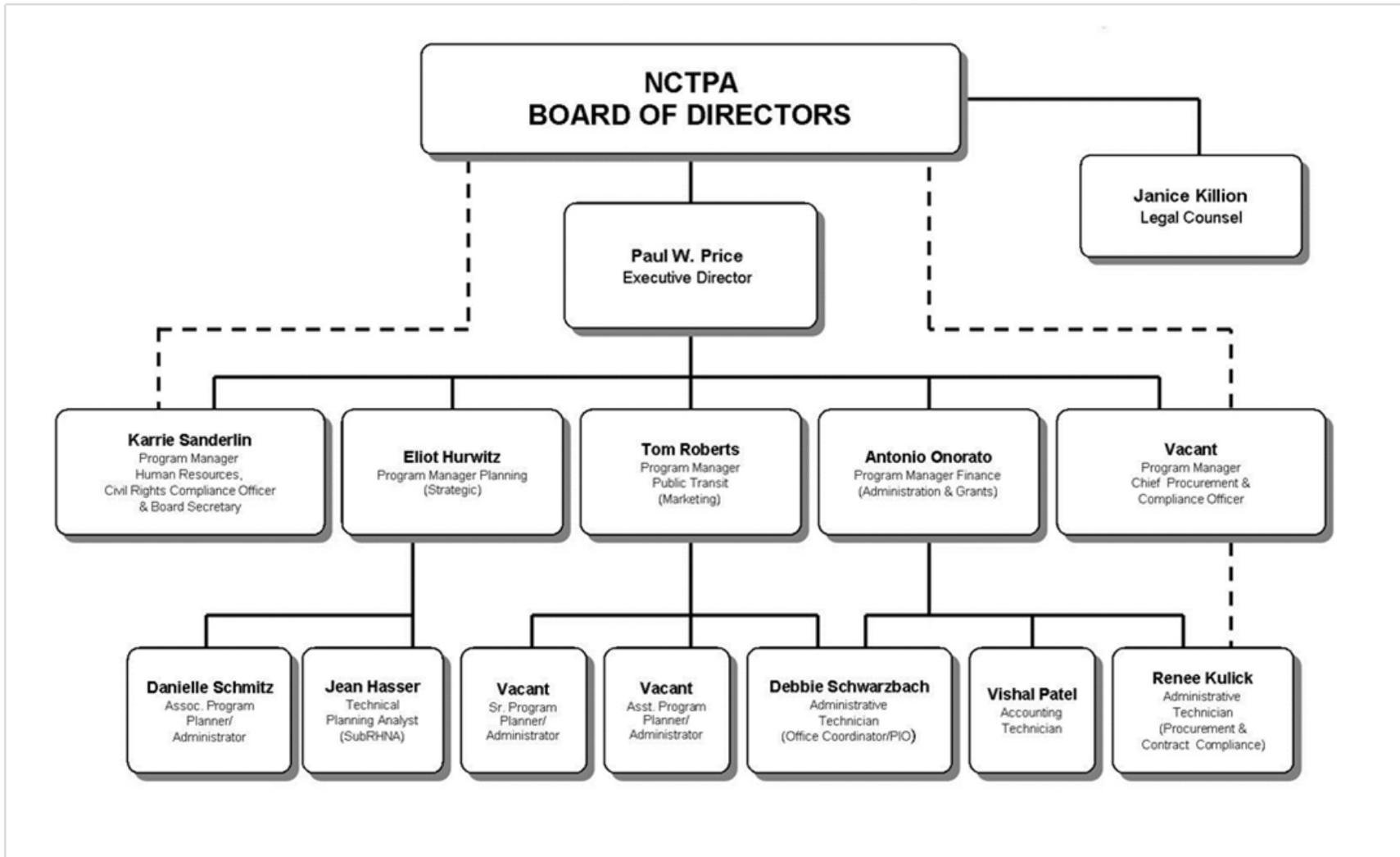
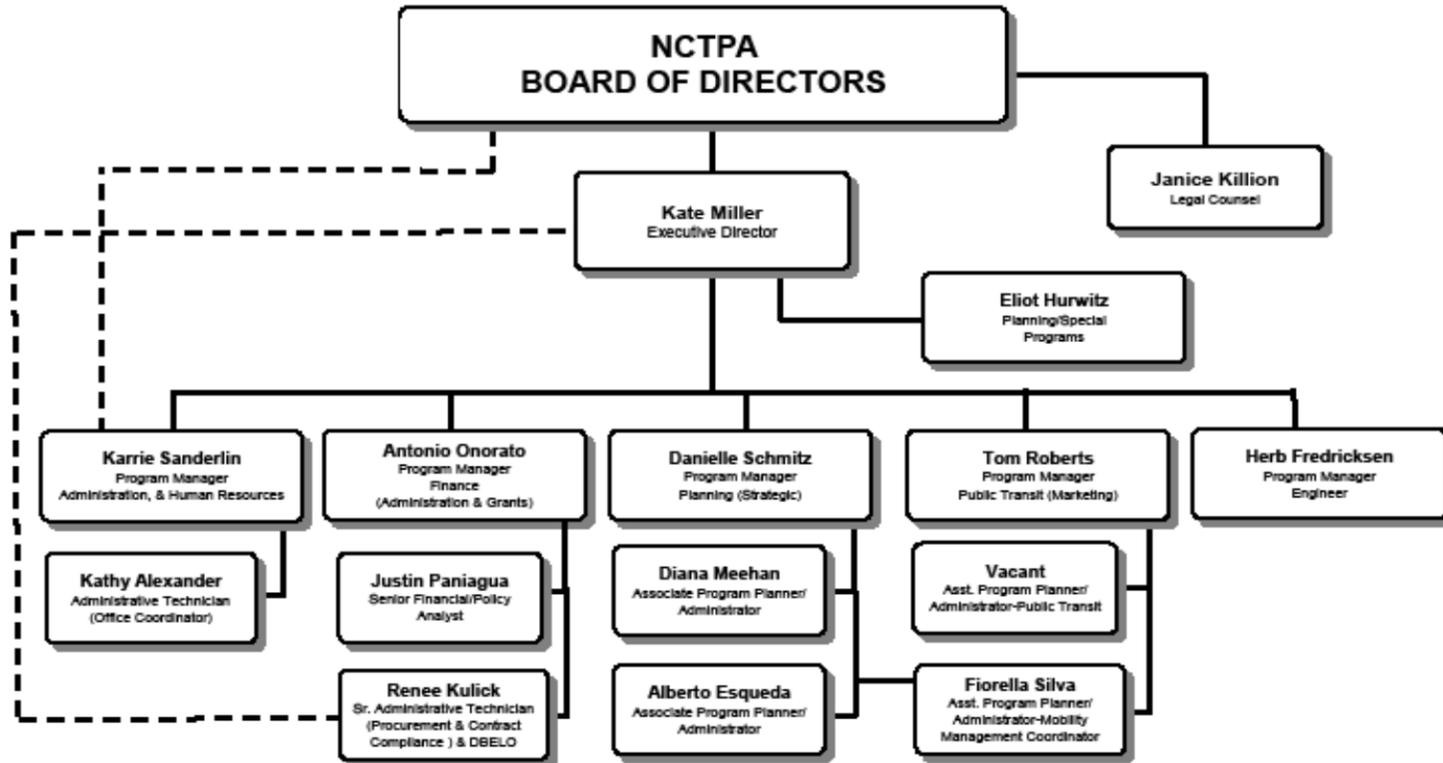


Exhibit 2.2: Organization Chart – Current

NCTPA Organizational Chart



Approved: 02/18/2015

This page left intentionally blank.

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

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

The TDA indicator analysis is based on these operating and financial statistics in the National Transit Database (NTD) reports submitted annually to the Federal Transit Administration (FTA). The information reported by NCTPA covering the audit period has been reviewed. NCTPA's NTD reports include its fixed-route bus and demand-response services. However, consistent with FTA reporting requirements, NCTPA does not submit employee hour information for purchased transportation service to the NTD. NCTPA staff provided full-time employee equivalent (FTE) information for this review.

To support this review, NCTPA also provided information to confirm and/or update its data collection and reporting procedures as described in the prior performance audit. It was noted that in FY2013, NCTPA reported fixed-route vehicle service hours and miles excluding "closed-door" regional bus route segments of five miles or more, though passengers could be on-board. This was determined to be inconsistent with TDA and NTD definitions. Following discussions with NCTPA and MTC, the agency corrected its vehicle service hour and mile data. As such, NCTPA provided sufficient input data with the excluded hours and miles added back, consistent with the TDA definitions.

Based on the information provided, as shown in Exhibit 3, NCTPA is in compliance with the data collection and reporting requirements for the five TDA statistics.

Exhibit 3: Compliance with TDA Data Collection and Reporting Requirements

TDA Statistic	TDA Definition	Compliance Finding	Verification Information
Operating Cost	“Operating cost” means all costs in the operating expense object classes exclusive of the costs in the depreciation and amortization expense object class of the uniform system of accounts and records adopted by the Controller pursuant to Section 99243, and exclusive of all subsidies for commuter rail services operated under the jurisdiction of the Interstate Commerce Commission and of all direct costs for providing charter services, and exclusive of all vehicle lease costs.	In Compliance	Defined as all costs in the operating expense object classes exclusive of depreciation, amortization and all subsidies for commuter rail services operated under the jurisdiction of the Interstate Commerce Commission; and of all direct costs for providing charter services, and all vehicle lease costs.
Vehicle Service Hours	“Vehicle service hours” means the total number of hours that each transit vehicle is in revenue service, including layover time.	In Compliance	<ul style="list-style-type: none"> • Total number of hours that each transit vehicle is in revenue service, including layover time. • Fixed-route: vehicle service hours collected and reported on an exception basis from scheduled revenue service hours. Base revenue service hours are the timetable scheduled hours. Additional service hours and hours missed are logged on the daily bus reports and presented in the contractor’s monthly report. • Demand-response: vehicle service hours collected and reported as time between pull-out and pull-in less service breaks for lunch, training, etc.
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"> • Total number of miles that each transit vehicle is in revenue service. • Fixed-route and demand-response revenue miles are logged on the daily bus report from the vehicle odometer. Miles are provided as part of the contractor’s monthly report.

TDA Statistic	TDA Definition	Compliance Finding	Verification Information
Unlinked Passengers	“Unlinked passengers” means the number of boarding passengers, whether revenue producing or not, carried by the public transportation system.	In Compliance	<ul style="list-style-type: none"> • Defined as the number of boarding passengers, whether revenue or not, carried by the public transportation system. • Fixed-route: passengers counted electronically using a GFI farebox stationed in each vehicle. Passengers are counted by specific fare category, transfer or free. Summaries of total rides and total rides by fare category are reported monthly. • Demand-response: Until September 2013, passengers were counted by the driver and recorded on drivers’ logs. Subsequently, all passengers are counted electronically using a GFI farebox stationed in each vehicle. Passengers are counted by fare category or free. Data is transferred to a spreadsheet, and summary totals are reported monthly.
Employee Full-Time Equivalents	2,000 person-hours of work in one year constitute one employee.	In Compliance	<ul style="list-style-type: none"> • Defined as 2,000 person-hours of work in one year constituting one employee. • NCTPA staff is budgeted for and dedicated to transit. A percentage of clerical and executive management oversight is budgeted and allocated to transit. • Contractor budgets for employee positions based upon service needs required to provide the service.

III. TDA PERFORMANCE INDICATORS AND TRENDS

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

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

Most of the performance results in these indicators were developed from the information in the NTD reports filed with the FTA for the three years of the audit period. NCTPA's NTD reports were generally the source of the operating and financial statistics except for employee FTEs. As noted previously, FTE data has been provided for this review directly by NCTPA staff, and fixed-route vehicle service hours and miles reported to the NTD for FY2013 have been adjusted to correct a mistaken exclusion of lengthy "closed-door" regional route segments from the calculations. In addition, due to a reporting anomaly, fixed-route and paratransit passenger data for FY2012 was missing from the NTD report. In lieu, NCTPA staff provided monthly NTD MR-20 report inputs for that year, from which annual passenger totals were aggregated for this review.

In addition to presenting performance for the three years of the audit period (FY2012 through FY2014), 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 NCTPA'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 FY2012 to FY2014 trend lines have been combined with those from the prior audit period (FY2009 through FY2011) 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 NCTPA’s performance trends in each of the five TDA performance indicators. The discussion is organized by service mode. NCTPA’s bus service is discussed first, followed by demand-response. The analysis is expanded to include a breakdown of the various component costs that contributed to the total and hourly operating costs during the last three years, although it is recognized that for contracted services, the cost breakdowns largely are internal contractor issues.

Bus Service Performance Trends

This section provides an overview of the performance of NCTPA’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.

In addition, year-to-year changes in selected operating cost categories over the current audit period are presented in Exhibit 4.5. Examining components of operating costs (e.g., labor, fringe benefits, 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 illustrates the portion of the cost per bus service hour that can be attributed to each included cost component.

- Operating Cost Per Vehicle Service Hour (Exhibit 4.1) – Operating cost per vehicle service hour is a key indicator of cost efficiency. During the six year review period, the cost per hour of bus service increased an average of seven percent annually, as service hours decreased somewhat overall while operating costs showed more

pronounced increase. In FY2012, the cost per hour reportedly jumped by 25 percent, which appears to primarily reflect changes in the allocation between service modes, as there was a concurrent 31 percent decrease in this indicator for NCTPA's demand-response services (discussed subsequently). In the last two years, service hours and operating costs both increased noticeably and at relatively similar levels, reflecting implementation of the major service restructuring in December 2012. The cost per hour increased in each year except the last, from a low of \$63.68 in FY2009 to a high of \$89.56 in FY2013. Results for FY2014 were almost unchanged from FY2013. To determine the effects of inflation, the annual results are presented in constant as well as current dollars. In FY2009 dollars, there was an average annual increase in this indicator that amounted to 4.4 percent.

As shown in Exhibit 4.5, between FY2012 and FY2014, in-house labor costs and fringe benefit costs both decreased overall by nearly 20 percent. At the same time, services/utilities costs increased by 100 percent per year on average, but remained a very small portion of total operating costs in absolute terms. Purchased transportation costs went up by about 25 percent per year, reflecting the increased service provided with the major service restructuring of 2012, and renegotiated contract terms. Other component costs including materials/supplies and miscellaneous expenses increased but at lower rates, while casualty/liability costs decreased overall. Total operating costs increased by about 16 percent per year.

Purchased transportation costs represented the largest portion of the total cost per vehicle service hour, increasing from about 65 percent in FY2012 to 73 percent in FY2014. The next largest share was materials/supplies costs, which decreased from about 24 percent to 20 percent, followed by casualty/liability, which also decreased, from a 6.6 percent share to 3.5 percent. Other cost categories each consistently comprised less than four percent.

- Passengers per Vehicle Service Hour (Exhibit 4.2) – Passengers per vehicle service hour is an indicator of passenger productivity. Passengers per hour increased an average of 2.1 percent annually during the six-year period, reflecting a modest overall decrease in service hours combined with a larger increase in passengers. Passengers per hour decreased from 9.3 in FY2009 to 7.7 in FY2013, with interim year results fluctuating between 8.2 and 7.7. However, in FY2014, there was a sharp increase to 10.34 passengers per hour. This reflected an increase in passengers of nearly 50 percent in the first full year following the major VINE service expansion and restructuring.
- Passengers per Vehicle Service Mile (Exhibit 4.2) – Another passenger productivity indicator is passengers per vehicle service mile. The six-year trend in this indicator was less positive overall than passengers per hour, decreasing by 5.1 percent annually on average. There were reductions of at least seven percent in every year through FY2013, as vehicle service miles generally increased but passenger levels declined or increased at a lower rate. There were 0.72 passengers per mile in FY2009, compared with 0.43 in FY2013. The trend turned in FY2014,

with improvement to 0.55 passengers per mile, driven by the substantial increase in passengers noted above.

- Operating Cost per Passenger (Exhibit 4.3) – Operating cost per passenger is a measure of cost effectiveness. The cost per passenger was 6.84 in the first year of the review period. It then rose noticeably in each year to reach \$11.68 in FY2013, but results for FY2014 showed a notable turnaround (down to \$8.65 per passenger) due to the increase in passengers following the VINE restructuring. The average annual increase over the six years was 4.8 percent. With the impact of inflation removed from the cost side (normalization), the six-year result was an average annual increase of 2.2 percent in the cost per passenger.
- Vehicle Service Hours per Employee (FTE) (Exhibit 4.4) – Employee productivity is measured as vehicle service hours per full-time employee (combined in-house and contractor employees). This indicator decreased an average 4.8 percent per year over the six years, as vehicle service hours went down by 0.4 percent per year but FTEs rose by 4.7 percent per year.

* * * * *

The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2009 through FY2014:

- There was an overall average annual increase in the operating cost per hour of seven percent, or a 4.4 percent annual increase in inflation adjusted dollars.
- The cost per passenger increased on average by 4.8 percent per year, which amounted to an average annual increase of 2.2 percent in constant FY2009 dollars.
- Passenger productivity was generally reduced through FY2013, followed by a significant turnaround in FY2014 that reflected a substantial increase in annual passengers following the major VINE service expansion and restructuring.
- Employee productivity decreased an average 4.8 percent per year.

The following is a brief summary of the component operating costs trend highlights between FY2012 and FY2014:

- Total operating costs increased by 16.2 percent per year, principally reflecting average annual increases in purchased transportation costs (23.6 percent), and materials/supplies costs (6.7 percent).

- Purchased transportation costs represented the largest portion of the total cost per vehicle service hour, increasing from about 65 percent in FY2012 to 73 percent in FY2014.
- The next largest share was materials/supplies costs, which decreased from about 24 percent to 20 percent, followed by casualty/liability (down from about six percent in the first two years to 3.5 percent in FY2014).
- In-house labor, fringe benefit and casualty/liability costs decreased overall, while services/utilities and miscellaneous costs increased at high rates. However, all of these component cost changes represented relatively small dollar amounts.

Exhibit 4: TDA Indicator Performance – Bus Service

	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	Av. Ann. Chg.
Performance Indicators							
Op. Cost per Vehicle Svc. Hour (Actual \$)	\$63.68	\$69.22	\$69.87	\$87.31	\$89.56	\$89.42	- -
<i>Annual Change</i>	- -	8.7%	0.9%	25.0%	2.6%	-0.2%	7.0%
Op. Cost per Vehicle Svc. Hour (Constant \$)	\$63.68	\$68.27	\$66.99	\$81.44	\$81.42	\$79.00	- -
<i>Annual Change</i>	- -	7.2%	-1.9%	21.6%	0.0%	-3.0%	4.4%
Passengers per Vehicle Service Hour	9.30	8.24	7.74	8.19	7.67	10.34	- -
<i>Annual Change</i>	- -	-11.4%	-6.0%	5.8%	-6.4%	34.8%	2.1%
Passengers per Vehicle Service Mile	0.72	0.67	0.57	0.49	0.43	0.55	- -
<i>Annual Change</i>	- -	-6.9%	-15.3%	-14.7%	-11.9%	29.5%	-5.1%
Op. Cost per Passenger (Actual \$)	\$6.84	\$8.40	\$9.02	\$10.66	\$11.68	\$8.65	- -
<i>Annual Change</i>	- -	22.8%	7.4%	18.1%	9.5%	-25.9%	4.8%
Op. Cost per Passenger (Constant \$)	\$6.84	\$8.29	\$8.65	\$9.94	\$10.62	\$7.64	- -
<i>Annual Change</i>	- -	21.1%	4.4%	14.9%	6.8%	-28.0%	2.2%
Vehicle Service Hours per FTE	1,269.7	1,410.7	1,346.1	1,080.1	1,056.5	992.1	- -
<i>Annual Change</i>	- -	11.1%	-4.6%	-19.8%	-2.2%	-6.1%	-4.8%
Input Data							
Operating Cost (Actual \$)	\$5,118,109	\$5,526,975	\$5,717,883	\$5,224,078	\$6,443,599	\$7,053,169	- -
<i>Annual Change</i>	- -	8.0%	3.5%	-8.6%	23.3%	9.5%	6.6%
Operating Cost (Constant \$)	\$5,118,109	\$5,450,666	\$5,482,151	\$4,873,207	\$5,857,817	\$6,230,715	- -
<i>Annual Change</i>	- -	6.5%	0.6%	-11.1%	20.2%	6.4%	4.0%
Vehicle Service Hours	80,372	79,845	81,841	59,835	71,945	78,874	- -
<i>Annual Change</i>	- -	-0.7%	2.5%	-26.9%	20.2%	9.6%	-0.4%
Vehicle Service Miles	1,036,954	979,920	1,114,415	1,010,393	1,290,802	1,473,000	- -
<i>Annual Change</i>	- -	-5.5%	13.7%	-9.3%	27.8%	14.1%	7.3%
Unlinked Passengers	747,718	657,798	633,614	490,043	551,759	815,502	- -
<i>Annual Change</i>	- -	-12.0%	-3.7%	-22.7%	12.6%	47.8%	1.8%
Employee Full-Time Equivalents	63.3	56.6	60.8	55.4	68.1	79.5	- -
<i>Annual Change</i>	- -	-10.6%	7.4%	-8.9%	22.9%	16.7%	4.7%
Bay Area CPI - Annual Change	- -	1.4%	2.9%	2.7%	2.6%	2.9%	- -
- Cumulative Change	- -	1.4%	4.3%	7.2%	10.0%	13.2%	2.5%

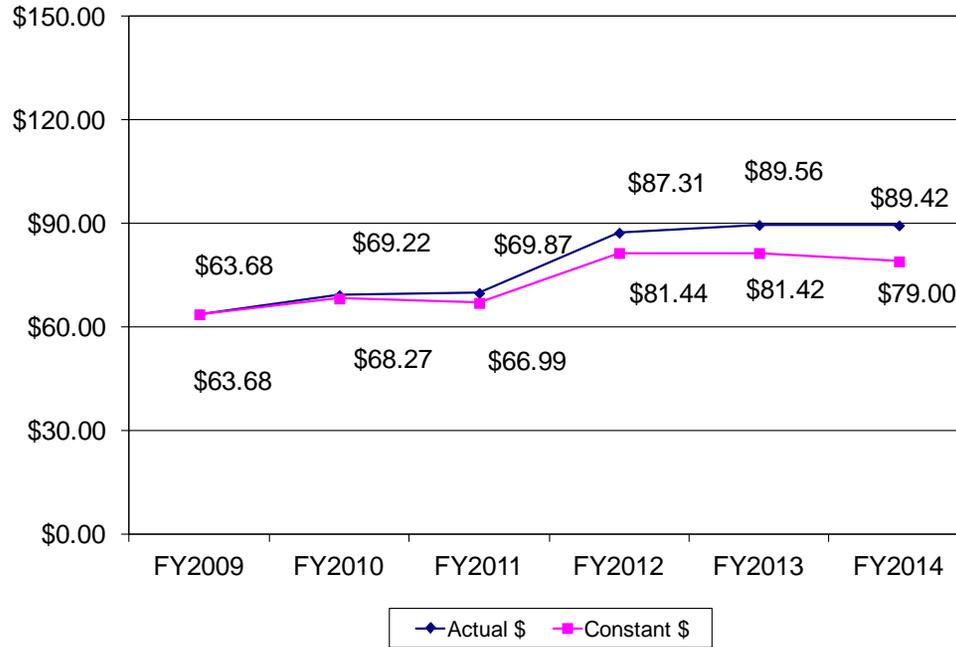
Sources: FY2009 through FY2011 - Prior Performance Audit Report

FY2012 through FY2014 - NTD Reports , except FY2012 Passengers - NTD MR-20 monthly inputs, and FTEs - NCTPA Staff

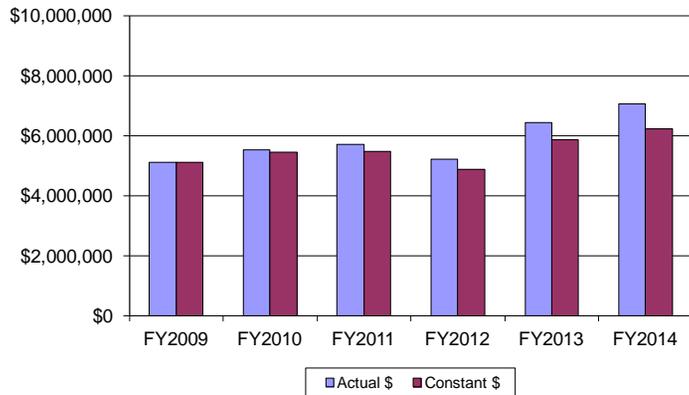
CPI Data - U.S. Department of Labor, Bureau of Labor Statistics

Note: FY2013 Hours & Miles adjusted per NCTPA staff input to add back "closed door" service not included in NTD Report

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



Operating Cost



Vehicle Service Hours

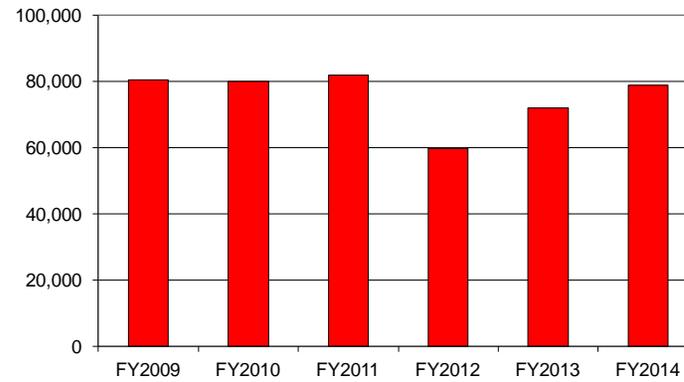
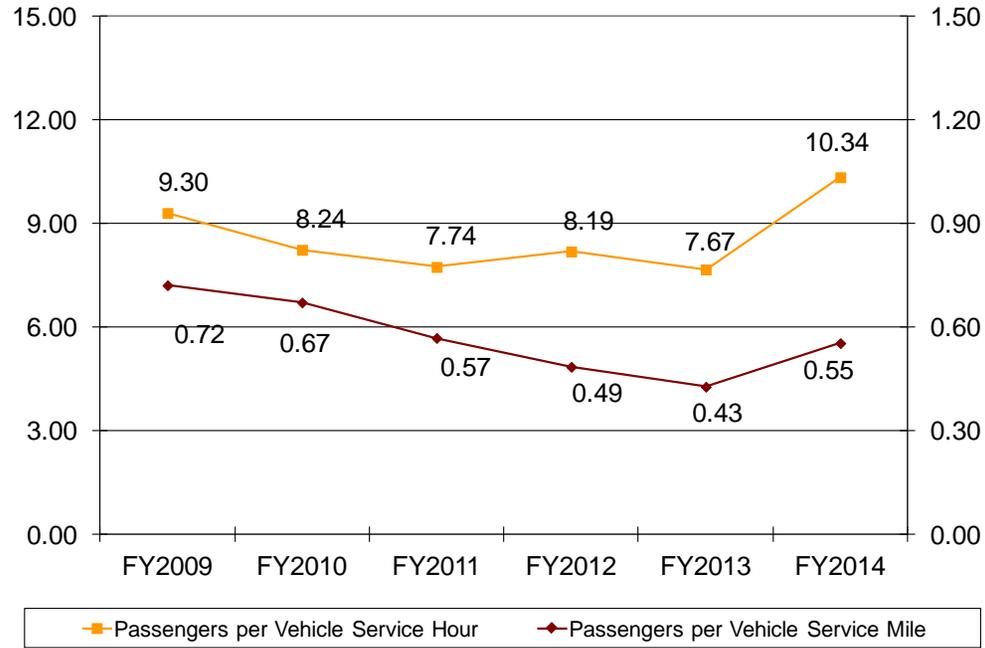
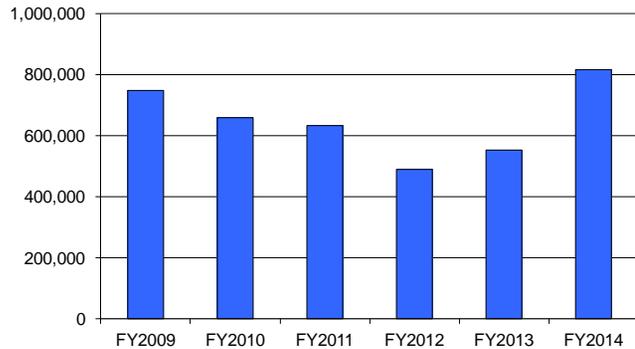


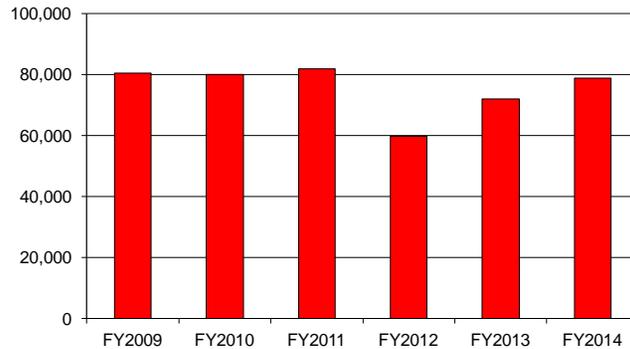
Exhibit 4.2: Passengers per Hour and per Mile – Bus Service



Unlinked Passengers



Vehicle Service Hours



Vehicle Service Miles

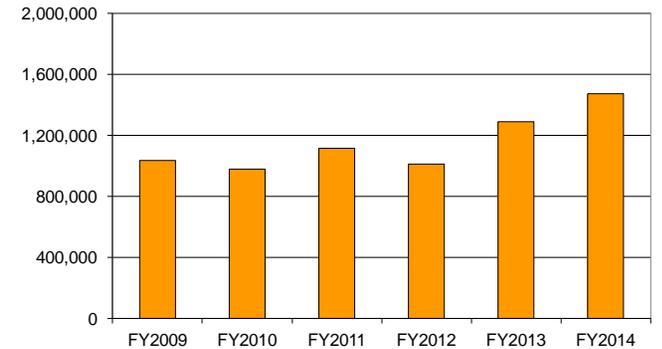
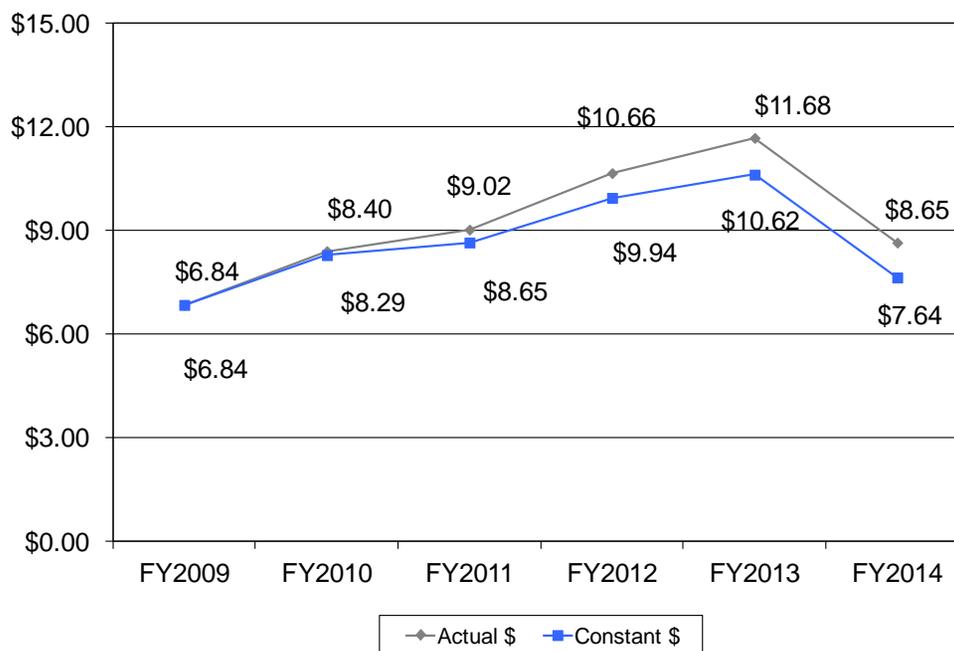
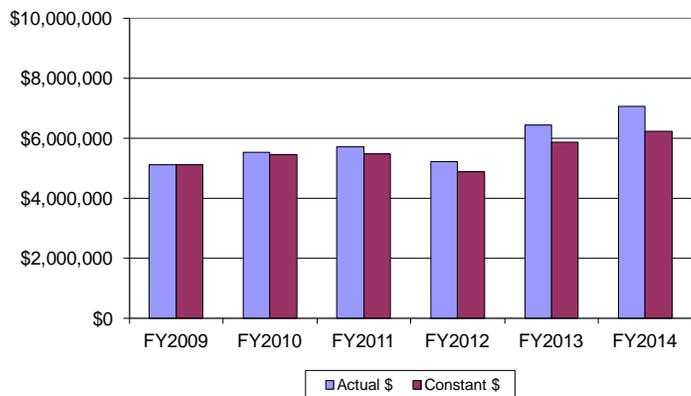


Exhibit 4.3: Operating Cost per Passenger – Bus Service



Operating Cost



Unlinked Passengers

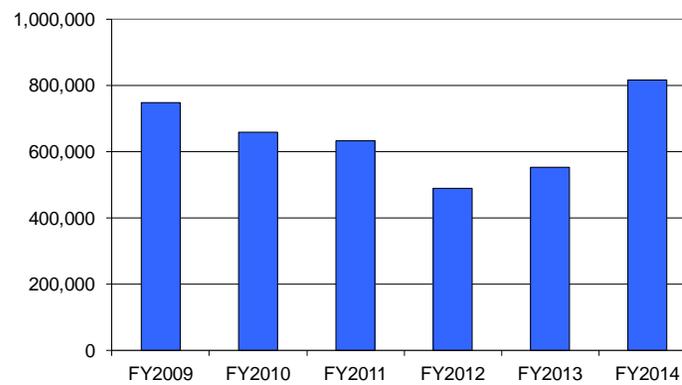
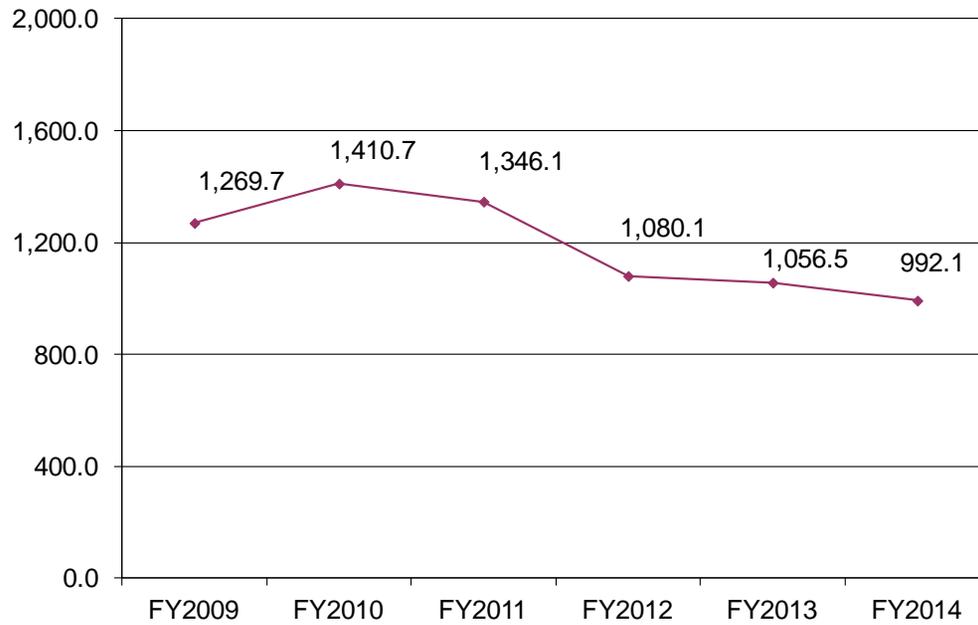
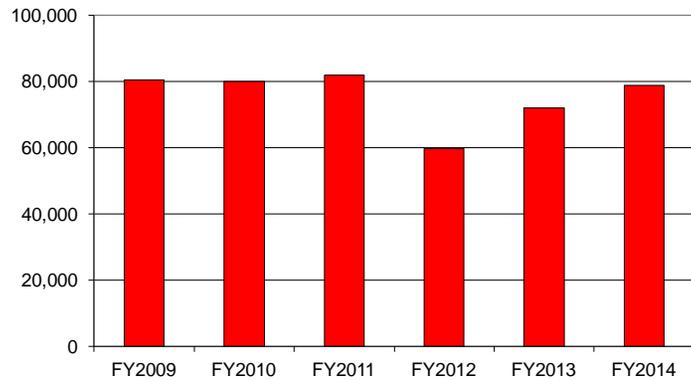


Exhibit 4.4: Vehicle Service Hours per FTE – Bus Service



Vehicle Service Hours



Full-time Equivalent

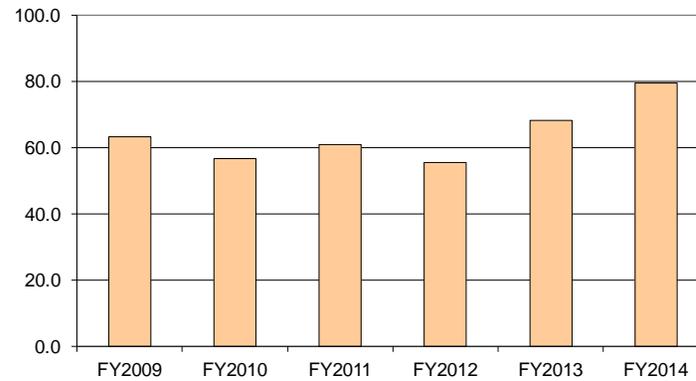


Exhibit 4.5: TDA Component Costs Trends – Bus Service

	FY2012	FY2013	FY2014	Av. Ann. Chg.
COST CATEGORIES				
Labor (Salaries, Wages)	\$189,630	\$196,801	\$124,232	--
<i>Annual Change</i>	--	3.8%	-36.9%	-19.1%
Fringe Benefits	\$53,086	\$60,677	\$34,227	--
<i>Annual Change</i>	--	14.3%	-43.6%	-19.7%
Services/Utilities	\$17,225	\$8,462	\$69,270	--
<i>Annual Change</i>	--	-50.9%	718.6%	100.5%
Materials/Supplies	\$1,251,119	\$1,331,077	\$1,424,925	--
<i>Annual Change</i>	--	6.4%	7.1%	6.7%
Purchased Transportation	\$3,368,604	\$4,485,178	\$5,143,699	--
<i>Annual Change</i>	--	33.1%	14.7%	23.6%
Casualty/Liability	\$343,714	\$361,404	\$247,445	--
<i>Annual Change</i>	--	5.1%	-31.5%	-15.2%
Misc. Expenses	\$700	\$0	\$9,371	--
<i>Annual Change</i>	--	-100.0%	--	265.9%
Total	\$5,224,078	\$6,443,599	\$7,053,169	--
<i>Annual Change</i>	--	23.3%	9.5%	16.2%
OPERATING STATISTICS				
Vehicle Service Hours	59,835	71,945	78,874	--
<i>Annual Change</i>	--	20.2%	9.6%	14.8%

Source: FY2012 through FY2014 NTD Reports

Exhibit 4.5: TDA Component Costs Trends – Bus Service, *continued*
Operating Cost per Vehicle Service Hour



Demand-Response Performance Trends

This section provides an overview of the performance of NCTPA's demand-response service over the six year analysis period. Included are several community demand-response services as well as the VINE Go paratransit service. The trends in the five TDA indicators and input data are presented in Exhibit 5. The six-year trends are illustrated in Exhibits 5.1 through 5.4. In addition, year-to-year changes in selected operating cost categories over the current audit period are presented in Exhibit 5.5, along with the concurrent changes in vehicle service hours and the portion of the cost per vehicle service hour that can be attributed to each included cost component.

- Operating Cost per Vehicle Service Hour (Exhibit 5.1) – The demand-response cost per hour decreased overall from \$87.57 in FY2009 to \$84.95 in FY2014 (less than one percent per year on average). There was noticeable variation in the intervening years that included reaching a period low of \$56.10 in FY2012. As discussed previously, in that year, the cost per hour reportedly declined by 31 percent, which appears to primarily reflect changes in the allocation between service modes, as there was a concurrent 25 percent increase in this indicator for NCTPA's fixed-route bus service. Operating costs and service hours were both about 11 percent higher in FY2014 than in FY2009. To determine the effects of inflation, the annual results are presented in constant as well as current dollars. In FY2009 dollars, there was an average annual decrease of three percent over the six years.

As shown in Exhibit 5.5, between FY2012 and FY2014, total operating costs increased by 25 percent per year on average. Almost all component cost categories increased at substantial rates, with the most significant being in-house labor and fringe benefits (both up by nearly 50 percent per year) and materials/supplies (up by more than 200 percent per year). However, certain of these component cost changes represented relatively small dollar amounts. In addition, a significant increase in the services/utilities area in FY2014 was attributed to costs associated with the new facility.

Purchased transportation costs (contractor) went up by about 25 percent annually from FY2012 to FY2014, and represented by far the largest portion of the total cost per vehicle service hour at more than 80 percent in all three years. The second highest contribution to total costs was materials/supplies, in a range of 11 to 15 percent during the period. Other categories each contributed three percent or less.

- Passengers per Vehicle Service Hour (Exhibit 5.2) – NCTPA's demand-response passenger productivity improved noticeably over the period, with passengers per vehicle service hour increasing an average of 11.2 percent annually, from 2.4

passengers per hour in FY2009 to 4.0 passengers per hour in FY2014. This reflects an increase in service hours (11.8 percent annually) coupled with a much larger increase in ridership (24.3 percent annually).

- Passengers per Vehicle Service Mile (Exhibit 5.2) – Performance improved at a similar rate in this indicator of passenger productivity, with passengers per vehicle service mile increasing an average of 12.8 percent annually. Passengers per mile increased from 0.23 in FY2009 to 0.42 in FY2014. This was due to the 24.3 percent average annual increase in ridership coinciding with an annual increase in service miles of 10.2 percent over the period.
- Operating Cost per Passenger (Exhibit 5.3) – NCTPA’s demand-response operating cost per passenger decreased overall during the six-year period by an average of 10.6 percent per year. The cost of \$36.83 per passenger in FY2009 was reduced to \$20.99 per passenger in FY2014. This reflects the increase (24.3 percent annually) in ridership coupled with a much smaller increase (11.1 percent annually) in operating costs. Expressed in constant FY2009 dollars, the cost per passenger achieved an average annual decrease of 12.8 percent.
- Vehicle Service Hours per FTE (Exhibit 5.4) – NCTPA’s demand-response employee productivity (combined in-house and contractor employees) increased an average of 6.4 percent annually, from 804 hours per FTE in FY2009 to 1,095 hours per FTE in FY2014. This trend reflects the increase in vehicle service hours (11.8 percent annually) coupled with a smaller increase in FTEs (5.1 percent annually) over the period.

* * * * *

The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2009 through FY2014:

- Cost efficiency improved overall, with an average annual decrease in the operating cost per hour of 0.6 percent (3.0 percent in inflation adjusted dollars).
- The operating cost per passenger averaged an annual decrease of 10.6 percent, or 12.8 percent when normalized in FY2009 dollars. Both operating costs and ridership increased over the period, but ridership increased at a much higher rate.

- Passenger productivity trends were positive, with passengers per service hour increasing on average by more than eleven percent per year, and passengers per service mile by nearly 13 percent per year.
- Employee productivity increased an average 6.4 percent per year.

The following is a brief summary of the component operating costs trend highlights between FY2012 and FY2014:

- Total operating costs increased by 25 percent per year on average. Almost all component cost categories increased at substantial rates as well, though certain of these cost changes represented relatively small dollar amounts.
- Purchased transportation costs went up by about 25 percent annually, and remained by far the largest portion of the total cost per vehicle service hour (more than 80 percent) in all three years.
- The second highest contribution to total costs was materials/supplies, in a range of 11 to 15 percent during the period. Other categories each contributed three percent or less.

Exhibit 5: TDA Indicator Performance – Demand-Response

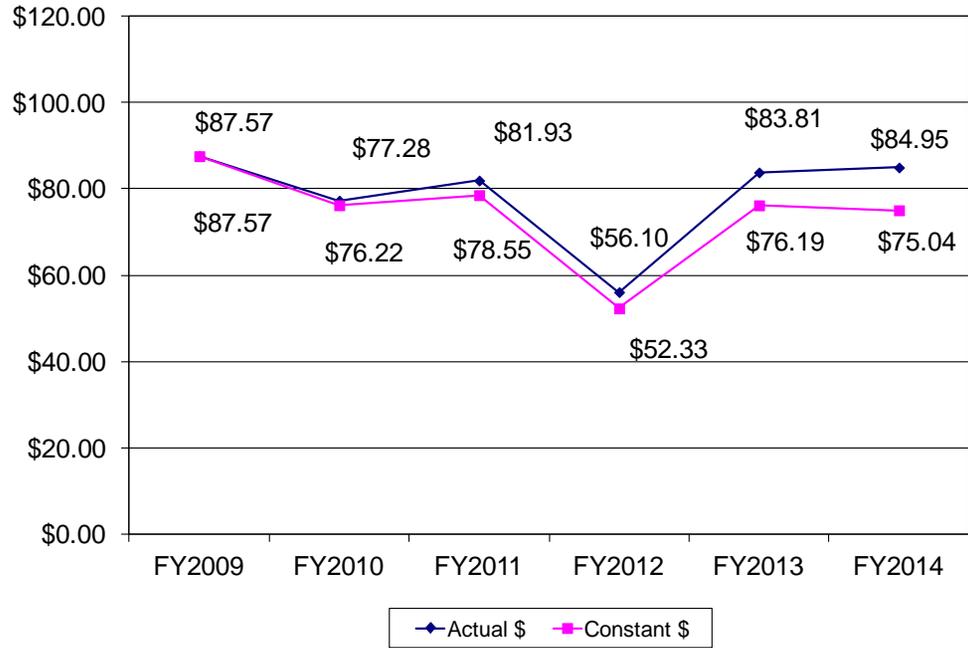
	FY2009	FY2010	FY2011	FY2012	FY2013	FY2014	Av. Ann. Chg.
Performance Indicators							
Op. Cost per Vehicle Svc. Hour (Actual \$)	\$87.57	\$77.28	\$81.93	\$56.10	\$83.81	\$84.95	- -
<i>Annual Change</i>	- -	-11.8%	6.0%	-31.5%	49.4%	1.4%	-0.6%
Op. Cost per Vehicle Svc. Hour (Constant \$)	\$87.57	\$76.22	\$78.55	\$52.33	\$76.19	\$75.04	- -
<i>Annual Change</i>	- -	-13.0%	3.1%	-33.4%	45.6%	-1.5%	-3.0%
Passengers per Vehicle Service Hour	2.4	2.3	2.7	3.6	4.1	4.0	- -
<i>Annual Change</i>	- -	-2.3%	16.8%	33.3%	13.6%	-1.6%	11.2%
Passengers per Vehicle Service Mile	0.23	0.22	0.25	0.36	0.40	0.42	- -
<i>Annual Change</i>	- -	-5.6%	13.9%	43.4%	12.1%	5.8%	12.8%
Op. Cost per Passenger (Actual \$)	\$36.83	\$33.26	\$30.19	\$15.51	\$20.39	\$20.99	- -
<i>Annual Change</i>	- -	-9.7%	-9.3%	-48.6%	31.5%	3.0%	-10.6%
Op. Cost per Passenger (Constant \$)	\$36.83	\$32.80	\$28.94	\$14.47	\$18.53	\$18.54	- -
<i>Annual Change</i>	- -	-10.9%	-11.8%	-50.0%	28.1%	0.1%	-12.8%
Vehicle Service Hours per FTE	803.9	883.0	687.4	1,141.9	1,054.7	1,094.8	- -
<i>Annual Change</i>	- -	9.8%	-22.1%	66.1%	-7.6%	3.8%	6.4%
Input Data							
Operating Cost (Actual \$)	\$1,450,211	\$1,310,165	\$1,340,464	\$1,556,487	\$2,156,745	\$2,455,237	- -
<i>Annual Change</i>	- -	-9.7%	2.3%	16.1%	38.6%	13.8%	11.1%
Operating Cost (Constant \$)	\$1,450,211	\$1,292,076	\$1,285,200	\$1,451,947	\$1,960,677	\$2,168,937	- -
<i>Annual Change</i>	- -	-10.9%	-0.5%	13.0%	35.0%	10.6%	8.4%
Vehicle Service Hours	16,560	16,953	16,361	27,747	25,734	28,902	- -
<i>Annual Change</i>	- -	2.4%	-3.5%	69.6%	-7.3%	12.3%	11.8%
Vehicle Service Miles	170,060	180,267	178,365	281,200	264,286	276,215	- -
<i>Annual Change</i>	- -	6.0%	-1.1%	57.7%	-6.0%	4.5%	10.2%
Unlinked Passengers	39,378	39,387	44,407	100,375	105,793	116,971	- -
<i>Annual Change</i>	- -	0.0%	12.7%	126.0%	5.4%	10.6%	24.3%
Employee Full-Time Equivalents	20.6	19.2	23.8	24.3	24.4	26.4	- -
<i>Annual Change</i>	- -	-6.8%	24.0%	2.1%	0.4%	8.2%	5.1%
Bay Area CPI - Annual Change	- -	1.4%	2.9%	2.7%	2.6%	2.9%	- -
- Cumulative Change	- -	1.4%	4.3%	7.2%	10.0%	13.2%	2.5%

Sources: FY2009 through FY2011 - Prior Performance Audit Report

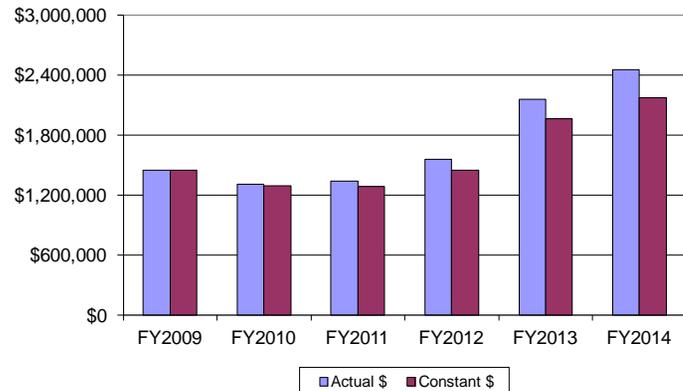
FY2012 through FY2014 - NTD Reports , except FY2012 Passengers - NTD MR-20 monthly inputs, and FTEs - NCTPA Staff

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

Exhibit 5.1: Operating Cost per Vehicle Service Hour – Demand-Response



Operating Cost



Vehicle Service Hours

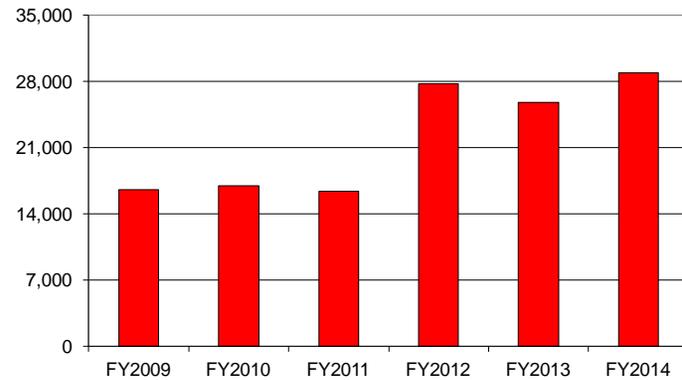
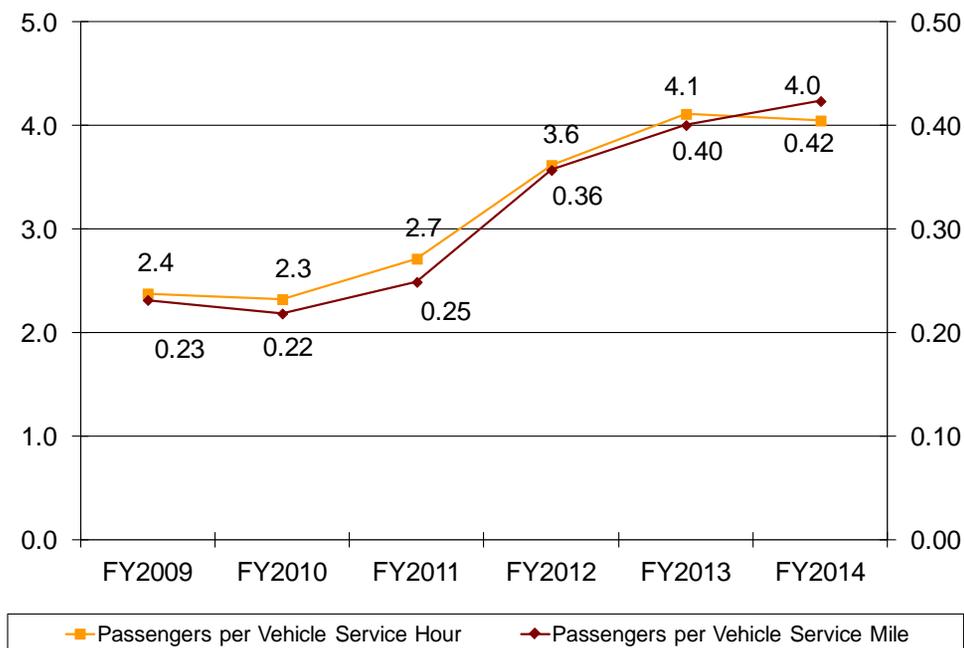
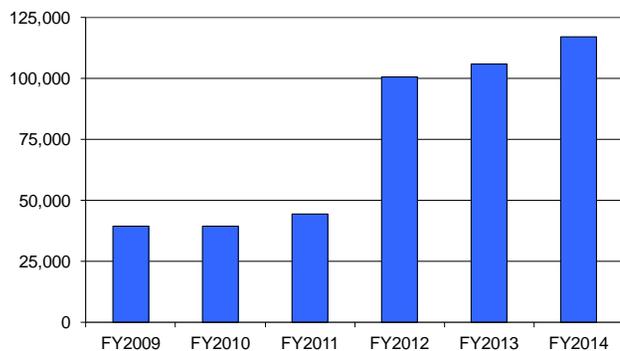


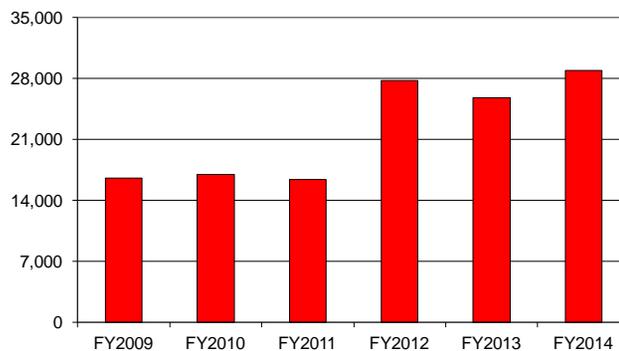
Exhibit 5.2: Passengers per Hour and per Mile – Demand-Response



Unlinked Passengers



Vehicle Service Hours



Vehicle Service Miles

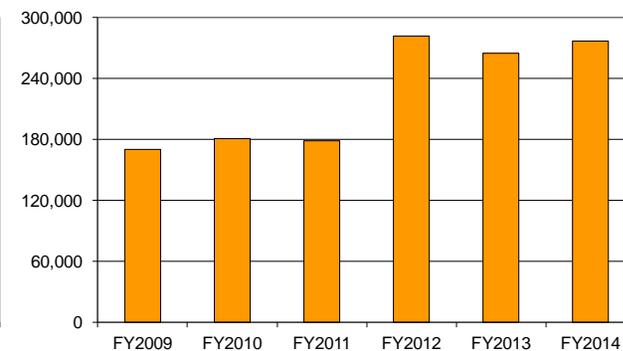
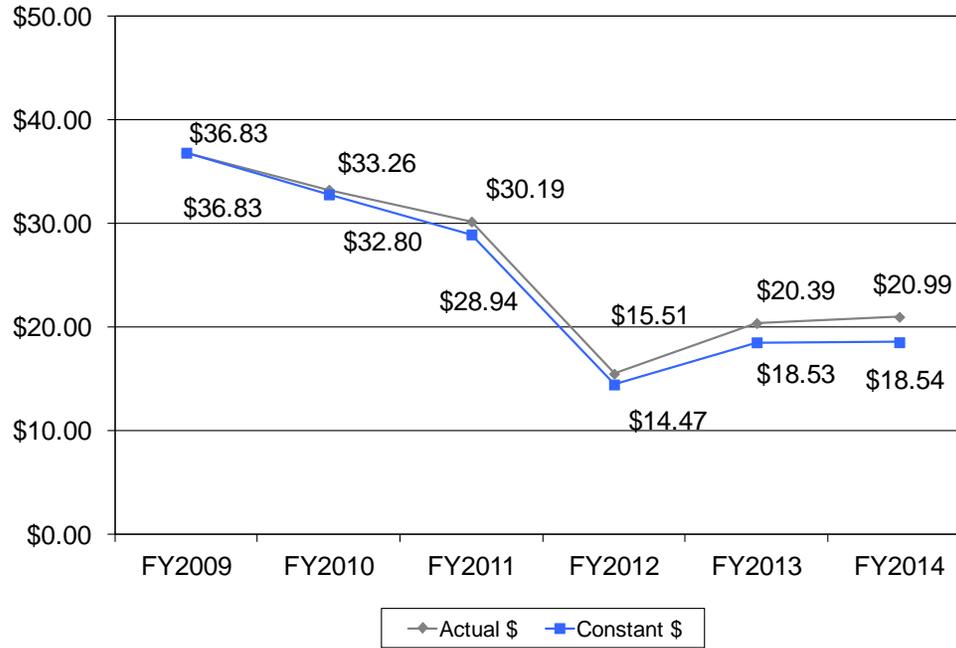
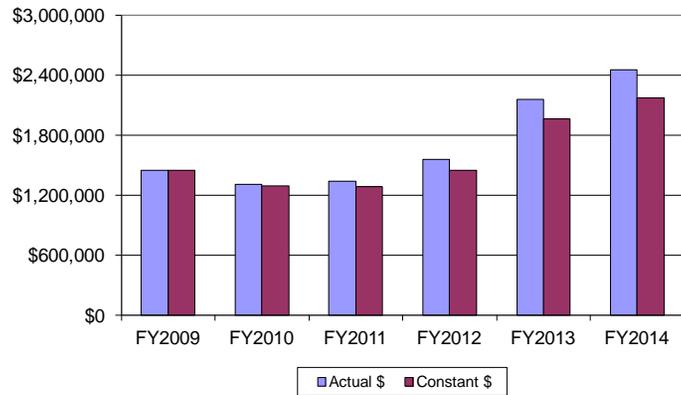


Exhibit 5.3: Operating Cost per Passenger – Demand-Response



Operating Cost



Unlinked Passengers

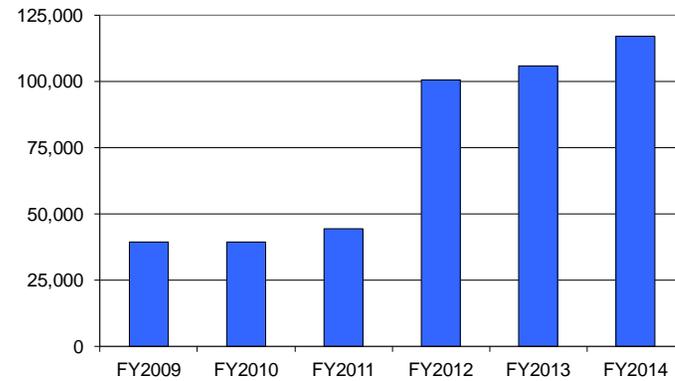
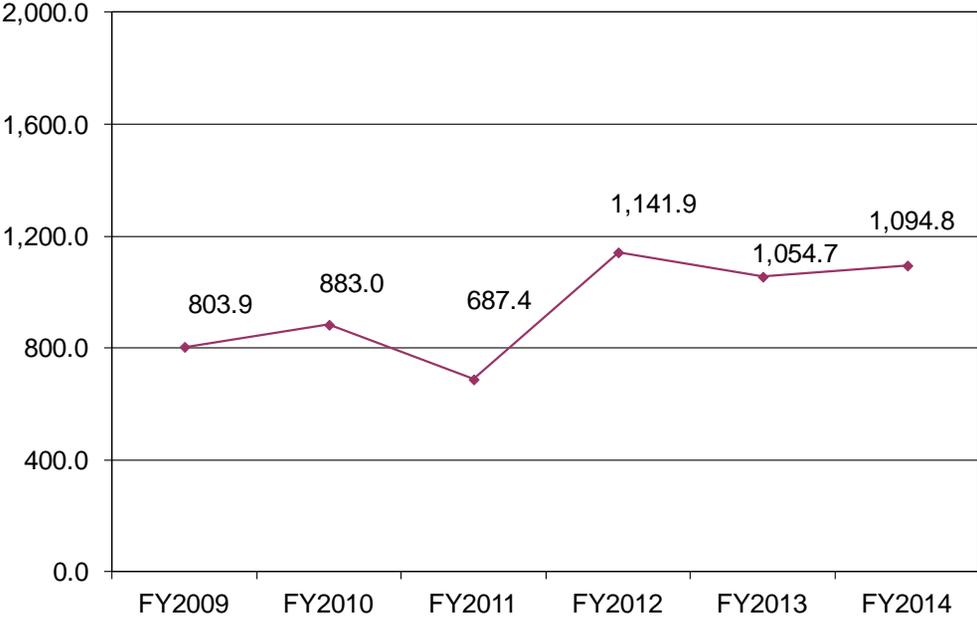
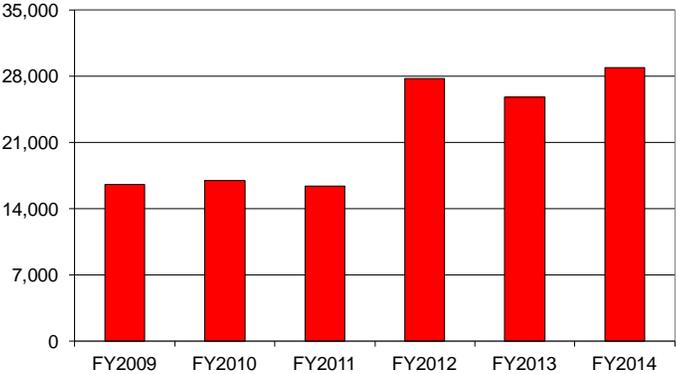


Exhibit 5.4: Vehicle Service Hours per FTE – Demand-Response



Vehicle Service Hours



Full-time Equivalents

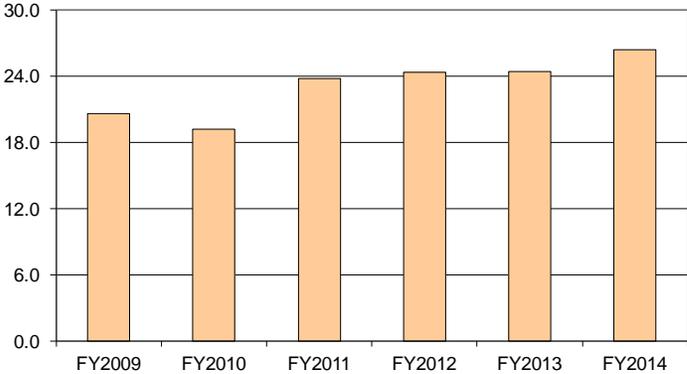
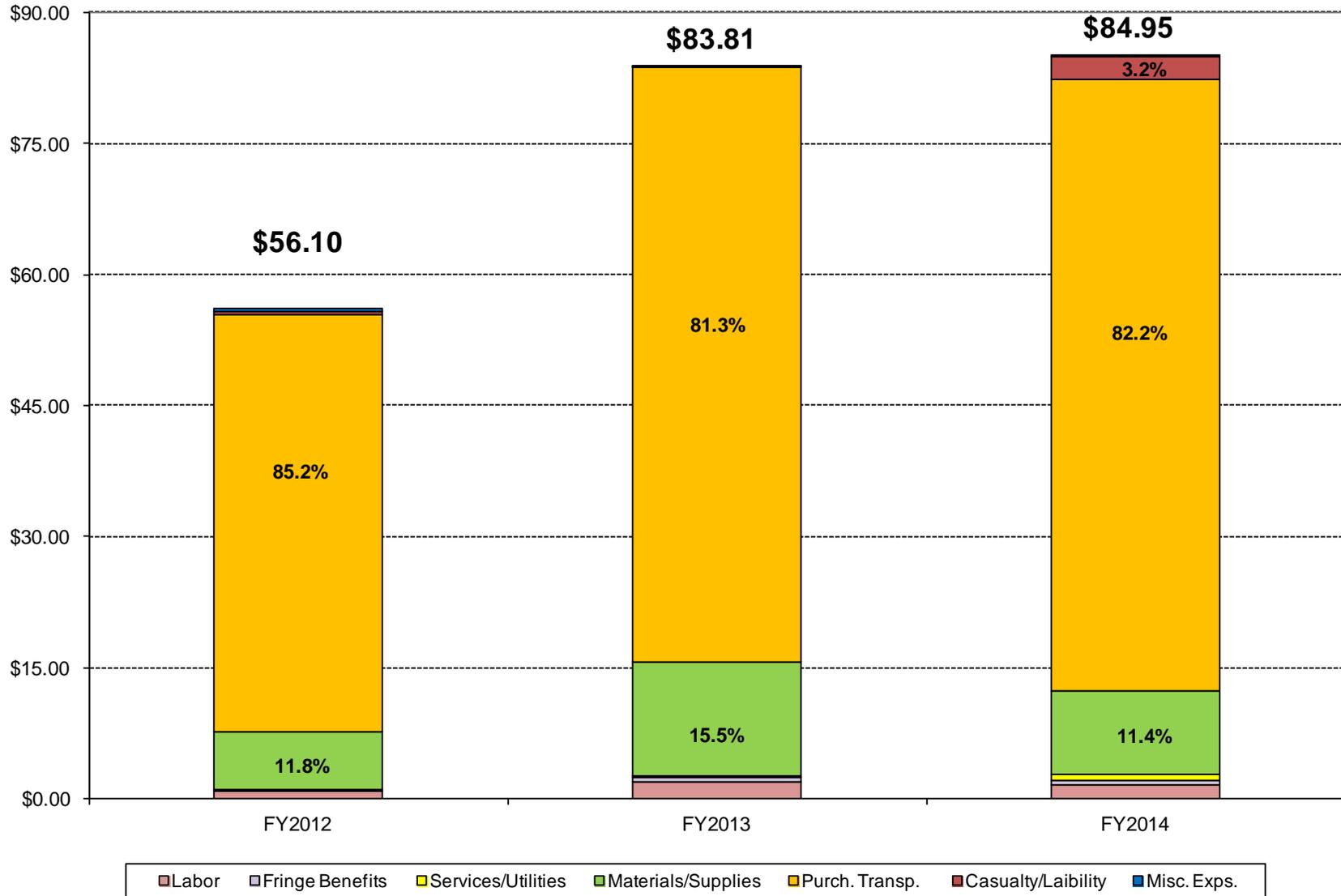


Exhibit 5.5: TDA Component Costs Trends – Demand-Response

	FY2012	FY2013	FY2014	Av. Ann. Chg.
COST CATEGORIES				
Labor (Salaries, Wages)	\$20,750	\$49,131	\$45,381	--
<i>Annual Change</i>	--	136.8%	-7.6%	47.9%
Fringe Benefits	\$5,853	\$13,858	\$12,800	--
<i>Annual Change</i>	--	136.8%	-7.6%	47.9%
Services/Utilities	\$0	\$906	\$19,355	--
<i>Annual Change</i>	--	--	2036.3%	--
Materials/Supplies	\$184,389	\$335,044	\$279,693	--
<i>Annual Change</i>	--	81.7%	-16.5%	23.2%
Purchased Transportation	\$1,325,547	\$1,753,269	\$2,019,070	--
<i>Annual Change</i>	--	32.3%	15.2%	23.4%
Casualty/Liability	\$8,503	\$2,107	\$77,364	--
<i>Annual Change</i>	--	-75.2%	3571.8%	201.6%
Misc. Expenses	\$11,445	\$2,430	\$1,574	--
<i>Annual Change</i>	--	-78.8%	-35.2%	-62.9%
Total	\$1,556,487	\$2,156,745	\$2,455,237	--
<i>Annual Change</i>	--	38.6%	13.8%	25.6%
OPERATING STATISTICS				
Vehicle Service Hours	27,747	25,734	28,902	--
<i>Annual Change</i>	--	-7.3%	12.3%	2.1%

Source: FY2012 through FY2014 NTD Reports

Exhibit 5.5: TDA Component Costs Trends – Demand-Response, *continued*
Operating Cost per Vehicle Service Hour



IV. COMPLIANCE WITH PUC REQUIREMENTS

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

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

Exhibit 6: Compliance with State PUC Requirements

Code Reference	Operator Compliance Requirements	Compliance Finding	Verification Information
PUC99251	<u>CHP Certification</u> - The CHP has, within the 13 months prior to each TDA claim submitted by an operator, certified the operator's compliance with Vehicle Code Section 1808 following a CHP inspection of the operator's terminal	In Compliance	Satisfactory Inspections: <ul style="list-style-type: none"> • 2012: 07/26/2012 • 2013: 08/28/2013 • 2014: 11/20/2014
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	No provision for excess vehicle staffing in Transit Services Agreement #10-01 with Veolia Transportation, dated August 27, 2009, nor various amendments of 2012, 2013 and 2014.
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	NCTPA staff confirmed that all the named identification cards are honored, although this information is not currently included in fare information in public information materials or on NCTPA's website. Staff indicated that the referenced language will be included on all updated literature and on its website.
PUC99314.7, Govt Code 66516, MTC Res. Nos. 3837, 4073	<u>Joint Revenue Sharing Agreement</u> - The operator has current joint fare revenue sharing agreements in place with transit operators in the MTC region with which its service connects, and submitted copies of agreements to MTC	In Compliance	<ul style="list-style-type: none"> • Valid transfer/revenue sharing agreement with Lake Transit Authority • Agreement with BART, SolTrans and WETA being completed in conjunction with implementation of the Clipper smartcard on Napa, Solano and Contra Costa County operators' systems.

Code Reference	Operator Compliance Requirements	Compliance Finding	Verification Information
PUC99246(d)	<p><u>Process for Evaluation of Passenger Needs</u> - The operator has an established process in place for evaluating the needs and types of passengers being served</p>	<p>In Compliance</p>	<ul style="list-style-type: none"> • On-Board survey: Every 3 to 6 years NCTPA undertakes a professional on-board survey designed to identify rider profiles and ridership patterns. • Short Range Transit Plan: Every four years NCTPA's SRTP analyzes various aspects of service delivery and performance. • Market Segmentation Study: NCTPA's market segmentation study measures public attitudes about, and priorities for, local transit services. • Community Based Transportation Plan: NCTPA periodically updates this plan which provides insight into the needs of special and/or underserved populations. • Advisory Boards: NCTPA has several advisory boards that meet every 1 to 2 months to review system performance and policy issues. • Consultant Services: Consultants are retained for special survey and/or system design work as needed. • Passenger Comment Cards: Passenger comment cards are reviewed daily.

This page left intentionally blank.

V. STATUS OF PRIOR AUDIT RECOMMENDATIONS

NCTPA's prior performance audit was completed in May 2012. 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 NCTPA's responses to the recommendations made in the prior performance audit, and whether NCTPA made reasonable progress toward their implementation. There were two recommendations made in NCTPA's prior audit. A summary of the recommendations and the actions taken by NCTPA in response is presented in Exhibit 7. A determination of the status of the recommendation also is provided, using one of the following four evaluation categories:

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

NCTPA implemented the first recommendation, which called for expedited completion of joint fare revenue sharing agreements with all connecting operators in order to be in compliance with the requirements of the California Public Utilities Code. During the current audit period,

NCTPA entered into an agreement with MTC and connecting operators including BART, SolTrans and WETA that is being completed in conjunction with implementation of the Clipper smartcard on Napa, Solano and Contra Costa County operators' systems. A new transfer agreement was also signed with the Lake Transit Authority.

NCTPA also implemented the second recommendation, which called for continuing strategies to address the declining passenger productivity and cost effectiveness of NCTPA's bus service. A primary focus during the current audit period was on implementation of its restructured public transit service throughout the Napa Valley, which was highlighted by a new service model for the VINE bus system. This produced significant ridership increases that have driven fixed-route TDA trend results toward the end of the current review period. In the last year, FY2014, which was also the first full year of the new service pattern, there were notable improvements compared with the immediately preceding years in the operating cost per passenger as well as passengers per service hour and passengers per service mile. The operating cost per hour also stabilized.

Exhibit 7: Status of Prior Audit Recommendations

Recommendation	Actions Taken	Evaluation
<p>1. NCTPA should expedite completion of joint fare revenue sharing agreements with all connecting operators in order to be in compliance with the requirements of SB602.</p>	<p>During the prior audit period, NCTPA did not have Joint Revenue Sharing Agreements with certain other transit operators whose services connect with NCTPA -- most notably BART and the Baylink Ferry. As such, NCTPA was not in compliance with the joint fare revenue sharing agreement requirement.</p> <p>During the current audit period, NCTPA entered into a “Supplemental Agreement to CLIPPER Memorandum of Understanding” with MTC and connecting operators including BART, SolTrans and WETA. The agreement is being completed in conjunction with implementation of the Clipper smartcard on Napa, Solano and Contra Costa County operators’ systems. It serves as the basis for an inter/intra operator automated fare payment system. Revenues generated by the Clipper system will be distributed to the appropriate operators based upon business rules.</p> <p>A new transfer agreement was also signed with the Lake Transit Authority.</p>	<p>Implemented</p>
<p>2. Continue strategies to address the declining passenger productivity and cost effectiveness of NCTPA’s bus service.</p>	<p>In the prior audit report, it was noted that NCTPA’s bus service experienced increases in service levels, particularly in FY2009, while at the same time, ridership declined. As a result, NCTPA’s passenger productivity declined sharply, which further resulted in a worsening trend in cost effectiveness.</p>	<p>Implemented</p>

Recommendation	Actions Taken	Evaluation
	<p>During the current audit period, NCTPA implemented its restructured public transit services throughout the Napa Valley. As part of the service redesign, in communities like Yountville, St. Helena and Calistoga service days and hours were expanded and the systems were converted to general public demand response. For the VINE fixed-route system, a new service model was employed combining neighborhood routes, a rapid transit corridor, and a “pulse” system at the new transit center.</p> <p>Together these changes have resulted in fixed-route ridership increases starting in FY2013, after years of declines. The increases have reportedly ranged from as high as 300 percent in smaller jurisdictions to over 50 percent on the VINE fixed route bus system.</p> <p>Fixed-route TDA trend results toward the end of the current review period reflect these successes. In the last year, FY2014, which was also the first full year of the new service pattern, a 47.8 percent increase in passengers was reported. This resulted in notable improvements compared with the immediately preceding years in the operating cost per passenger as well as passengers per service hour and passengers per service mile. In addition, the operating cost per service hour stabilized.</p>	

VI. CONCLUSIONS AND RECOMMENDATIONS

The preceding sections presented a discussion of NCTPA's performance during the three-year period of FY2012 through FY2014 (July 1, 2011 through June 30, 2014). They included discussions of NCTPA's compliance with reporting requirements and trends in TDA-mandated performance indicators, actions taken to implement the recommendations from the prior performance audit, and a review of selected other key performance results.

Conclusions

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

- Data Collection – NCTPA is in compliance with the data collection and reporting requirements for the five TDA statistics.

- TDA Performance Trends

Bus Service – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2009 through FY2014:

- There was an overall average annual increase in the operating cost per hour of seven percent, or a 4.4 percent annual increase in inflation adjusted dollars.

- The cost per passenger increased on average by 4.8 percent per year, which amounted to an average annual increase of 2.2 percent in constant FY2009 dollars.

- Passenger productivity was generally reduced through FY2013, followed by a significant turnaround in FY2014 that reflected a substantial increase in annual passengers following the major VINE service expansion and restructuring.

- Employee productivity decreased an average 4.8 percent per year.

The following is a brief summary of the component operating costs trend highlights for the bus service between FY2012 and FY2014:

- Total operating costs increased by 16.2 percent per year, principally reflecting average annual increases in purchased transportation costs (23.6 percent), and materials/supplies costs (6.7 percent).
- Purchased transportation costs represented the largest portion of the total cost per vehicle service hour, increasing from about 65 percent in FY2012 to 73 percent in FY2014.
- The next largest share was materials/supplies costs, which decreased from about 24 percent to 20 percent, followed by casualty/liability (down from about six percent in the first two years to 3.5 percent in FY2014).
- In-house labor, fringe benefit and casualty/liability costs decreased overall, while services/utilities and miscellaneous costs increased at high rates. However, all of these component cost changes represented relatively small dollar amounts.

Demand-Response – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2009 through FY2014:

- Cost efficiency improved overall, with an average annual decrease in the operating cost per hour of 0.6 percent (3.0 percent in inflation adjusted dollars).
- The operating cost per passenger averaged an annual decrease of 10.6 percent, or 12.8 percent when normalized in FY2009 dollars. Both operating costs and ridership increased over the period, but ridership increased at a much higher rate.
- Passenger productivity trends were positive, with passengers per service hour increasing on average by more than eleven percent per year, and passengers per service mile by nearly 13 percent per year.
- Employee productivity increased an average 6.4 percent per year.

The following is a brief summary of the component operating costs trend highlights for the demand-response services between FY2012 and FY2014:

- Total operating costs increased by 25 percent per year on average. Almost all component cost categories increased at substantial rates as well, though certain of these cost changes represented relatively small dollar amounts.
- Purchased transportation costs went up by about 25 percent annually, and remained by far the largest portion of the total cost per vehicle service hour (more than 80 percent) in all three years.

- The second highest contribution to total costs was materials/supplies, in a range of 11 to 15 percent during the period. Other categories each contributed three percent or less.

- PUC Compliance – NCTPA 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, revenue sharing, and evaluating passenger needs.

- Status of Prior Audit Recommendations – NCTPA implemented the first recommendation, which called for expedited completion of joint fare revenue sharing agreements with all connecting operators in order to be in compliance with the requirements of the California Public Utilities Code. During the current audit period, NCTPA entered into an agreement with MTC and connecting operators including BART, SolTrans and WETA that is being completed in conjunction with implementation of the Clipper smartcard on Napa, Solano and Contra Costa County operators’ systems. A new transfer agreement was also signed with the Lake Transit Authority.

NCTPA also implemented the second recommendation, which called for continuing strategies to address the declining passenger productivity and cost effectiveness of NCTPA’s bus service. A primary focus during the current audit period was on implementation of its restructured public transit service throughout the Napa Valley, which was highlighted by a new service model for the VINE bus system. This produced significant ridership increases that have driven fixed-route TDA trend results toward the end of the current review period. In the last year, FY2014, which was also the first full year of the new service pattern, there were notable improvements compared with the immediately preceding years in the operating cost per passenger as well as passengers per service hour and passengers per service mile. The operating cost per hour also stabilized.

Recommendations

No recommendations are suggested for NCTPA based on the results of this triennial performance audit.