

Triennial Performance Audit

of the

Napa Valley Transportation Authority (NVTA)

Fiscal Years 2017/18, 2018/19 and 2019/20

FINAL AUDIT REPORT

prepared for the



**METROPOLITAN
TRANSPORTATION
COMMISSION**

by



Pierlott & Associates, LLC
Management Consulting

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NOTE:

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

EXECUTIVE SUMMARY

This executive summary highlights the findings from the performance audit of the Napa Valley Transportation Authority (NVTA). 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 NVTA Transit, bus and paratransit, are the prime focus of this performance audit. The audit period is Fiscal Years 2018 through 2020 (from July 1, 2017 through June 30, 2020). **NOTE: Due to the COVID-19 emergency it is recognized that performance in the latter part of FY2020 is anomalous with the earlier part of the audit period. As such, trend analyses in this report do not place much emphasis on performance beyond FY2019 for the purposes of drawing conclusions and formulating recommendations.**

Performance Audit and Report Organization

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

- An assessment of data collection and reporting procedures;
- A review of performance trends in TDA-mandated indicators and component costs;
- A review of compliance with selected PUC requirements;
- An evaluation of NVTA Transit's actions to implement the recommendations from the last performance audit;
- An evaluation of functional performance indicator trends; and

- Findings, conclusions, and recommendations to further improve NVTA Transit’s performance based on the results of the previous sections.

Comments received from NVTA Transit 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 - NVTA is in compliance with the data collection and reporting requirements for the TDA statistics. In addition, the statistics collected over the six-year review period appear to be consistent with the TDA definitions, and indicate general consistency in terms of the direction and magnitude of the year-to-year changes across the statistics.

Performance Indicators and Trends – NVTA’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 FY2015 through FY2020:
 - The trend in operating cost per hour rose steadily throughout most of the analysis period, increasing an average of 5.2 percent per year in actual dollars and 2.3 percent in inflation-adjusted dollars.
 - Passenger productivity exhibited steadily declining trends, with passengers per hour decreasing an average of 1.5 percent per year, and passengers per mile decreasing an average of 1.9 percent per year.

- Over the six-year analysis period, cost per passenger increased an average of 6.8 percent annually in actual dollars and 3.8 percent in inflation-adjusted dollars.

The following is a brief summary of the component operating costs trend highlights for the bus service between FY2015 through FY2020:

- Purchased transportation costs increased in nearly every year of the analysis period, but were held to an average of less than four percent per year.
 - Service costs exhibited significant increases in FY2020, however, these costs represent only about two to three percent of total operating costs.
 - Materials and supplies, the second largest cost category, exhibited up and down annual changes that resulted in an average annual change of less than one percent.
 - Other expenses rose sharply in FY2020, but still only comprised 2.5 percent of total operating costs.
- Paratransit – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2015 through FY2020:
 - Paratransit cost per hour increased an average of 1.6 percent per year over the six years in actual terms, but exhibited a 1.2 percent decrease in constant, inflation-adjusted terms.
 - Passenger productivity generally remained steady through most of the analysis period, but declined in FY2020 as a result of the pandemic impacts on ridership.
 - Cost per passenger rose slowly and steadily through the six-year period posting an average increase of 7.2 percent per year in actual terms and a 4.3 percent per year increase in inflation-adjusted terms.

The following is a brief summary of the component operating costs trend highlights for paratransit between FY2015 through FY2020:

- Purchased transportation costs represented by far the largest portion of the total costs, ranging between 84 and 88 percent during the review period, and increased moderately an average 1.2 percent per year.
- While representing a relatively small portion of total operating costs, both in-house labor and fringe benefits costs decreased over the six-year period.
- Despite large swings, material and supplies costs remained virtually unchanged over the review period.

Compliance with Statutory Requirements – NVTA 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 – As a result of the prior audit, two recommendations were offered. First, it was recommended that NVTA and its contractor should expand efforts toward improving on-time performance across its services. Second, it was recommended that NVTA develop strategies to address a rise in the accident rate by improving operator training and enhancing monitoring activities to ensure that safety issues are identified and corrected.

The prior audit found that schedule adherence on NVTA’s bus system remained in a range of 76 to 78 percent. At the same time, paratransit schedule adherence decreased from 77 percent in FY2015 to 75 percent in FY2017. In order to provide more reliable service, it was recommended that NVTA and its contractor expand efforts toward improving on-time performance across its services. While paratransit on-time

performance has greatly improved, bus service on-time performance remains problematic due to inaccuracies of data collected by NVRTA's aging CAD/AVL equipment. The implementation of this recommendation is still in progress, and has been carried forward into this audit.

The prior audit recommendation related to the bus and paratransit accident rates has been closed.

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

- Systemwide (All Modes) – The following is a brief summary of the systemwide functional trend highlights between FY2018 and FY2020:
 - Administrative costs remained fairly steady in terms of percentage of total operating costs (about 18 to 19 percent) and administrative costs per vehicle service hour (about \$18 per hour).
 - Revenue recovery exhibited a downward trend during the first two years of the audit period, which was exacerbated by the suspension of fare collection due to the COVID public health emergency.

- Bus Service – The following is a brief summary of the bus service functional trend highlights between FY2018 and FY2020:
 - Service Planning results generally showed consistent performance in terms of in-service miles and hours, as well as in passenger productivity between FY2018 and FY2019. Performance in FY2020 for these measures was negatively impacted as a result of the pandemic response.

- Operations results showed steady performance throughout the audit period in terms of vehicle operations costs as a percentage of total operating cost. Schedule adherence remained at a relatively low level with performance between 66 and 68 percent of trips on-time.
- Maintenance costs were steadily at 12 percent of total operating costs. There was substantial improvement in the rate of major mechanical failures over the audit period for both major failures and all failures.
- The rate of preventable accidents remained consistent with performance observed in the prior audit period.
- Paratransit – The following is a brief summary of the paratransit functional trend highlights between FY2018 and FY2020:
 - Service Planning results showed steady performance in terms of in-service miles and hours operated as a percentage of total miles and hours. Despite ridership losses due to the pandemic emergency, passenger productivity exhibited only modest decreases.
 - Operations results showed steady performance in terms of vehicle operations costs as a percentage of total operating costs. Vehicle operations cost per hour improved by 5.5 percent overall. Schedule adherence remained consistent high throughout the audit period, and the rates of complaints improved by more than half.

No ADA trip denials were reported during the entire audit period. While trip cancellation rates remained steady, the percentage of total and late cancellation appears unusually high at 30 percent and 10 percent, respectively. In addition, the no-show rate also appeared to be unusually high, between seven and eight percent in FY2018 and FY2019, respectively, an increasing to nine percent in FY2020.

- Maintenance performance results exhibited improvement throughout the audit period in terms of maintenance costs as a percentage of total costs, and maintenance costs per vehicle mile. Although the trend in service reliability (i.e., mean distance between

failure) was downward, the actual number of failure in each year was rather low.

- While the trend in preventable accidents per 100,000 miles increased, there was only one accident per year in FY2018 and FY2019, and only two in FY2020.

Recommendations

1. CONTINUE TO MONITOR SCHEDULE ADHERENCE ON THE BUS SERVICE AND DEVELOP STRATEGIES FOR IMPROVEMENT.

[Reference Section: V. Status of Prior Audit Recommendations; VI. Functional Performance Indicator Trends]

The prior audit period found that schedule adherence on NVTA's bus system ranged from 76 percent to 78 percent. In response to this performance, a recommendation was made to expand efforts toward improving on-time performance, including additional monitoring activities to identify the causes of service delays, and a plan for addressing the circumstances found that are hindering on-time operations. Through its monitoring efforts, NVTA concluded that the bus on-time performance from its CAD/AVL system is not providing accurate information. NVTA noted that the current CAD/AVL system nearly seven years old and approaching the end of its useful life. The current system uses a communication threshold of 60 seconds, whereas new systems have thresholds of every ten seconds. As such, vehicle positioning may not always be as accurate as it could be. Furthermore, discrepancies between the scheduled locations and the location and size of the trigger boxes that surround the stops appear to be generating errors in reporting the actual location of vehicles.

Bus service on-time performance worsened during this audit period with results between 66 percent and 68 percent. NVTA reported that they have issued an RFP for a new CAD/AVL system to replace the existing system, and anticipates that the new system will be in place sometime during 2021. Once the system is in place, NVTA should continue reporting its on-time performance to MTC to ensure that the new system and monitoring procedures are recording accurate information. Should bus on-time performance continue to be at the same level, NVTA should develop strategies to leverage the new technology to improve schedule adherence.

2. TAKE STEPS TO REDUCE THE HIGH RATES OF TRIP CANCELLATIONS, LATE CANCELLATIONS, AND NO-SHOWS ON THE PARATRANSIT SERVICE.

[Reference Section: VI. Functional Performance Indicator Trends]

Trip cancellations and late cancellations on NVTA's paratransit service are consistently around 30 percent and 10 percent, respectively. Furthermore, the rate of no-shows not only is unusually high, but increased from 7.2 percent to 9.0 percent over the audit period.

NVTA should examine the reasons for the large number of cancellations, late cancellations, and no-shows to determine how policies and procedures can be modified to reduce their number.

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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 Napa Valley Transportation Authority (NVTA). The two modes operated by NVTA, bus and paratransit, are the focus of this performance audit. The audit period is Fiscal Years 2018 through 2020 (from July 1, 2017 through June 30, 2020). **NOTE: Due to the COVID-19 emergency it is recognized that performance in the latter part of FY2020 is anomalous with the earlier part of the audit period. As such, trend analyses in this report do not place much emphasis on performance beyond FY2019 for the purposes of drawing conclusions and formulating recommendations.**

An overview of NVTAs is provided in Exhibit 1. This is followed by an audit period organization chart in Exhibit 2.1, and a current organization chart in Exhibit 2.2.

Performance Audit and Report Organization

This performance audit of NVTAs 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 functional performance indicator trends; and
 - Findings, conclusions, and the formulation of recommendations.

This report presents the findings from the Compliance Audit. Findings and conclusions from the Functional Review will be presented in the Draft Audit Report, which will be prepared at a later date. That document also will incorporate comments received from NVTAs and MTC staff regarding this preliminary report.

Exhibit 1: System Overview

| | |
|----------------------|---|
| Location | Headquarters: 625 Burnell Street, Napa CA 94559 |
| Establishment | In 1998, the Napa County 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. At the February 16, 2016 Board of Directors meeting, the Agency changed its name to the Napa Valley Transportation Authority (NVTA). NVTA serves as the transportation planning agency for Napa County and administers the public transit services. Day-to-day operations, maintenance, and management for all of NVTA's transit services are provided through a third party contract with Transdev Services (formerly Veolia Transportation). NVTA owns all transit 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>NVTA administrative staff is located on the 2nd floor of the Soscol Gateway Transit Center at 625 Burnell Street in Napa. NVTA has two Park and Ride facilities in Napa and one in Yountville.</p> <p>NVTA's Vine fixed-route fleet includes 40 transit vehicles and 16 paratransit vehicles. Most of these vehicles are maintained and stored in a bus maintenance facility at 720 Jackson Street in Napa. Fueling is provided by a private enterprise across the street for diesel and gasoline vehicles. Compressed natural gas vehicles are fueled at two locations in the City of Napa.</p> <p>The bus yard also houses Transdev Services employees. Eight additional community shuttle vehicles are stored and fueled in their respective cities but return to the Jackson Street yard for maintenance.</p> |
| Service Data | <p>NVTA operates local, regional, and commuter fixed-route service, on-demand shuttle service, and ADA paratransit service. The Agency also administers several mobility management programs including travel training, a shared vehicle program, mileage reimbursement, and lifeline taxi programs.</p> <p>Fixed-route Vine service operates local in the City of Napa on eight routes (Routes A through H). In addition, there are four regional routes, Routes 10 and 11, which provide regional service between Calistoga and the San Francisco Ferry Terminal in Vallejo. Four express routes, Routes 10X, 11X, 21, and 29 provide 29 commuter express service with limited stops.</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 and 29</p> |

operate only on weekdays. NVTA breaks out its fares into two fare categories, full and half fare. Full cash fare is \$1.60 paid by individuals between the ages of 19 and 64, a youth fare if \$1.10 is available to children from ages 6 to 18 years. A half fare (\$0.80) is available for seniors, disabled, and/or a Medicare card holders. Children under age six ride free with a paying customer. The one-way adult cash fare on express routes 10X, 11X and 21 is \$3.00, and the fare for Route 29 is \$5.50. Free transfers between routes and various discounted passes (single day, 20-ride, and 31-day) also are available.

NVTA also currently operates four community shuttles: American Canyon Transit, Calistoga Shuttle, St. Helena Shuttle, and Yountville Trolley. All are 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 all 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 during the same hours and in the same locations as the fixed route system on a given day. Since VineGo provides service to the entire Napa Valley, fares are zoned based on the distance traveled (\$3.20 or \$6.40).

Recent Changes

In November 2017, the NVTA Board adopted a service-restructuring plan called “Vine Vision”. The Vine Vision plan was a two-phase plan. In Phase I NVTA made changes to its Routes 10, 11, 21, and 29, and added two new routes, the Routes 10X and 11X. The new Route 10X is an express version of the Route 10 only operating during the peak periods with limited stops. The Route 11X links to the Vallejo Ferry with limited stops during peak hours.

Phase II was a system wide change to the routes serving the City of Napa. Routes 1-8 that provided local service in the City became Routes A-H. The primary goal of the service restructuring was to create more linear and bidirectional service.

Response to COVID-19

NVTA is a member of the “Riding Together—Bay Area Healthy Transit Plan”, developed by a collaboration of Bay Area transit systems. As a result, NVTA has implemented the following measures:

- NVTA uses a CDC-approved disinfectant nightly, to deep clean all vehicles. The disinfectant is sprayed on all surfaces including high touch surfaces on the outside of the bus (i.e., doors, door frames, and bike racks).
- NVTA is running limited passenger loads to allow for social distancing. On-demand buses carry no more than 6 passengers at a time, regional and express buses carry no more than 12 passengers at a time.
- Rear door boarding was implemented in March through August 2020 to ensure the maximum physical distance between passengers and drivers (front door boarding resumed September 13, 2020).
- All fares were waived from March through August 2020 (fare collection resumed September 13, 2020).

- Enhanced safety measures, including the installation of driver barriers were implemented.
- Requiring face coverings on all vehicles, at bus stops, and at all facilities for persons over the age of two, except for those with breathing difficulties.
- Provided PPE to drivers and staff members, staggered office shifts whenever possible, and adhered to strict safety protocols at our facilities.
- Posted large signs onboard buses and at the transit center to reinforce social distancing guidelines and face covering requirements.
- More recently NVRTA is providing free ride to and from vaccine appointments, to help protect our community and support equitable COVID-19 vaccine distribution.

Planned Changes

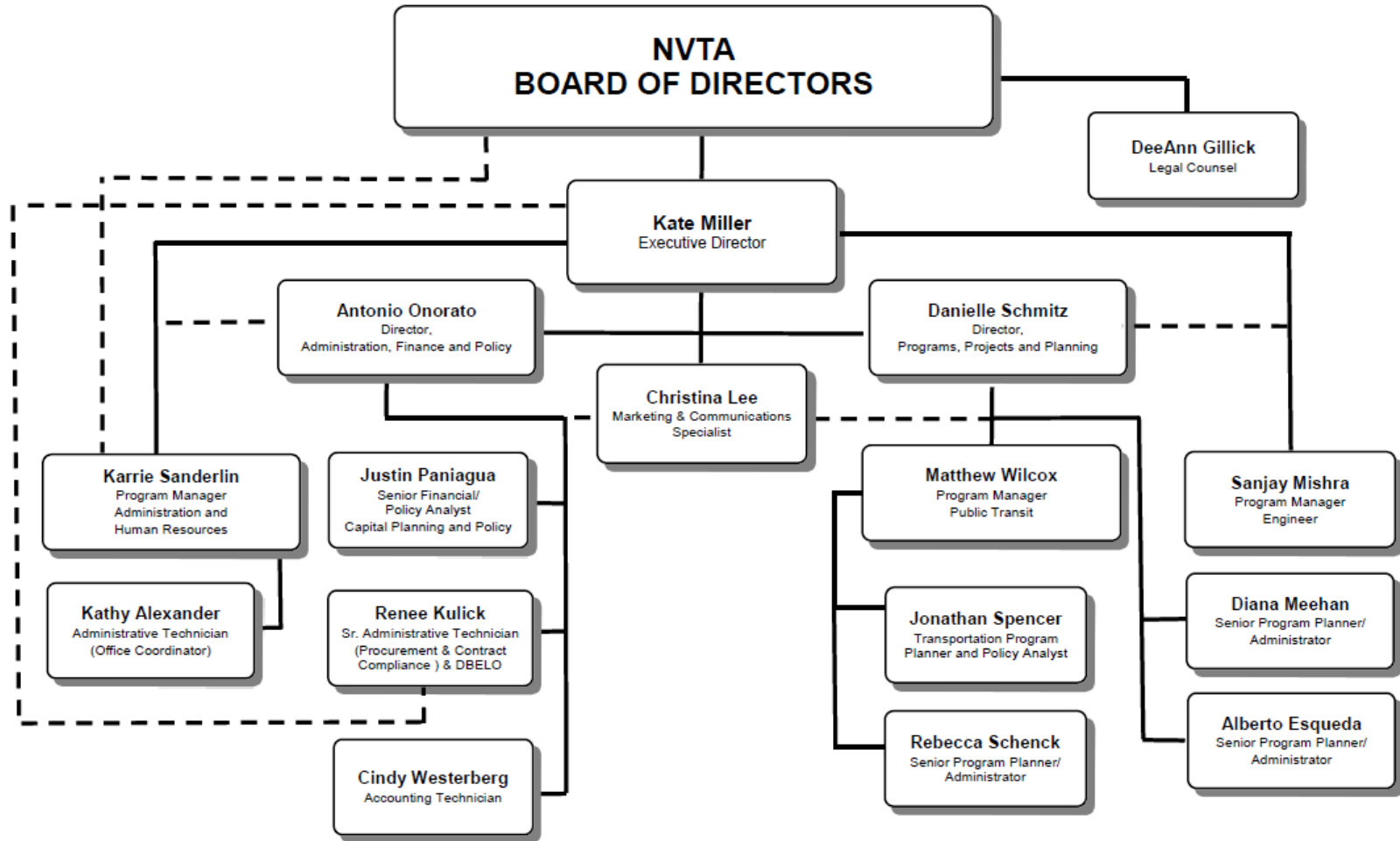
NVRTA’s ten-year capital and financial plan in its most recent SRTP, envisions service changes to meet demand as well as a new contract for the operation and professional management of the Vine’s services. Among the capital projects identified are the replacement of buses per the fleet replacement plan, and the maintenance of facilities. The capital plan also includes expansion projects subject to availability of funding. These include enhancements to the downtown transit center, development of a new maintenance facility, a new park-and-ride facility, equipment purchases to improve efficiency, effectiveness and safety, and acquisition of real-time signage technology.

Staff

At the end of the audit period, the NVRTA administrative staff consisted of 15 employee positions organized as follows:

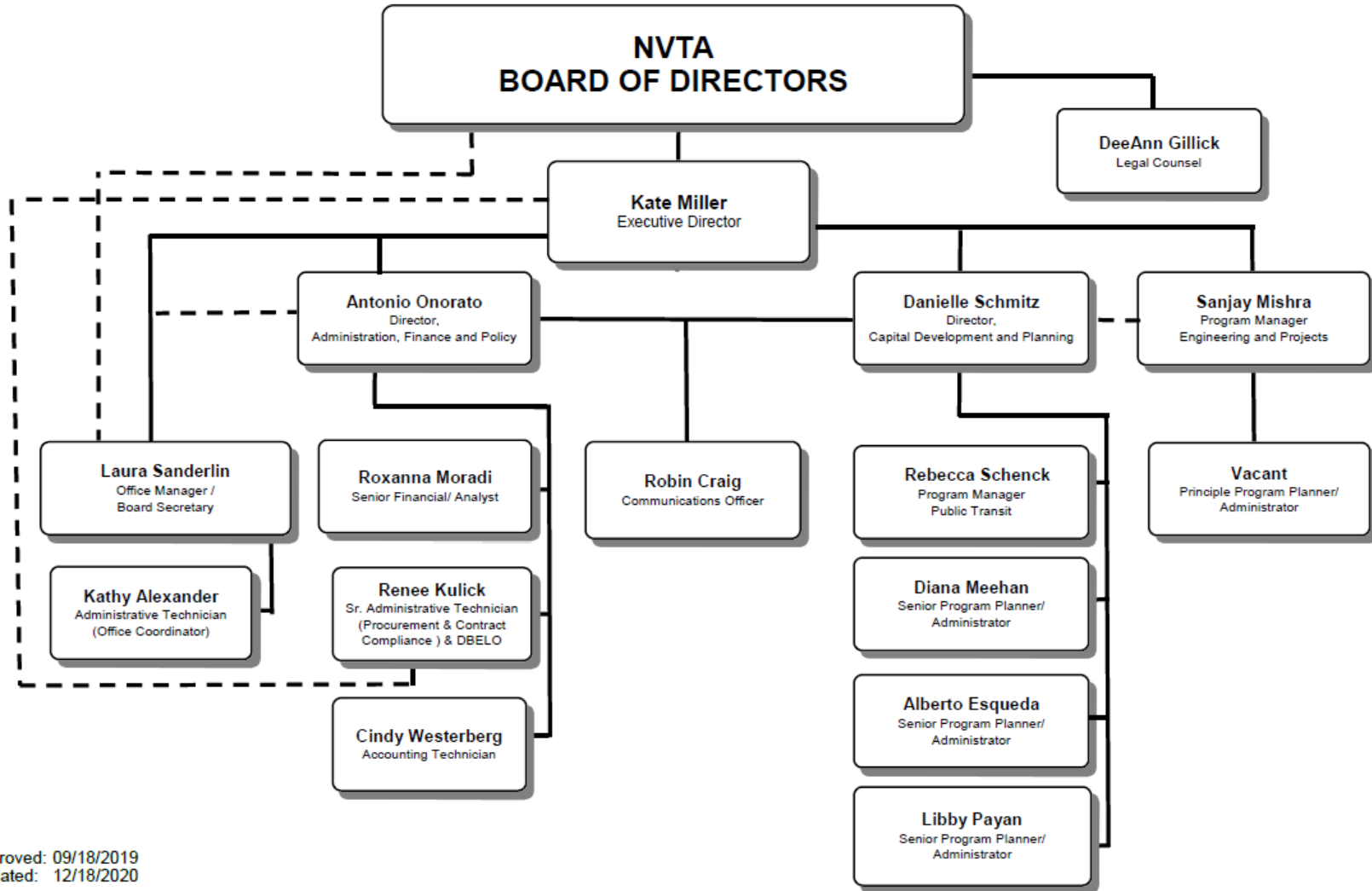
| <u>Organizational Unit</u> | <u>Number of Positions</u> |
|-------------------------------------|----------------------------|
| Executive Director’s Office | 3 |
| Administration, Finance, and Policy | 4 |
| Communications | 1 |
| Capital Development and Planning | 5 |
| Engineering and Projects | <u>2</u> |
| TOTAL | 15 |

Exhibit 2.1: Audit Period Organization Chart



Approved: 7/19/2017
Updated: 07/2019

Exhibit 2.2: Current Organization Chart



Approved: 09/18/2019
Updated: 12/18/2020

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

Compliance with Requirements

To support this review, NVTA staff also provided information to confirm and update its data collection and reporting procedures as described in the prior performance audit. There were no substantive changes. Based on the information provided, as shown

in Exhibit 3.1, NVTA is in compliance with the data collection and reporting requirements for all five TDA statistics.

Consistency of the Reported Statistics

The resulting TDA statistics for NVTA's bus and paratransit services are shown in Exhibits 3.2 and 3.3, respectively. Included are statistics covering each fiscal year of the three-year audit period, plus the immediately preceding three fiscal years, resulting in a six-year trend.

Overall, the statistics collected over the period appear to be consistent with the TDA definitions. Further, they indicate general consistency in terms of the direction and magnitude of the year-to-year changes across the statistics. For example, increases or decreases in annual operating costs are relatively proportional to increases or decreases in annual vehicle service hours and miles.

Exhibit 3.1: Compliance with TDA Data Collection and Reporting Requirements

| TDA Statistic | TDA Definition | Compliance Finding | Verification Information |
|-----------------------|---|--------------------|--|
| Operating Cost | <p>“Operating cost” means all costs in the operating expense object classes exclusive of the costs in the depreciation and amortization expense object class of the uniform system of accounts and records adopted by the Controller pursuant to Section 99243. Also excluded are all subsidies for commuter rail services operated on railroad lines under the jurisdiction of the Federal Railroad Administration, all direct costs for providing charter services, all vehicle lease costs, and principal and interest payments on capital projects funded with certificates of participation.</p> | In Compliance | <ul style="list-style-type: none"> • Consistent with the TDA definition: all costs in the operating expense object classes exclusive of depreciation, amortization and subsidies for commuter rail services operated under the jurisdiction of the Federal Railroad Administration; and of all direct costs for providing charter services, and all vehicle lease costs. • Reporting follows NTD categories and requirements. |
| 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"> • Defined as the 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 such as for lunch and training. |

| TDA Statistic | TDA Definition | Compliance Finding | Verification Information |
|--------------------------------|---|--------------------|---|
| Vehicle Service Miles | “Vehicle service miles” means the total number of miles that each transit vehicle is in revenue service. | In Compliance | <ul style="list-style-type: none"> • Defined as the total number of miles that each transit vehicle is in revenue service. • Fixed-route and demand-response revenue miles are pulled from NVTA’s automated vehicle locator system. |
| 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. • Fixed-route: passengers counted electronically using automated passenger counters. • Demand-response: all passengers 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. Data can also per verified by the on-demand app supplied by TapRide. |
| 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. • NVTA 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. • NVTA is a contracted service, as such contractor employee work hours are not reported in the NTD. |

Exhibit 3.2: TDA Statistics – Bus Service

| TDA Statistic | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Operating Cost (Actual \$) | \$7,020,548 | \$7,105,717 | \$7,523,993 | \$7,889,072 | \$8,165,855 | \$8,685,573 |
| <i>Annual Change</i> | - - | 1.2% | 5.9% | 4.9% | 3.5% | 6.4% |
| Vehicle Service Hours | 81,259 | 85,795 | 83,951 | 82,365 | 83,350 | 78,124 |
| <i>Annual Change</i> | - - | 5.6% | -2.1% | -1.9% | 1.2% | -6.3% |
| Vehicle Service Miles | 1,481,832 | 1,495,463 | 1,518,356 | 1,479,476 | 1,489,139 | 1,457,304 |
| <i>Annual Change</i> | - - | 0.9% | 1.5% | -2.6% | 0.7% | -2.1% |
| Unlinked Passengers | 825,148 | 1,113,033 | 1,053,708 | 1,000,202 | 955,467 | 736,341 |
| <i>Annual Change</i> | - - | 34.9% | -5.3% | -5.1% | -4.5% | -22.9% |
| Employee Full-Time Equivalents | (a) | (a) | (a) | (a) | (a) | (a) |
| <i>Annual Change</i> | - - | - - | - - | - - | - - | - - |

Sources: FY2015 through FY2017 - Prior Performance Audit Report
 FY2018 through FY2020 - NTD Reports

(a) Not applicable, contracted services

Exhibit 3.3: TDA Statistics – Paratransit

| TDA Statistic | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Operating Cost (Actual \$) | \$2,582,021 | \$2,443,879 | \$2,439,170 | \$2,808,453 | \$2,971,904 | \$2,771,036 |
| <i>Annual Change</i> | - - | -5.4% | -0.2% | 15.1% | 5.8% | -6.8% |
| Vehicle Service Hours | 29,527 | 27,801 | 27,667 | 27,974 | 28,981 | 29,290 |
| <i>Annual Change</i> | - - | -5.8% | -0.5% | 1.1% | 3.6% | 1.1% |
| Vehicle Service Miles | 275,302 | 251,046 | 244,583 | 241,589 | 250,352 | 228,605 |
| <i>Annual Change</i> | - - | -8.8% | -2.6% | -1.2% | 3.6% | -8.7% |
| Unlinked Passengers | 116,599 | 101,934 | 100,240 | 99,575 | 103,701 | 88,486 |
| <i>Annual Change</i> | - - | -12.6% | -1.7% | -0.7% | 4.1% | -14.7% |
| Employee Full-Time Equivalents | (a) | (a) | (a) | (a) | (a) | (a) |
| <i>Annual Change</i> | - - | - - | - - | - - | - - | - - |

Sources: FY2015 through FY2017 - Prior Performance Audit Report
 FY2018 through FY2020 - NTD Reports

(a) Not applicable, contracted services

III. TDA PERFORMANCE INDICATORS AND TRENDS

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

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

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

In addition to presenting performance for the three years of the audit period (FY2018 through FY2020), 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 NVTA'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 FY2018 to FY2020 trend lines have been combined with those from the prior audit period (FY2015 through FY2017) 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 NVRTA's performance trends in each of the five TDA performance indicators. The discussion is organized by service mode -- bus service is discussed first, followed by paratransit. The analysis is also expanded to include a breakdown of the various component costs that contributed to the total and hourly operating costs during the last six years.

Bus Service Performance Trends

This section provides an overview of the performance of NVRTA'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 4.3.

- 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. However, a substantial portion of that increase occurred in FY2020 as a result of the pandemic impacts.
 - The cost per hour ranged from a low of \$82.82 in FY2016 to a high of \$111.18 in FY2020.

- The rise in cost per hour between FY2015 and FY2019 was largely driven by increases in total operating costs, but in FY2020 decreasing service levels in response to the pandemic exacerbated this trend.
- In FY2020 constant dollars, there was an average annual decrease in this indicator of just over two percent.
- Passengers per Vehicle Service Hour (Exhibit 4.2)
 - A key indicator of passenger productivity, passengers per hour exhibited a slow steady decline throughout most of the analysis period.
 - Ridership peaked in FY2016, resulting in productivity of 13.0 passengers per hour. By FY2019 productivity had declined to 11.5 passengers per hour.
 - Productivity in FY2020 was further impacted by a 22.9 percent decrease in ridership resulting in 9.4 passengers per hour.
- Passengers per Vehicle Service Mile (Exhibit 4.2)
 - Similar to passengers per hour, passengers per mile also exhibited a steady decline between FY2016 and FY2020.
 - From its peak of 0.74 passengers per mile in FY2016, the performance of this indicator dropped to 0.64 passengers per mile in FY2019, with a further drop of 21.3 percent in FY2020 due to the pandemic impacts.
- Operating Cost per Passenger (Exhibit 4.3)
 - A key measure of cost effectiveness, the cost per passenger rose consistently between FY2016 and FY2020.
 - The overall change in this indicator over the analysis period was an average of 6.8 percent per year.
 - Adjusted for inflation, the resulting average annual change was 3.8 percent per year.

* * * * *

The following is a brief summary of the bus service TDA performance trend highlights over the six-year period of FY2015 through FY2020:

- The trend in operating cost per hour rose steadily throughout most of the analysis period, increasing an average of 5.2 percent per year in actual dollars and 2.3 percent in inflation-adjusted dollars.
- Passenger productivity exhibited steadily declining trends, with passengers per hour decreasing an average of 1.5 percent per year, and passengers per mile decreasing an average of 1.9 percent per year.
- Over the six-year analysis period, cost per passenger increased an average of 6.8 percent annually in actual dollars and 3.8 percent in inflation-adjusted dollars.

Exhibit 4: TDA Indicator Performance - Bus Service

| | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | Av. Ann. Chg. |
|--|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| Performance Indicators | | | | | | | |
| Op. Cost per Vehicle Svc. Hour (Actual \$) | \$86.40 | \$82.82 | \$89.62 | \$95.78 | \$97.97 | \$111.18 | -- |
| <i>Annual Change</i> | -- | -4.1% | 8.2% | 6.9% | 2.3% | 13.5% | 5.2% |
| Op. Cost per Vehicle Svc. Hour (Constant \$) | \$86.40 | \$80.80 | \$84.71 | \$87.07 | \$86.47 | \$96.84 | -- |
| <i>Annual Change</i> | -- | -6.5% | 4.8% | 2.8% | -0.7% | 12.0% | 2.3% |
| Passengers per Vehicle Service Hour | 10.2 | 13.0 | 12.6 | 12.1 | 11.5 | 9.4 | -- |
| <i>Annual Change</i> | -- | 27.8% | -3.3% | -3.3% | -5.6% | -17.8% | -1.5% |
| Passengers per Vehicle Service Mile | 0.56 | 0.74 | 0.69 | 0.68 | 0.64 | 0.51 | -- |
| <i>Annual Change</i> | -- | 33.7% | -6.8% | -2.6% | -5.1% | -21.3% | -1.9% |
| Op. Cost per Passenger (Actual \$) | \$8.51 | \$6.38 | \$7.14 | \$7.89 | \$8.55 | \$11.80 | -- |
| <i>Annual Change</i> | -- | -25.0% | 11.8% | 10.5% | 8.4% | 38.0% | 6.8% |
| Op. Cost per Passenger (Constant \$) | \$8.51 | \$6.23 | \$6.75 | \$7.17 | \$7.54 | \$10.27 | -- |
| <i>Annual Change</i> | -- | -26.8% | 8.4% | 6.2% | 5.2% | 36.2% | 3.8% |
| Vehicle Service Hours per FTE | (a) | (a) | (a) | (a) | (a) | (a) | -- |
| <i>Annual Change</i> | -- | -- | -- | -- | -- | -- | -- |
| Input Data | | | | | | | |
| Operating Cost (Actual \$) | \$7,020,548 | \$7,105,717 | \$7,523,993 | \$7,889,072 | \$8,165,855 | \$8,685,573 | -- |
| <i>Annual Change</i> | -- | 1.2% | 5.9% | 4.9% | 3.5% | 6.4% | 4.3% |
| Operating Cost (Constant \$) | \$7,020,548 | \$6,932,407 | \$7,111,525 | \$7,171,884 | \$7,207,286 | \$7,565,830 | -- |
| <i>Annual Change</i> | -- | -1.3% | 2.6% | 0.8% | 0.5% | 5.0% | 1.5% |
| Vehicle Service Hours | 81,259 | 85,795 | 83,951 | 82,365 | 83,350 | 78,124 | -- |
| <i>Annual Change</i> | -- | 5.6% | -2.1% | -1.9% | 1.2% | -6.3% | -0.8% |
| Vehicle Service Miles | 1,481,832 | 1,495,463 | 1,518,356 | 1,479,476 | 1,489,139 | 1,457,304 | -- |
| <i>Annual Change</i> | -- | 0.9% | 1.5% | -2.6% | 0.7% | -2.1% | -0.3% |
| Unlinked Passengers | 825,148 | 1,113,033 | 1,053,708 | 1,000,202 | 955,467 | 736,341 | -- |
| <i>Annual Change</i> | -- | 34.9% | -5.3% | -5.1% | -4.5% | -22.9% | -2.3% |
| Employee Full-Time Equivalents | (a) | (a) | (a) | (a) | (a) | (a) | -- |
| <i>Annual Change</i> | -- | -- | -- | -- | -- | -- | -- |
| Bay Area CPI - Annual Change | -- | 2.5% | 3.3% | 4.0% | 3.0% | 1.3% | -- |
| - Cumulative Change | -- | 2.5% | 5.8% | 10.0% | 13.3% | 14.8% | 2.8% |

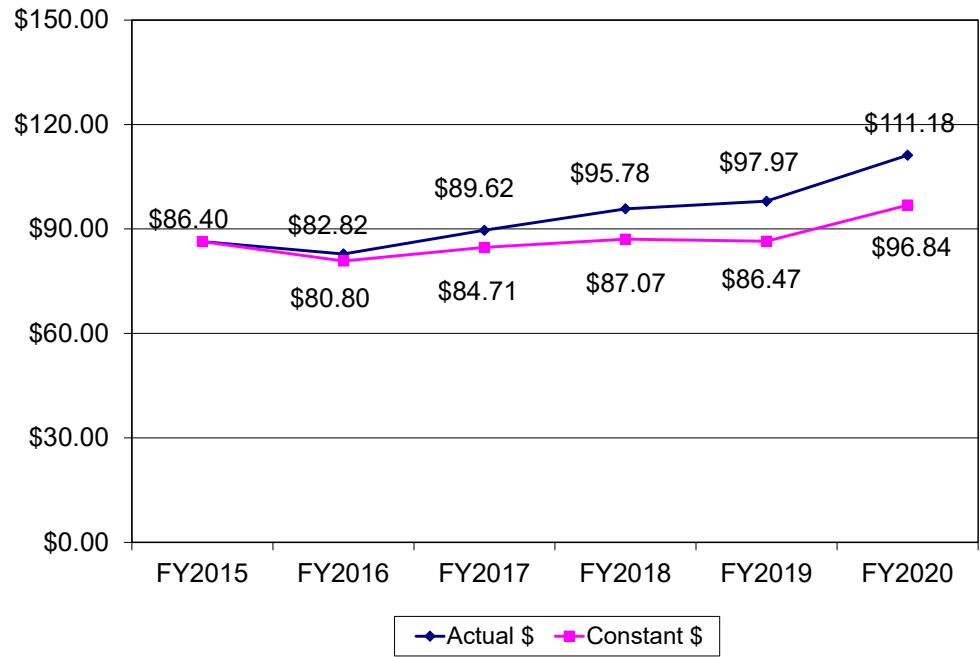
Sources: FY2015 through FY2017 - Prior Performance Audit Report

(a) Not applicable, contracted services

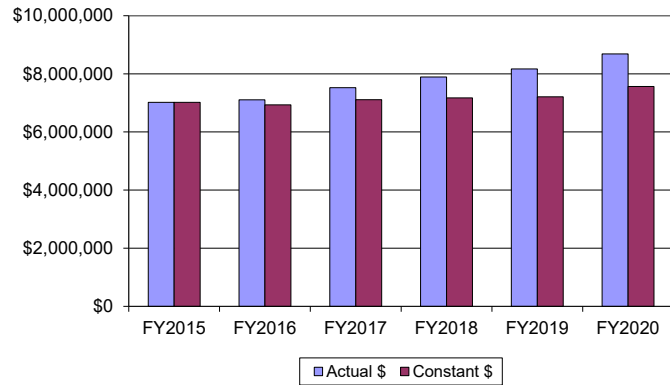
FY2018 through FY2020 - NTD Reports

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

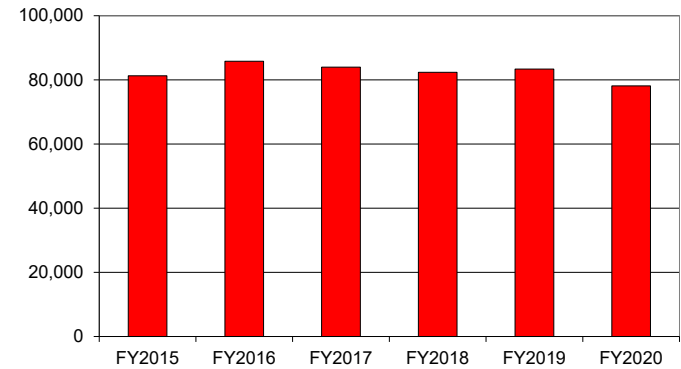
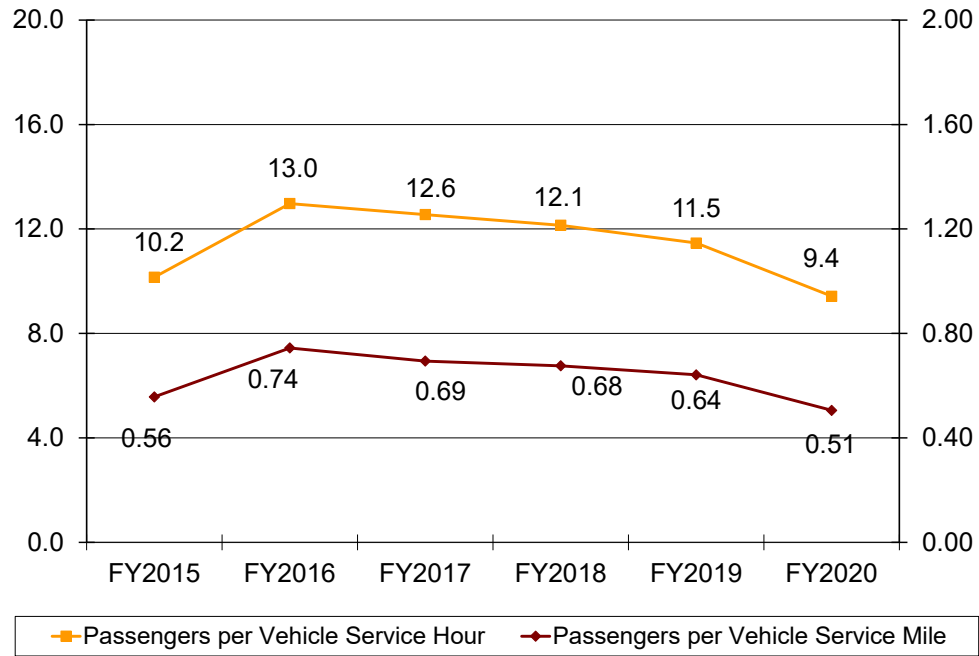
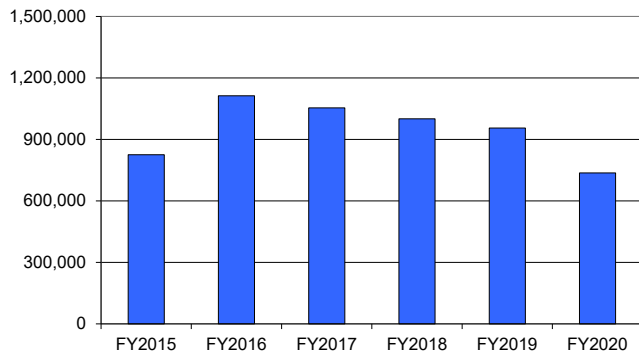


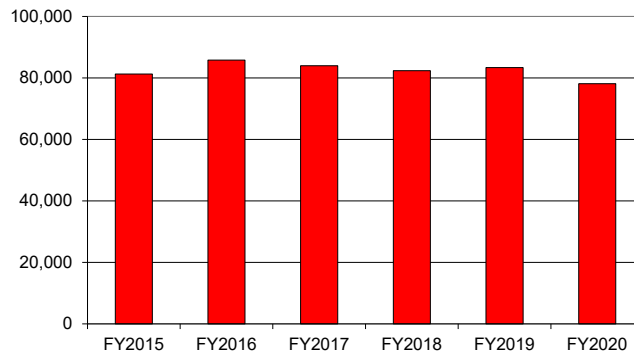
Exhibit 4.2: Passengers per Hour and per Mile – Bus Service



Unlinked Passengers



Vehicle Service Hours



Vehicle Service Miles

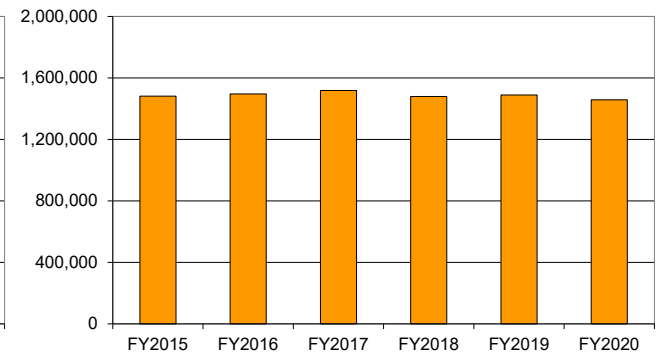
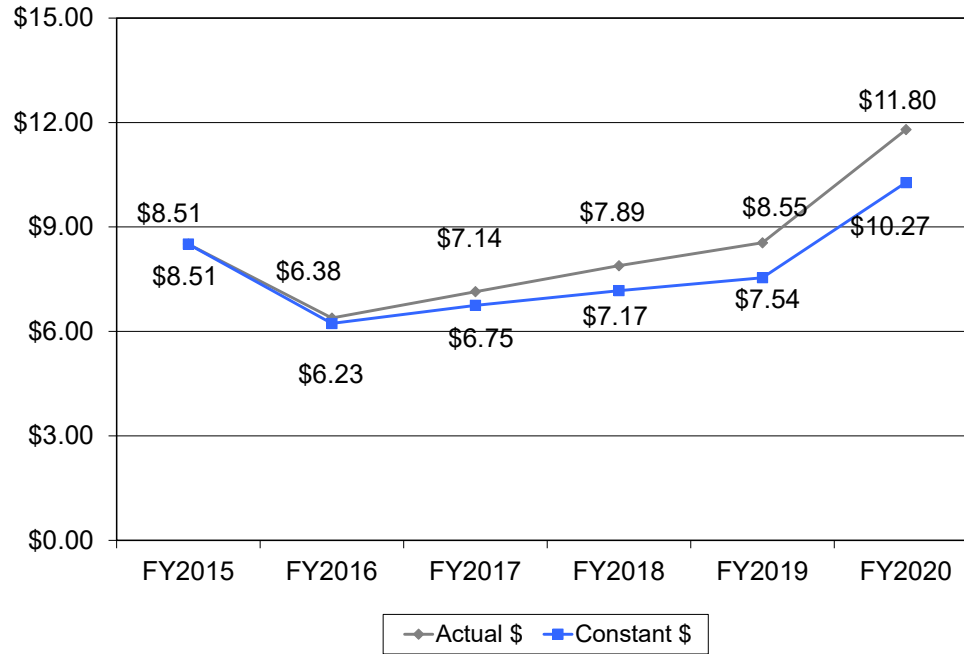
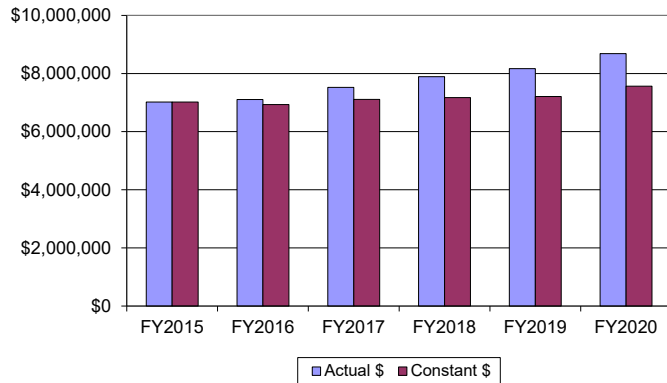


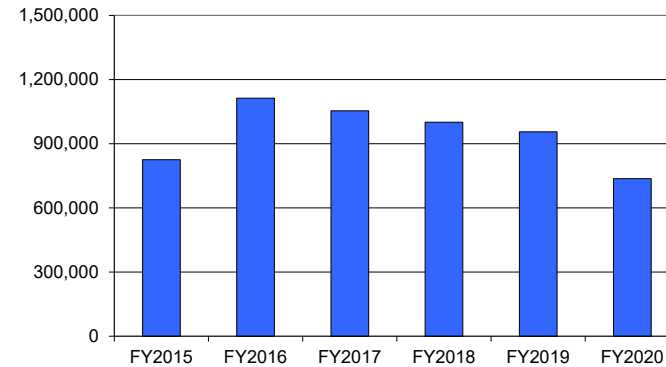
Exhibit 4.3: Operating Cost per Passenger – Bus Service



Operating Cost



Unlinked Passengers



Bus Service Component Costs

Year-to-year changes in selected operating cost categories over the past six years are presented in Exhibit 4.4. 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 4.4 also shows the concurrent changes in vehicle service hours, and Exhibit 4.5 illustrates the portion of the cost per bus service hour that can be attributed to each included cost component.

- Total operating costs increased by 4.3 percent annually on average during the six-year review period.
- In-house labor and fringe benefits costs both increased by 41.0 percent in FY2019. However, these categories together comprise approximately two to three percent of total operating costs.
- Services costs increased an average of 22.7 percent per year overall. The largest single-year increase was observed in FY2020 when these costs rose 114 percent.
- Purchased transportation costs are the largest category of expense, comprising more than three-quarters of the total operating costs. These costs increased an average of 3.6 percent annually over the six-year period.
- Materials and supplies are the second largest category of expense, representing between 13 percent and 16 percent of total operating costs. Year-to-year changes in these costs resulted in an average annual change of less than one percent across the six-year period.
- Casualty/liability costs fluctuated from year-to-year reflecting changes in claims activity and settlements over the analysis period. The net result as an average increase of 12.2 percent per year over the review period.
- Other expenses were fairly consistent between FY2015 and FY2019. However, these costs rose sharply in FY2020 resulting in an average annual change of 53.2 percent per year over the entire period.

* * * * *

The following is a brief summary of the bus service component operating costs trend highlights between FY2015 and FY2020:

- Purchased transportation costs increased in nearly every year of the analysis period, but were held to an average of less than four percent per year.
- Service costs exhibited significant increases in FY2020, however, these costs represent only about two to three percent of total operating costs.
- Materials and supplies, the second largest cost category, exhibited up and down annual changes that resulted in an average annual change of less than one percent.
- Other expenses rose sharply in FY2020, but still only comprised 2.5 percent of total operating costs.

Exhibit 4.4: Component Cost Trends – Bus Service

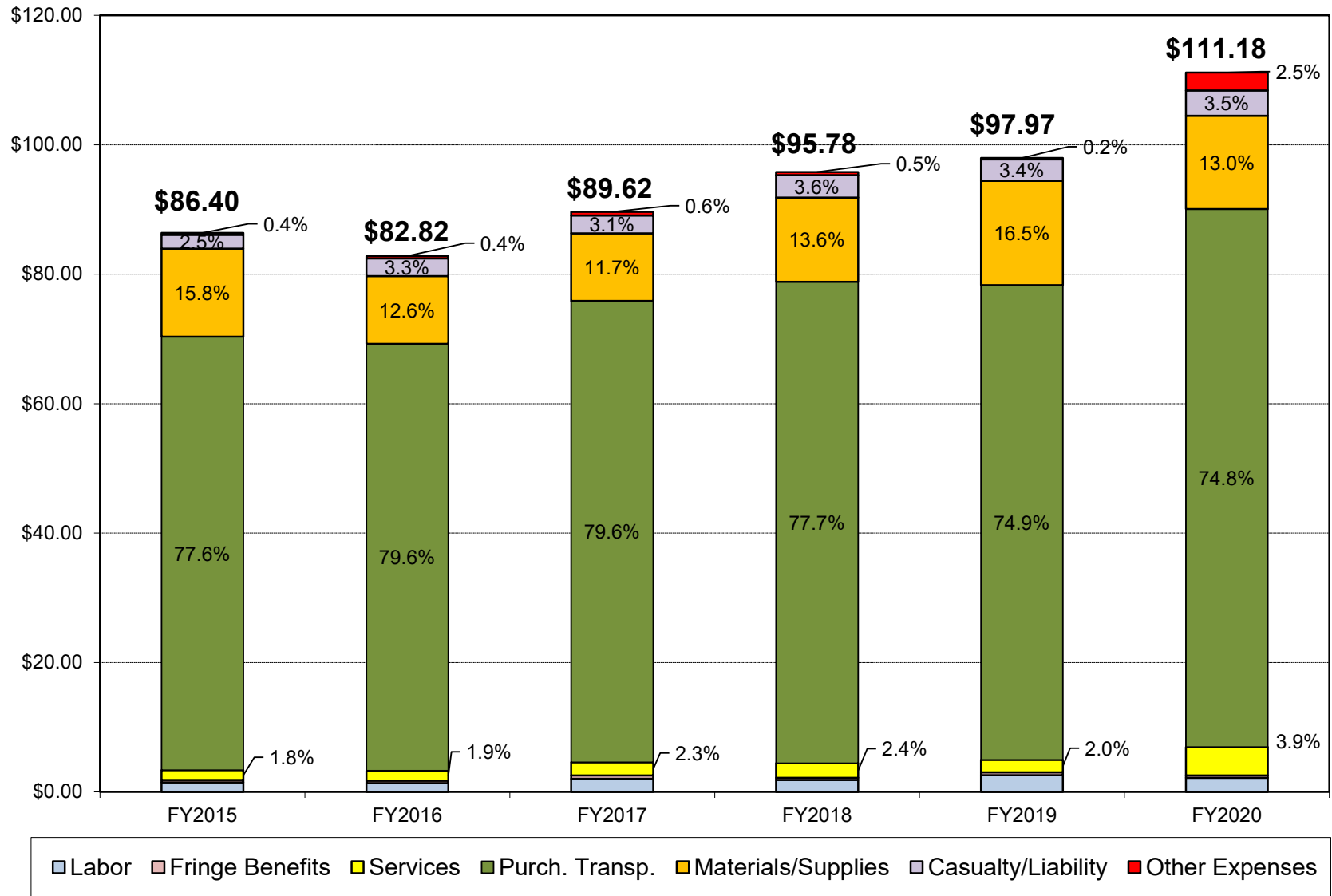
| | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | Av. Ann. Chg. |
|--------------------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| COST CATEGORIES | | | | | | | |
| Labor (Salaries/Wages) | \$118,774 | \$118,353 | \$170,119 | \$151,903 | \$214,227 | \$168,847 | -- |
| <i>Annual Change</i> | -- | -0.4% | 43.7% | -10.7% | 41.0% | -21.2% | 7.3% |
| Fringe Benefits | \$29,694 | \$29,804 | \$42,825 | \$27,442 | \$38,702 | \$30,127 | -- |
| <i>Annual Change</i> | -- | 0.4% | 43.7% | -35.9% | 41.0% | -22.2% | 0.3% |
| Services | \$122,873 | \$133,045 | \$170,178 | \$185,820 | \$159,429 | \$341,117 | -- |
| <i>Annual Change</i> | -- | 8.3% | 27.9% | 9.2% | -14.2% | 114.0% | 22.7% |
| Purchased Transportation | \$5,445,218 | \$5,658,650 | \$5,987,143 | \$6,128,855 | \$6,115,731 | \$6,496,814 | -- |
| <i>Annual Change</i> | -- | 3.9% | 5.8% | 2.4% | -0.2% | 6.2% | 3.6% |
| Materials/Supplies (a) | \$1,106,342 | \$897,984 | \$877,163 | \$1,071,903 | \$1,343,670 | \$1,126,721 | -- |
| <i>Annual Change</i> | -- | -18.8% | -2.3% | 22.2% | 25.4% | -16.1% | 0.4% |
| Casualty/Liability | \$172,011 | \$235,971 | \$231,269 | \$284,535 | \$274,334 | \$305,857 | -- |
| <i>Annual Change</i> | -- | 37.2% | -2.0% | 23.0% | -3.6% | 11.5% | 12.2% |
| Other Expenses (b) | \$25,636 | \$31,910 | \$45,296 | \$38,614 | \$19,762 | \$216,090 | -- |
| <i>Annual Change</i> | -- | 24.5% | 41.9% | -14.8% | -48.8% | 993.5% | 53.2% |
| Total | \$7,020,548 | \$7,105,717 | \$7,523,993 | \$7,889,072 | \$8,165,855 | \$8,685,573 | -- |
| <i>Annual Change</i> | -- | 1.2% | 5.9% | 4.9% | 3.5% | 6.4% | 4.3% |
| OPERATING STATISTICS | | | | | | | |
| Vehicle Service Hours | 81,259 | 85,795 | 83,951 | 82,365 | 83,350 | 78,124 | -- |
| <i>Annual Change</i> | -- | 5.6% | -2.1% | -1.9% | 1.2% | -6.3% | -0.8% |

(a) Includes tires/tubes, and other materials/supplies

(b) Includes utilities, taxes, and miscellaneous expenses

Exhibit 4.5: Distribution of Component Costs – Bus Service

Operating Cost per Vehicle Service Hour



Paratransit Performance Trends

This section provides an overview of the performance of NVTA'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)
 - Paratransit cost per hour exhibited a 13.9 percent increase in FY2018 when cost rose to \$100.40 per hour. However, FY2020 saw a reduction in this indicator of 7.7 percent.
 - Overall, the cost per hour increased an average of 1.6 percent per year over the six years.
 - In inflation-adjusted dollars, cost efficiency improved overall demonstrating an average annual decrease of 1.2 percent per year.
- Passengers per Vehicle Service Hour (Exhibit 5.2)
 - Productivity remained fairly steady throughout most of the review period at around 3.6 passengers per vehicle service hour.
 - Due to the impacts of the pandemic, ridership fell 14.7 percent in FY2020 resulting in a commensurate decline in productivity of 15.6 percent.
 - Overall, passengers per hour decreased an average of 5.2 percent per year over the review period.
- Passengers per Vehicle Service Mile (Exhibit 5.2)
 - Performance in passengers per vehicle service mile also remained steady throughout most of the six-year analysis period.
 - This indicator held at 0.41 passengers per mile from FY2016 through FY2019, and decreased to 0.39 passengers per mile in FY2020.

- Operating Cost per Passenger (Exhibit 5.3)
 - The cost per passenger increased from \$22.14 in FY2015 to \$28.66 in FY2019. The resulting loss in ridership in FY2020 further intensified the trend resulting in a 9.3 percent increase to \$31.32 per passenger.
 - Overall, cost per passenger showed an average annual increase of 7.2 percent in actual dollars and 4.3 percent in inflation-adjusted dollars.

* * * * *

The following is a brief summary of the paratransit TDA performance trend highlights over the six-year period of FY2015 through FY2020:

- Paratransit cost per hour increased an average of 1.6 percent per year over the six years in actual terms, but exhibited a 1.2 percent decrease in constant, inflation-adjusted terms.
- Passenger productivity generally remained steady through most of the analysis period, but declined in FY2020 as a result of the pandemic impacts on ridership.
- Cost per passenger rose slowly and steadily through the six-year period posting an average increase of 7.2 percent per year in actual terms and a 4.3 percent per year increase in inflation-adjusted terms.

Exhibit 5: TDA Indicator Performance – Paratransit

| | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | Av. Ann. Chg. |
|--|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| Performance Indicators | | | | | | | |
| Op. Cost per Vehicle Svc. Hour (Actual \$) | \$87.45 | \$87.91 | \$88.16 | \$100.40 | \$102.55 | \$94.61 | -- |
| <i>Annual Change</i> | -- | 0.5% | 0.3% | 13.9% | 2.1% | -7.7% | 1.6% |
| Op. Cost per Vehicle Svc. Hour (Constant \$) | \$87.45 | \$85.76 | \$83.33 | \$91.27 | \$90.51 | \$82.41 | -- |
| <i>Annual Change</i> | -- | -1.9% | -2.8% | 9.5% | -0.8% | -8.9% | -1.2% |
| Passengers per Vehicle Service Hour | 3.9 | 3.7 | 3.6 | 3.6 | 3.6 | 3.0 | -- |
| <i>Annual Change</i> | -- | -7.1% | -1.2% | -1.8% | 0.5% | -15.6% | -5.2% |
| Passengers per Vehicle Service Mile | 0.42 | 0.41 | 0.41 | 0.41 | 0.41 | 0.39 | -- |
| <i>Annual Change</i> | -- | -4.1% | 0.9% | 0.6% | 0.5% | -6.6% | -1.8% |
| Op. Cost per Passenger (Actual \$) | \$22.14 | \$23.98 | \$24.33 | \$28.20 | \$28.66 | \$31.32 | -- |
| <i>Annual Change</i> | -- | 8.3% | 1.5% | 15.9% | 1.6% | 9.3% | 7.2% |
| Op. Cost per Passenger (Constant \$) | \$22.14 | \$23.39 | \$23.00 | \$25.64 | \$25.29 | \$27.28 | -- |
| <i>Annual Change</i> | -- | 5.6% | -1.7% | 11.5% | -1.3% | 7.8% | 4.3% |
| Vehicle Service Hours per FTE | (a) | (a) | (a) | (a) | (a) | (a) | -- |
| <i>Annual Change</i> | -- | -- | -- | -- | -- | -- | -- |
| Input Data | | | | | | | |
| Operating Cost (Actual \$) | \$2,582,021 | \$2,443,879 | \$2,439,170 | \$2,808,453 | \$2,971,904 | \$2,771,036 | -- |
| <i>Annual Change</i> | -- | -5.4% | -0.2% | 15.1% | 5.8% | -6.8% | 1.4% |
| Operating Cost (Constant \$) | \$2,582,021 | \$2,384,272 | \$2,305,454 | \$2,553,139 | \$2,623,040 | \$2,413,794 | -- |
| <i>Annual Change</i> | -- | -7.7% | -3.3% | 10.7% | 2.7% | -8.0% | -1.3% |
| Vehicle Service Hours | 29,527 | 27,801 | 27,667 | 27,974 | 28,981 | 29,290 | -- |
| <i>Annual Change</i> | -- | -5.8% | -0.5% | 1.1% | 3.6% | 1.1% | -0.2% |
| Vehicle Service Miles | 275,302 | 251,046 | 244,583 | 241,589 | 250,352 | 228,605 | -- |
| <i>Annual Change</i> | -- | -8.8% | -2.6% | -1.2% | 3.6% | -8.7% | -3.6% |
| Unlinked Passengers | 116,599 | 101,934 | 100,240 | 99,575 | 103,701 | 88,486 | -- |
| <i>Annual Change</i> | -- | -12.6% | -1.7% | -0.7% | 4.1% | -14.7% | -5.4% |
| Employee Full-Time Equivalents | (a) | (a) | (a) | (a) | (a) | (a) | -- |
| <i>Annual Change</i> | -- | -- | -- | -- | -- | -- | -- |
| Bay Area CPI - Annual Change | -- | 2.5% | 3.3% | 4.0% | 3.0% | 1.3% | -- |
| - Cumulative Change | -- | 2.5% | 5.8% | 10.0% | 13.3% | 14.8% | 2.8% |

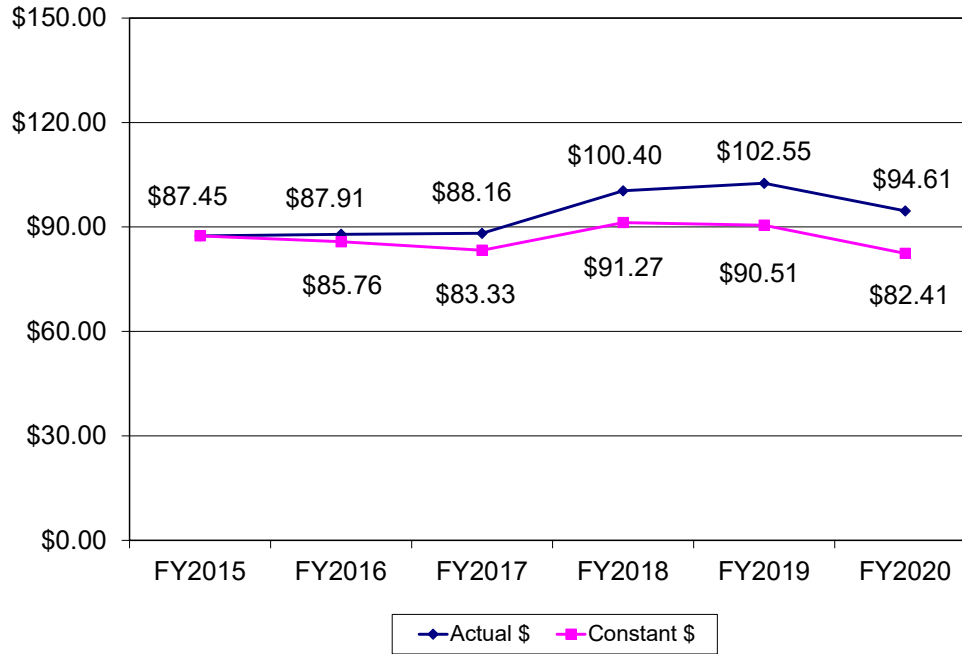
Sources: FY2015 through FY2017 - Prior Performance Audit Report

(a) Not applicable, contracted services

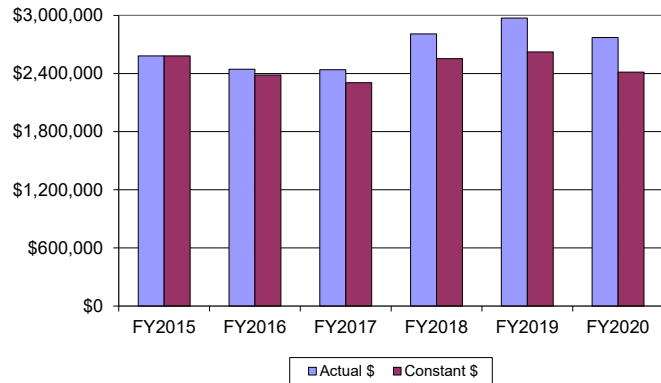
FY2018 through FY2020 - NTD Reports

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

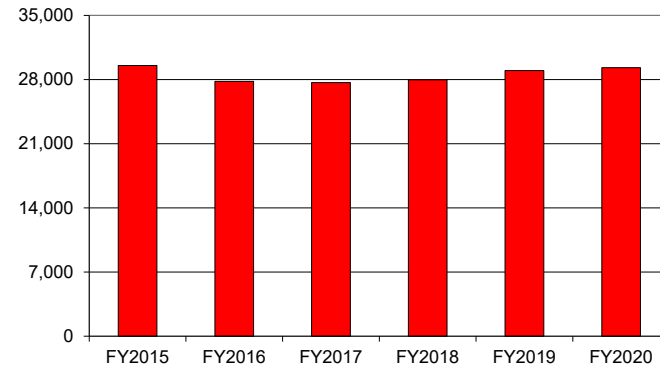
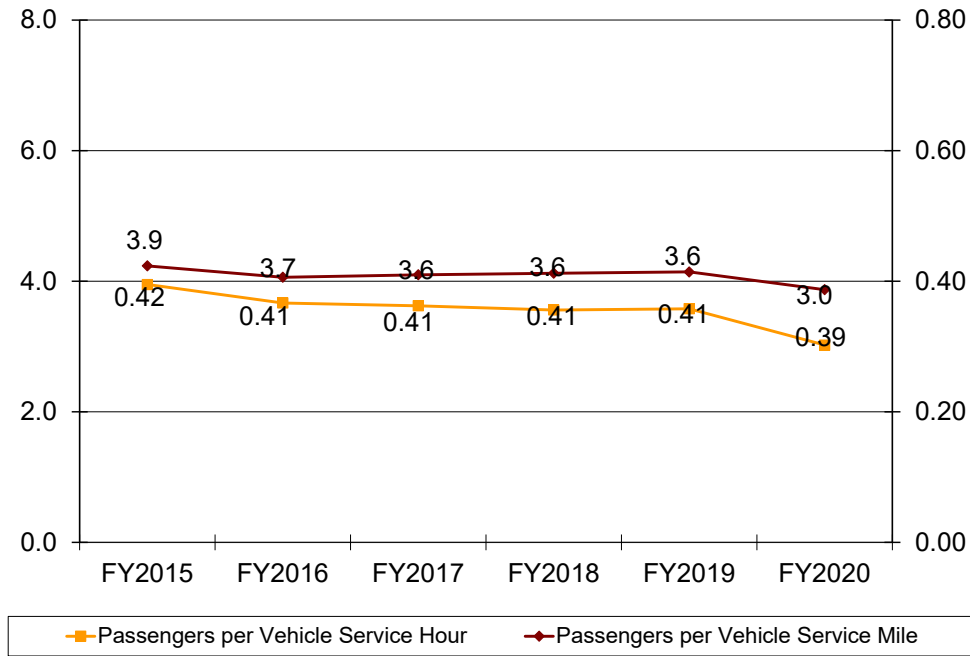
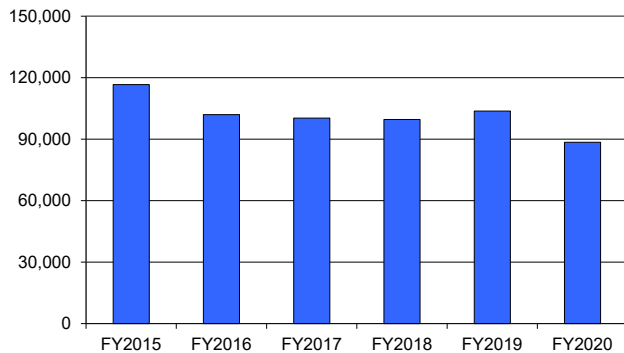


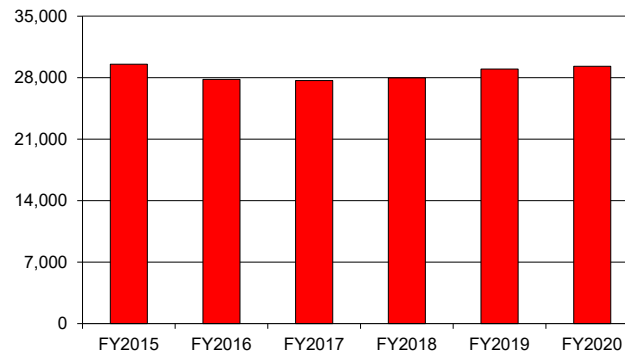
Exhibit 5.2: Passengers per Hour and per Mile – Paratransit



Unlinked Passengers



Vehicle Service Hours



Vehicle Service Miles

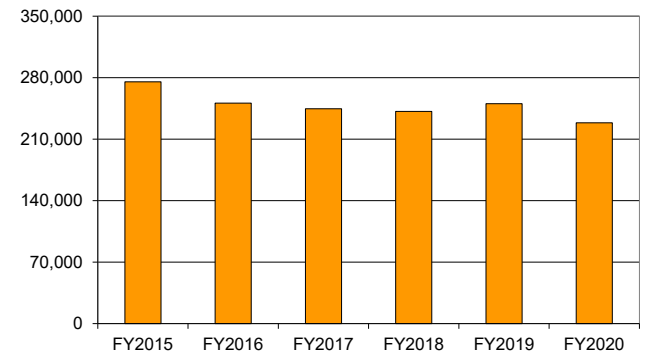
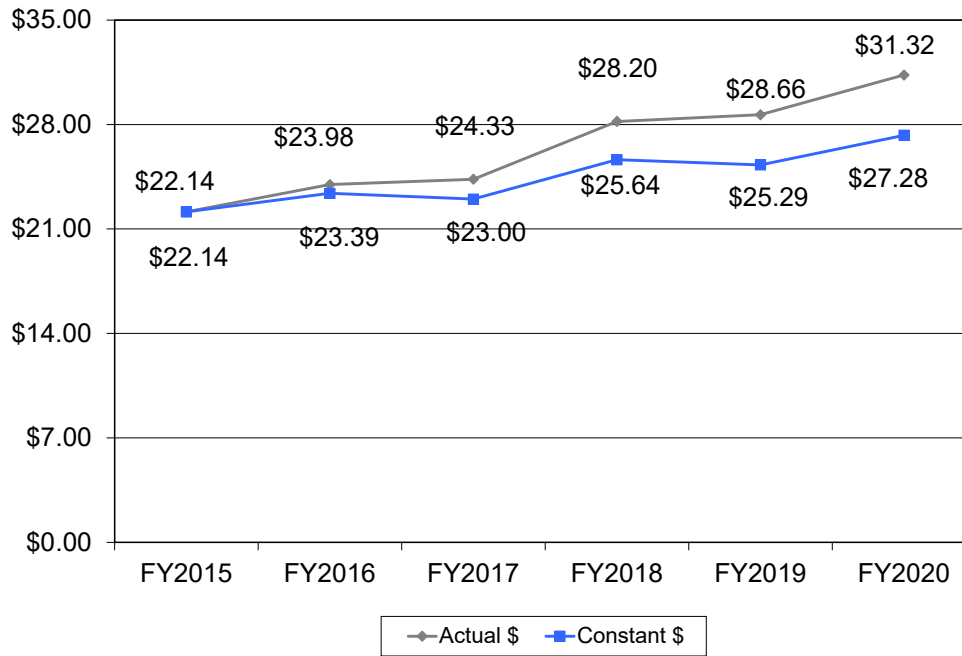
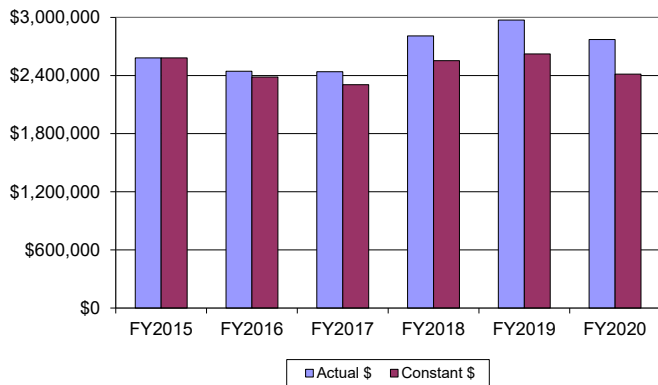


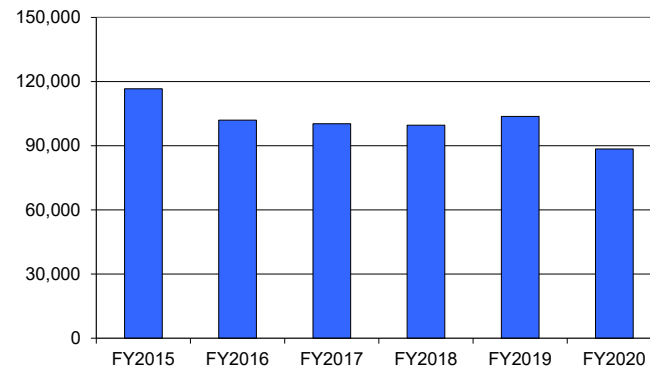
Exhibit 5.3: Operating Cost per Passenger – Paratransit



Operating Cost



Unlinked Passengers



Paratransit Component Costs

The year-to-year changes in selected operating cost categories are presented in Exhibit 5.4, along with the concurrent changes in vehicle service hours. The portions of the cost per vehicle service hour that can be attributed to each included cost component are shown in Exhibit 5.5.

- Total operating costs increased by 1.4 percent annually on average during the six-year period. The largest single-year increase occurred in FY2018 when operating costs increased 15.1 percent.
- Purchased transportation costs represent the largest portion of the total costs throughout the review period, ranging between 84 and 88 percent.
- While not major components of total costs (i.e., approximately two percent of the total), in-house labor and fringe benefits costs both decreased by over the six-year period, averaging 8.6 percent per year and 7.0 percent per year, respectively.
- Services costs increased substantially over the review period, increasing an average of 40.3 percent per year. This increase resulted in services going from less than one percent of the total operating costs to nearly three percent of the total.
- Materials and supplies, the second largest cost category, exhibited large year-to-year swings from a 28.4 percent reduction in FY2016 to a 47.7 percent increasing in FY2018. These large shifts resulted in materials and supplies costs remaining virtually unchanged over the six-year period.
- Casualty and liability costs exhibited an average annual change of 8.8 percent per year.

* * * * *

The following is a brief summary of the paratransit component operating costs trend highlights between FY2015 and FY2020:

- Purchased transportation costs represented by far the largest portion of the total costs, ranging between 84 and 88 percent during the review period, and increased moderately an average 1.2 percent per year.
- While representing a relatively small portion of total operating costs, both in-house labor and fringe benefits costs decreased over the six-year period.
- Despite large swings, material and supplies costs remained virtually unchanged over the review period.

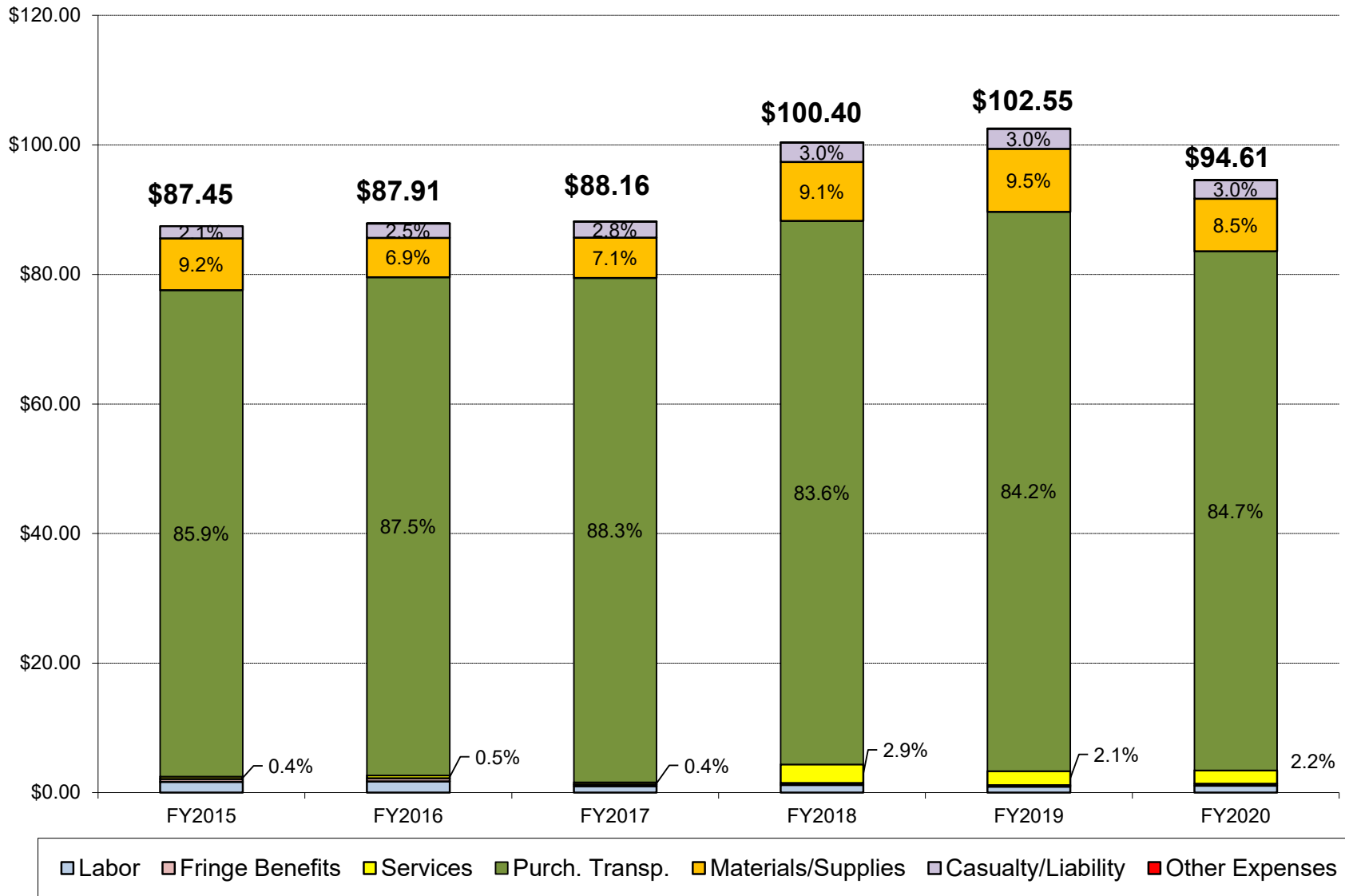
Exhibit 5.4: Component Costs Trends – Paratransit

| | FY2015 | FY2016 | FY2017 | FY2018 | FY2019 | FY2020 | Av. Ann. Chg. |
|-----------------------------|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| COST CATEGORIES | | | | | | | |
| Labor (Salaries/Wages) | \$48,412 | \$48,000 | \$27,120 | \$33,361 | \$26,190 | \$30,832 | -- |
| <i>Annual Change</i> | -- | -0.9% | -43.5% | 23.0% | -21.5% | 17.7% | -8.6% |
| Fringe Benefits | \$13,655 | \$13,539 | \$7,649 | \$8,340 | \$6,547 | \$9,523 | -- |
| <i>Annual Change</i> | -- | -0.8% | -43.5% | 9.0% | -21.5% | 45.5% | -7.0% |
| Services | \$11,080 | \$12,605 | \$8,970 | \$80,362 | \$63,386 | \$60,261 | -- |
| <i>Annual Change</i> | -- | -- | -28.8% | 795.9% | -21.1% | -4.9% | 40.3% |
| Purchased Transportation | \$2,217,102 | \$2,138,189 | \$2,154,517 | \$2,346,819 | \$2,502,397 | \$2,348,023 | -- |
| <i>Annual Change</i> | -- | -3.6% | 0.8% | 8.9% | 6.6% | -6.2% | 1.2% |
| Materials/Supplies (a) | \$236,261 | \$169,059 | \$172,427 | \$254,648 | \$282,436 | \$236,809 | -- |
| <i>Annual Change</i> | -- | -28.4% | 2.0% | 47.7% | 10.9% | -16.2% | 0.0% |
| Casualty/Liability | \$55,511 | \$61,497 | \$68,030 | \$83,680 | \$89,569 | \$84,473 | -- |
| <i>Annual Change</i> | -- | 10.8% | 10.6% | 23.0% | 7.0% | -5.7% | 8.8% |
| Other Expenses (b) | \$0 | \$990 | \$457 | \$1,243 | \$1,379 | \$1,115 | -- |
| <i>Annual Change</i> | -- | -- | -53.8% | 172.0% | 10.9% | -19.1% | -- |
| Total | \$2,582,021 | \$2,443,879 | \$2,439,170 | \$2,808,453 | \$2,971,904 | \$2,771,036 | -- |
| <i>Annual Change</i> | -- | -5.4% | -0.2% | 15.1% | 5.8% | -6.8% | 1.4% |
| OPERATING STATISTICS | | | | | | | |
| Vehicle Service Hours | 29,527 | 27,801 | 27,667 | 27,974 | 28,981 | 29,290 | -- |
| <i>Annual Change</i> | -- | -5.8% | -0.5% | 1.1% | 3.6% | 1.1% | -0.2% |

(a) Includes tires/tubes, and other materials/supplies

(b) Includes utilities, taxes, and miscellaneous expenses

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



IV. COMPLIANCE WITH PUC REQUIREMENTS

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

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

Exhibit 6: Compliance with State PUC Requirements

| Code Reference | Operator Compliance Requirements | Compliance Finding | Verification Information |
|----------------------|--|--------------------|---|
| PUC99251 | <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"> • 2018: 11/16/2018 • 2019: 11/21/2019 • 2020: 11/19/2020 |
| PUC99264 | <u>Operator-to-Vehicle Staffing</u> - The operator does not routinely staff with two or more persons public transportation vehicles designed to be operated by one person | In Compliance | <ul style="list-style-type: none"> • No provision for excess vehicle staffing in Transit Services Agreement #10-01 with Veolia Transportation (now Transdev Services, Inc.), dated August 27, 2009, nor amendments. • No provision for excess vehicle staffing in Transit Operations Services Agreement #2016-12 with Transdev Services, Inc., dated September 1, 2016. |
| 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 | NVTA contracts with Transdev Services, Inc. to provide its fixed-route and paratransit services. |
| PUC99155 | <u>Reduced Fare Eligibility</u> - For any operator who received TDA Article 4 funds, if the operator offers reduced fares to senior citizens and disabled persons, applicant will honor the federal Medicare identification card, the California Department of Motor Vehicles disability ID card, the Regional Transit Connection Discount Card, or any other current identification card issued by another transit operator that is valid for the type of transportation service or discount requested; and if the operator offers reduced fares to senior citizens, it also offers the same reduced fare to disabled patrons | In Compliance | NVTA's website Fares & Passes section: https://vinetransit.com/fares/ |

| Code Reference | Operator Compliance Requirements | Compliance Finding | Verification Information |
|---|--|--------------------|---|
| PUC99155.1 (a)(1)(2) | <u>Welfare to Work Coordination</u> - Operators must coordinates with county welfare departments in order to ensure that transportation moneys available for purposes of assisting recipients of aid are expended efficiently for the benefit of that population; if a recipient of CalWORKs program funds by the county, the operator shall give priority to the enhancement of public transportation services for welfare-to-work purposes and to the enhancement of transportation alternatives, such as, but not limited to, subsidies or vouchers, van pools, and contract paratransit operations, in order to promote welfare-to-work purposes | In Compliance | <ul style="list-style-type: none"> NVTA participates in MTC's Coordinated Public Transit- Human Service Transportation Plan for the San Francisco Bay Area. NVTA also acts as the Consolidated Transportation Service Agency (CTSA) for Napa County. As such, NVTA coordinates with social service organizations including county welfare departments to ensure that transportation moneys available for assisting recipients of aid are expended efficiently for the benefit of that population. |
| 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"> Signatory participant in Amended and Restated Clipper® Memorandum of Understanding (February 2016). Agreement also includes MTC and the other transit operators participating in the Clipper® program. Passenger Transfer Agreement with SolTrans (December 2016) |

| 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"> • NVTA generally relies on the MTC passenger survey to provide statistically significant information regarding rider demographics and the needs of the riders. • Studies completed by NVTA, most recently the Community Based Transportation Plan. • Voluntary surveys of riders, and potential riders. • Public participation activities as described in NVTA's Title VI Plan. |

V. STATUS OF PRIOR AUDIT RECOMMENDATIONS

NVTA's prior performance audit was completed in May 2015. Generally, MTC has used the audit recommendations as the basis for developing the Productivity Improvement Program (PIP) projects the operator is required to complete. MTC tracks PIP project implementation as part of its annual review of the operator's TDA-STA claim application. This section provides an assessment of actions taken by TDA-STA recipients toward implementing the recommendations advanced in the prior audit. This assessment provides continuity between the current and prior audits, which allows MTC to fulfill its obligations where the recommendations were advanced as PIP projects.

This review addresses NVTA's responses to the recommendations made in the prior performance audit, and whether NVTA made reasonable progress toward their implementation. There were two recommendations made in the prior audit. A summary of these recommendations and the actions taken by NVTA 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.

The prior audit found that schedule adherence on NVTA's bus system remained in a range of 76 to 78 percent. At the same time, paratransit schedule adherence decreased from 77 percent in FY2015 to 75 percent in FY2017. In order to provide more reliable service, it was recommended that NVTA and its contractor expand efforts toward improving on-time performance across its services. While paratransit on-time performance has greatly improved, bus service on-time performance remains problematic due to inaccuracies of data collected by NVTA's aging CAD/AVL equipment. The implementation of this recommendation is still in progress, and has been carried forward into this audit.

In addition, it was observed in the previous audit observed that the rate of preventable accidents on NVTA's bus and paratransit services worsened over the audit period. Although the number of accidents was not inordinately high, the increases pointed to a potentially burgeoning safety issue. It was recommended that NVTA address the issue through improved operator training and enhanced monitoring activities to ensure that safety issues were identified and corrected before they had a chance to escalate. NVTA closely monitored and tracked accident rates, however, the rates remain in the same range as they were in the prior audit, obviating the need for further action. Since the actual numbers of preventable accidents is rather low (i.e., fewer than 20 per year), it appears that this recommendation is no longer warranted, and has been closed.

Exhibit 7: Status of Prior Audit Recommendations

| Recommendation | Actions Taken | Evaluation |
|--|---|----------------------------|
| 1. Develop and implement strategies to improve schedule adherence on the bus and paratransit services. | <p>Schedule adherence on the paratransit service, as reported by the Trapeze system shows consistent on-time performance of 99 percent over the last three fiscal years.</p> <p>Schedule adherence data on the bus service continues to be problematic. NVTA has identified issues with the accuracy of its CAD/AVL system which is nearing the end of its useful life. NVTA issued an RFP in December 2020 to replace the current system, which it hopes to have in place in 2021.</p> | Implementation in progress |
| 2. Take steps to reduce preventable accidents on NVTA’s bus and paratransit services. | NVTA and its contractor made a concerted effort to track the number of preventable and non-preventable accidents in each of the subsequent fiscal years to ensure that safety performance did not worsen. During this audit period, no significant change in the accident rates occurred. As such, it appears that the trend in safety has remained steady. | Closed |

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VI. FUNCTIONAL PERFORMANCE INDICATOR TRENDS

To further assess NVRTA'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 NVRTA or for which input data were maintained by NVRTA 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, NVTA’s functional indicators relating to Management, Administration and Marketing have been included generally on a systemwide basis. Audit period performance is discussed below and presented in Exhibit 8.

- Administrative costs remained fairly steady over the audit period at approximately 18 to 19 percent of total operating costs.
- Administrative costs per vehicle service hour rose slightly from \$17.89 per vehicle service hour in FY2018 to \$18.13 in FY2019. This was followed by a 12 percent increase driven mainly by the decline in service levels due to the COVID emergency.
- The systemwide farebox recovery ratio declined from 11.5 percent in FY2018 to about 10.3 percent in FY2019. A further drop was observed in FY2020 due to the suspension of fare collection in response to the COVID emergency.

* * * * *

The following is a brief summary of the systemwide functional trend highlights between FY2018 and FY2020:

- Administrative costs remained fairly steady in terms of percentage of total operating costs (about 18 to 19 percent) and administrative costs per vehicle service hour (about \$18 per hour).

- Revenue recovery exhibited a downward trend during the first two years of the audit period, which was exacerbated by the suspension of fare collection due to the COVID public health emergency.

Exhibit 8: Functional Performance Trends – Systemwide

| FUNCTION/Indicator | Actual Performance | | |
|---|--------------------|---------|---------|
| | FY2018 | FY2019 | FY2020 |
| MANAGEMENT, ADMINISTRATION & MARKETING | | | |
| Administrative Cost/Total Operating Cost | 18.5% | 18.3% | 19.1% |
| <i>Annual Percent Change</i> | -- | -0.9% | 4.4% |
| <i>Three Year Percent Change</i> | -- | -- | 3.5% |
| Adminstrative Cost/Vehicle Service Hour | \$17.89 | \$18.13 | \$20.36 |
| <i>Annual Percent Change</i> | -- | 1.4% | 12.3% |
| <i>Three Year Percent Change</i> | -- | -- | 13.8% |
| Marketing Cost/Total Administrative Cost | (a) | (a) | (a) |
| <i>Annual Percent Change</i> | -- | -- | -- |
| <i>Three Year Percent Change</i> | -- | -- | -- |
| Marketing Cost/Unlinked Passenger Trip | (a) | (a) | (a) |
| <i>Annual Percent Change</i> | -- | -- | -- |
| <i>Three Year Percent Change</i> | -- | -- | -- |
| Farebox Revenue/Operating Cost | 11.5% | 10.3% | 7.9% |
| <i>Annual Percent Change</i> | -- | -11.1% | -23.2% |
| <i>Three Year Percent Change</i> | -- | -- | -31.7% |

(a) Not available

Bus Service

NVTA'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
 - The operating cost per passenger mile increased from \$0.82 in FY2018 to \$1.15 in FY2019, an increase of nearly 40 percent. This was the result of declining passenger miles.
 - The ratio of vehicle service miles to total miles remained consistent throughout the audit period at around 95 percent.
 - The percent of vehicle service hours to total hours also was steady at approximately 80 percent in all three years.
 - Passengers carried per service mile and per service hour both declined slightly between FY2018 and FY2019 by about 5 percent.

- Operations
 - Vehicle operations costs comprised about 66 to 67 percent of total operating costs throughout the entire audit period.
 - Vehicle operations costs per service hour showed relatively little change between FY2018 and FY2019, about a two percent increase. The sharp rise in FY2020 was largely due to the reductions in service levels in response to the pandemic.
 - Schedule adherence remained in a range of 66 to 68 percent during the audit period, which is lower than it had been in the period audit period (i.e., 76 to 78 percent).

- The rate of complaints rose from 1.0 per 10,000 boardings to 1.4 per 10,000 boardings between FY2018 and FY2019. Complaints further increased to 2.0 per 10,000 boardings in FY2020.
- The incidence of missed trips was remained very low throughout the audit period.
- Maintenance
 - Total maintenance costs comprised about 12 percent of total operating costs throughout the period.
 - Vehicle maintenance costs per service mile increased held steady between FY2018 and FY2019 at \$0.59 per mile. This indicator rose about 13 percent in FY2020 to \$0.67 per mile.
 - The vehicle spare ratio decreased from 30 percent in FY2018 to nearly 20 percent in FY2019, followed by a sharp increase to 42 percent in FY2020. The latter ratio influenced by reduced service levels in response to the pandemic.
 - The mean distance between major failures improved substantially in over the audit period with performance increasing 45 percent overall
- Safety
 - The rate of preventable accidents per 100,000 vehicle miles did not change appreciably over the audit period. This level of performance was consistent with that observed at the end of the prior audit period.

* * * * *

The following is a brief summary of the bus service functional trend highlights between FY2018 and FY2020:

- Service Planning results generally showed consistent performance in terms of in-service miles and hours, as well as in passenger productivity between FY2018 and FY2019. Performance in FY2020 for these measures was negatively impacted as a result of the pandemic response.
- Operations results showed steady performance throughout the audit period in terms of vehicle operations costs as a percentage of total operating cost. Schedule adherence remained at a relatively low level with performance between 66 and 68 percent of trips on-time.
- Maintenance costs were steadily at 12 percent of total operating costs. There was substantial improvement in the rate of major mechanical failures over the audit period for both major failures and all failures.
- The rate of preventable accidents remained consistent with performance observed in the prior audit period.

Exhibit 9: Functional Performance Trends – Bus Service

| FUNCTION/Indicator | Actual Performance | | |
|--|--------------------|---------|---------|
| | FY2018 | FY2019 | FY2020 |
| SERVICE PLANNING | | | |
| Total Operating Cost/Passenger Mile | \$0.82 | \$1.15 | \$1.45 |
| <i>Annual Percent Change</i> | -- | 39.9% | 25.5% |
| <i>Three Year Percent Change</i> | -- | -- | 75.5% |
| Vehicle Service Miles/Total Miles | 95.0% | 94.5% | 96.8% |
| <i>Annual Percent Change</i> | -- | -0.5% | 2.5% |
| <i>Three Year Percent Change</i> | -- | -- | 2.0% |
| Vehicle Service Hours/Total Hours | 79.4% | 80.0% | 79.6% |
| <i>Annual Percent Change</i> | -- | 0.8% | -0.6% |
| <i>Three Year Percent Change</i> | -- | -- | 0.3% |
| Passengers/Vehicle Service Mile | 0.68 | 0.64 | 0.51 |
| <i>Annual Percent Change</i> | -- | -5.1% | -21.3% |
| <i>Three Year Percent Change</i> | -- | -- | -25.3% |
| Passengers/Vehicle Service Hour | 12.14 | 11.46 | 9.43 |
| <i>Annual Percent Change</i> | -- | -5.6% | -17.8% |
| <i>Three Year Percent Change</i> | -- | -- | -22.4% |
| OPERATIONS | | | |
| Vehicle Operations Cost/Total Operating Cost | 67.0% | 67.0% | 65.9% |
| <i>Annual Percent Change</i> | -- | 0.1% | -1.7% |
| <i>Three Year Percent Change</i> | -- | -- | -1.5% |
| Vehicle Operations Cost/Vehicle Service Hour | \$64.14 | \$65.68 | \$73.30 |
| <i>Annual Percent Change</i> | -- | 2.4% | 11.6% |
| <i>Three Year Percent Change</i> | -- | -- | 14.3% |
| Farebox Revenue/Operating Cost | 12.1% | 10.5% | 7.0% |
| <i>Annual Percent Change</i> | -- | -13.3% | -33.7% |
| <i>Three Year Percent Change</i> | -- | -- | -42.5% |
| TDA Recovery Ratio (a) | (b) | (b) | (b) |
| <i>Annual Percent Change</i> | -- | -- | -- |
| <i>Three Year Percent Change</i> | -- | -- | -- |
| Percentage of Trips On-Time | 68.1% | 66.6% | 66.0% |
| <i>Annual Percent Change</i> | -- | -2.3% | -0.8% |
| <i>Three Year Percent Change</i> | -- | -- | -3.1% |
| Complaints/10,000 Boardings | 1.0 | 1.4 | 2.0 |
| <i>Annual Percent Change</i> | -- | 37.5% | 49.7% |
| <i>Three Year Percent Change</i> | -- | -- | 105.8% |
| Missed Trips/Total Trips | 0.01% | 0.01% | 0.03% |
| <i>Annual Percent Change</i> | -- | -13.6% | 356.7% |
| <i>Three Year Percent Change</i> | -- | -- | 294.7% |

| FUNCTION/Indicator | Actual Performance | | |
|---|--------------------|--------|---------|
| | FY2018 | FY2019 | FY2020 |
| MAINTENANCE | | | |
| Vehicle + Non-Veh. Maint. Cost/Total Operating Cost | 11.5% | 11.5% | 12.2% |
| <i>Annual Percent Change</i> | -- | 0.1% | 6.4% |
| <i>Three Year Percent Change</i> | -- | -- | 6.5% |
| Vehicle Maintenance Cost/Vehicle Service Mile | \$0.59 | \$0.59 | \$0.67 |
| <i>Annual Percent Change</i> | -- | 0.6% | 12.9% |
| <i>Three Year Percent Change</i> | -- | -- | 13.6% |
| Spare Vehicles/Total Vehicles | 29.5% | 19.5% | 42.1% |
| <i>Annual Percent Change</i> | -- | -34.0% | 115.8% |
| <i>Three Year Percent Change</i> | -- | -- | 42.5% |
| Mean Distance between Major Failures (Miles) | 103,861 | 92,734 | 150,515 |
| <i>Annual Percent Change</i> | -- | -10.7% | 62.3% |
| <i>Three Year Percent Change</i> | -- | -- | 44.9% |
| Mean Distance between All Failures (Miles) | 29,960 | 36,662 | 39,609 |
| <i>Annual Percent Change</i> | -- | 22.4% | 8.0% |
| <i>Three Year Percent Change</i> | -- | -- | 32.2% |
| SAFETY | | | |
| Preventable Accidents/100,000 Vehicle Miles | 0.77 | 0.70 | 1.06 |
| <i>Annual Percent Change</i> | -- | -9.4% | 52.3% |

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

(b) Not available

Paratransit

NVTA's paratransit functional area trends represent mostly similar areas to the bus service. Audit period performance is discussed below and presented in Exhibit 10.

- Service Planning
 - Operating costs per passenger mile increased from \$3.97 in FY2018 to \$4.62 in FY2019, an increase of 16.2 percent. A further increase was observed in FY2020. However, this was largely the result of the ridership loss due to the pandemic emergency.
 - The portion of vehicle miles traveled that were in service remained steady throughout the audit period at around 79 to 80 percent.
 - Passenger productivity was steady during the first two years of the audit period, and declined in FY2020. The decline in FY2020 was mainly due to the loss of ridership experienced in response to the pandemic.

- Operations
 - Vehicle operations costs as a percentage of total operating consistently comprised just over 85 percent of total operating costs.
 - Vehicle operations costs per service hour increase slightly from \$85.77 in FY2018 to \$88.20 in FY2019 before decreasing to \$81.03 in FY2020, which was 5.5 percent lower than at the start of the audit period.
 - Schedule adherence was consistently above 99 percent throughout the audit period.
 - The rate of complaints decreased from 0.2 per 1,000 trips in FY2018 to 0.1 per 1,000 trips in FY2020. In terms of total number this represents a decrease from 20 complaint to 8 complaints over the audit period.
 - There were no missed trips reported during the audit period.

- There were no ADA trip denials throughout the audit period.
 - Total trip cancellations remained steady at around 30 percent of total ADA trips. Late trip cancellations also remained at approximately 10 percent of ADA trips.
 - The passenger no-show rate increased in each year, from 7.2 percent in FY2018 to 9.0 percent in FY2020.
- Maintenance
 - Total maintenance costs ranged from 3.9 percent to 4.8 percent of total operating costs during the audit period.
 - Vehicle maintenance costs per service mile held steady at approximately \$0.4 per service mile throughout the audit period.
 - The percentage of spare vehicles to total vehicles decreased from 65.5 percent in FY2018 to 41.7 percent in FY2020.
 - There were no major failures reported in FY2018 and FY2019. The mean distance between major failure in FY2020 was 72,292 miles.
 - The mean distance between all failures declined from 99,903 miles in FY2018 to 36,146 miles in FY2020, a drop of nearly 64 percent. Although this decrease appears substantial, it represents a change from three total failures in FY2018 to eight total failures in FY2020 (see p. A-4 of Appendix A).
 - Safety
 - The rate of preventable accidents remained steady at around 0.3 accidents per 100,000 vehicle miles in FY2018 and FY2019. Although the accident rate increased to 0.69 per 100,000 miles in FY2020, this represents only one additional accident in that year (see p. A-4 of Appendix A).

* * * * *

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

- Service Planning results showed steady performance in terms of in-service miles and hours operated as a percentage of total miles and hours. Despite ridership losses due to the pandemic emergency, passenger productivity exhibited only modest decreases.
- Operations results showed steady performance in terms of vehicle operations costs as a percentage of total operating costs. Vehicle operations cost per hour improved by 5.5 percent overall. Schedule adherence remained consistent high throughout the audit period, and the rates of complaints improved by more than half.

No ADA trip denials were reported during the entire audit period. While trip cancellation rates remained steady, the percentage of total and late cancellation appears unusually high at 30 percent and 10 percent, respectively. In addition, the no-show rate also appeared to be unusually high, between seven and eight percent in FY2018 and FY2019, respectively, an increasing to nine percent in FY2020.

- Maintenance performance results exhibited improvement throughout the audit period in terms of maintenance costs as a percentage of total costs, and maintenance costs per vehicle mile. Although the trend in service reliability (i.e., mean distance between failure) was downward, the actual number of failure in each year was rather low.
- While the trend in preventable accidents per 100,000 miles increased, there was only one accident per year in FY2018 and FY2019, and only two in FY2020.

Exhibit 10: Functional Performance Trends – Paratransit

| FUNCTION/Indicator | Actual Performance | | |
|--|--------------------|---------|---------|
| | FY2018 | FY2019 | FY2020 |
| SERVICE PLANNING | | | |
| Total Operating Cost/Passenger Mile | \$3.97 | \$4.62 | \$11.01 |
| <i>Annual Percent Change</i> | -- | 16.2% | 138.5% |
| <i>Three Year Percent Change</i> | -- | -- | 177.2% |
| Vehicle Service Miles/Total Miles | 80.6% | 78.7% | 79.1% |
| <i>Annual Percent Change</i> | -- | -2.4% | 0.5% |
| <i>Three Year Percent Change</i> | -- | -- | -1.9% |
| Vehicle Service Hours/Total Hours | 85.1% | 85.3% | 85.9% |
| <i>Annual Percent Change</i> | -- | 0.2% | 0.7% |
| <i>Three Year Percent Change</i> | -- | -- | 0.9% |
| Passengers/Vehicle Service Mile | 0.41 | 0.41 | 0.39 |
| <i>Annual Percent Change</i> | -- | 0.5% | -6.6% |
| <i>Three Year Percent Change</i> | -- | -- | -6.1% |
| Passengers/Vehicle Service Hour | 3.56 | 3.58 | 3.02 |
| <i>Annual Percent Change</i> | -- | 0.5% | -15.6% |
| <i>Three Year Percent Change</i> | -- | -- | -15.1% |
| OPERATIONS | | | |
| Vehicle Operations Cost/Total Operating Cost | 85.4% | 86.0% | 85.7% |
| <i>Annual Percent Change</i> | -- | 0.7% | -0.4% |
| <i>Three Year Percent Change</i> | -- | -- | 0.3% |
| Vehicle Operations Cost/Vehicle Service Hour | \$85.77 | \$88.20 | \$81.03 |
| <i>Annual Percent Change</i> | -- | 2.8% | -8.1% |
| <i>Three Year Percent Change</i> | -- | -- | -5.5% |
| Farebox Revenue/Operating Cost | 9.9% | 9.5% | 10.7% |
| <i>Annual Percent Change</i> | -- | -3.3% | 12.3% |
| <i>Three Year Percent Change</i> | -- | -- | 8.6% |
| TDA Recovery Ratio (a) | (b) | (b) | (b) |
| <i>Annual Percent Change</i> | -- | -- | -- |
| <i>Three Year Percent Change</i> | -- | -- | -- |
| Percentage of Trips On-Time | 99.97% | 99.98% | 99.98% |
| <i>Annual Percent Change</i> | -- | 0.0% | 0.0% |
| <i>Three Year Percent Change</i> | -- | -- | 0.0% |
| Complaints/1,000 Passenger Trips | 0.2 | 0.0 | 0.1 |
| <i>Annual Percent Change</i> | -- | -80.8% | 134.4% |
| <i>Three Year Percent Change</i> | -- | -- | -55.0% |
| Missed Trips/Total Trips | 0.0% | 0.0% | 0.0% |
| <i>Annual Percent Change</i> | -- | -- | -- |
| <i>Three Year Percent Change</i> | -- | -- | -- |

| FUNCTION/Indicator | Actual Performance | | |
|---|--------------------|--------|--------|
| | FY2018 | FY2019 | FY2020 |
| OPERATIONS (Continued) | | | |
| ADA Trip Denials/Total ADA Trips | 0.00% | 0.00% | 0.00% |
| <i>Annual Percent Change</i> | -- | -- | -- |
| <i>Three Year Percent Change</i> | -- | -- | -- |
| Trip Cancellations/Total ADA Trips | 30.5% | 28.3% | 30.8% |
| <i>Annual Percent Change</i> | -- | -7.2% | 9.0% |
| <i>Three Year Percent Change</i> | -- | -- | 1.2% |
| Late Cancellations/Total ADA Trips | 9.9% | 10.2% | 10.5% |
| <i>Annual Percent Change</i> | | 3.0% | 3.4% |
| <i>Three Year Percent Change</i> | | | 6.6% |
| No-Shows/Total ADA Trips | 7.2% | 7.9% | 9.0% |
| <i>Annual Percent Change</i> | -- | 9.5% | 14.4% |
| <i>Three Year Percent Change</i> | -- | -- | 25.3% |
| MAINTENANCE | | | |
| Vehicle + Non-Veh. Maint. Cost/Total Operating Cost | 4.8% | 4.4% | 3.9% |
| <i>Annual Percent Change</i> | -- | -7.8% | -12.4% |
| <i>Three Year Percent Change</i> | -- | -- | -19.3% |
| Vehicle Maintenance Cost/Vehicle Service Mile | \$0.41 | \$0.39 | \$0.38 |
| <i>Annual Percent Change</i> | -- | -4.1% | -1.4% |
| <i>Three Year Percent Change</i> | -- | -- | -5.4% |
| Spare Vehicles/Total Vehicles | 65.5% | 66.7% | 41.7% |
| <i>Annual Percent Change</i> | -- | 1.8% | -37.5% |
| <i>Three Year Percent Change</i> | -- | -- | -36.4% |
| Mean Distance between Major Failures (Miles) | (c) | (c) | 72,292 |
| <i>Annual Percent Change</i> | -- | -- | -- |
| <i>Three Year Percent Change</i> | -- | -- | -- |
| Mean Distance between All Failures (Miles) | 99,903 | 39,765 | 36,146 |
| <i>Annual Percent Change</i> | -- | -60.2% | -9.1% |
| <i>Three Year Percent Change</i> | -- | -- | -63.8% |
| SAFETY | | | |
| Preventable Accidents/100,000 Vehicle Miles | 0.33 | 0.31 | 0.69 |
| <i>Annual Percent Change</i> | -- | -5.8% | 120.0% |
| <i>Three Year Percent Change</i> | -- | -- | 107.3% |

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

(b) Not available

(c) No major failures reported

VII. CONCLUSIONS AND RECOMMENDATIONS

This report has presented the findings of the compliance audit portion of the performance audit of NVTA. The primary focus was the three-year audit period of FY2018 through FY2020 (July 1, 2017 through June 30, 2020). It has focused on TDA compliance issues including trends in TDA-mandated performance indicators and compliance with selected sections of the state Public Utilities Code (PUC). It also provides the findings from an overview of NVTA's data collection activities to support the TDA indicators. Performance results from the previous three years have also been included as applicable to provide a longer perspective on performance.

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

- Data Collection – NVTA is in compliance with the data collection and reporting requirements for the TDA statistics. In addition, the statistics collected over the six-year review period appear to be consistent with the TDA definitions, and indicate general consistency in terms of the direction and magnitude of the year-to-year changes across the statistics.
- TDA Performance Trends

NVTA'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 FY2015 through FY2020:

- The trend in operating cost per hour rose steadily throughout most of the analysis period, increasing an average of 5.2 percent per year in actual dollars and 2.3 percent in inflation-adjusted dollars.

- Passenger productivity exhibited steadily declining trends, with passengers per hour decreasing an average of 1.5 percent per year, and passengers per mile decreasing an average of 1.9 percent per year.
- Over the six-year analysis period, cost per passenger increased an average of 6.8 percent annually in actual dollars and 3.8 percent in inflation-adjusted dollars.

The following is a brief summary of the component operating costs trend highlights for the bus service between FY2015 and FY2020:

- Purchased transportation costs increased in nearly every year of the analysis period, but were held to an average of less than four percent per year.
- Service costs exhibited significant increases in FY2020, however, these costs represent only about two to three percent of total operating costs.
- Materials and supplies, the second largest cost category, exhibited up and down annual changes that resulted in an average annual change of less than one percent.
- Other expenses rose sharply in FY2020, but still only comprised 2.5 percent of total operating costs.

Paratransit – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2015 through FY2020:

- Paratransit cost per hour increased an average of 1.6 percent per year over the six years in actual terms, but exhibited a 1.2 percent decrease in constant, inflation-adjusted terms.
- Passenger productivity generally remained steady through most of the analysis period, but declined in FY2020 as a result of the pandemic impacts on ridership.

- Cost per passenger rose slowly and steadily through the six-year period posting an average increase of 7.2 percent per year in actual terms and a 4.3 percent per year increase in inflation-adjusted terms.

The following is a brief summary of the component operating costs trend highlights for paratransit between FY2015 and FY2020:

- Purchased transportation costs represented by far the largest portion of the total costs, ranging between 84 and 88 percent during the review period, and increased moderately an average 1.2 percent per year.
 - While representing a relatively small portion of total operating costs, both in-house labor and fringe benefits costs decreased over the six-year period.
 - Despite large swings, material and supplies costs remained virtually unchanged over the review period.
- PUC Compliance – NVRTA 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 – The prior audit found that schedule adherence on NVRTA’s bus system remained in a range of 76 to 78 percent. At the same time, paratransit schedule adherence decreased from 77 percent in FY2015 to 75 percent in FY2017. In order to provide more reliable service, it was recommended that NVRTA and its contractor expand efforts toward improving on-time performance across its services. While paratransit on-time performance has greatly improved, bus service on-time performance remains problematic due to inaccuracies of data collected by NVRTA’s aging CAD/AVL equipment. The implementation of this recommendation is still in progress, and has been carried forward into this audit.

The prior audit recommendation related to the bus and paratransit accident rates has been closed.

- Functional Performance Indicator Trends

To further assess NVTA'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 FY2018 and FY2020:

- Administrative costs remained fairly steady in terms of percentage of total operating costs (about 18 to 19 percent) and administrative costs per vehicle service hour (about \$18 per hour).
- Revenue recovery exhibited a downward trend during the first two years of the audit period, which was exacerbated by the suspension of fare collection due to the COVID public health emergency.

Bus Service – The following is a brief summary of the bus service functional trend highlights between FY2018 and FY2020:

- Service Planning results generally showed consistent performance in terms of in-service miles and hours, as well as in passenger productivity between FY2018 and FY2019. Performance in FY2020 for these measures was negatively impacted as a result of the pandemic response.
- Operations results showed steady performance throughout the audit period in terms of vehicle operations costs as a percentage of total operating cost. Schedule adherence remained at a relatively low level with performance between 66 and 68 percent of trips on-time.
- Maintenance costs were steadily at 12 percent of total operating costs. There was substantial improvement in the rate of major mechanical failures over the audit period for both major failures and all failures.
- The rate of preventable accidents remained consistent with performance observed in the prior audit period.

Paratransit – The following is a brief summary of the paratransit functional trend highlights between FY2018 and FY2020:

- Service Planning results showed steady performance in terms of in-service miles and hours operated as a percentage of total miles and hours. Despite ridership losses due to the pandemic emergency, passenger productivity exhibited only modest decreases.
- Operations results showed steady performance in terms of vehicle operations costs as a percentage of total operating costs. Vehicle operations cost per hour improved by 5.5 percent overall. Schedule adherence remained consistent high throughout the audit period, and the rates of complaints improved by more than half.

No ADA trip denials were reported during the entire audit period. While trip cancellation rates remained steady, the percentage of total and late cancellation appears unusually high at 30 percent and 10 percent, respectively. In addition, the no-show rate also appeared to be unusually high, between seven and eight percent in FY2018 and FY2019, respectively, an increasing to nine percent in FY2020.

- Maintenance performance results exhibited improvement throughout the audit period in terms of maintenance costs as a percentage of total costs, and maintenance costs per vehicle mile. Although the trend in service reliability (i.e., mean distance between failure) was downward, the actual number of failure in each year was rather low.
- While the trend in preventable accidents per 100,000 miles increased, there was only one accident per year in FY2018 and FY2019, and only two in FY2020.

Recommendations

1. CONTINUE TO MONITOR SCHEDULE ADHERENCE ON THE BUS SERVICE AND DEVELOP STRATEGIES FOR IMPROVEMENT.

[Reference Section: V. Status of Prior Audit Recommendations; VI. Functional Performance Indicator Trends]

The prior audit period found that schedule adherence on NVTA's bus system ranged from 76 percent to 78 percent. In response to this performance, a recommendation was made to expand efforts toward improving on-time performance, including additional monitoring activities to identify the causes of service delays, and a plan for addressing the circumstances found that are hindering on-time operations. Through its monitoring efforts, NVTA concluded that the bus on-time performance from its CAD/AVL system is not providing accurate information. NVTA noted that the current CAD/AVL system is nearly seven years old and approaching the end of its useful life. The current system uses a communication threshold of 60 seconds, whereas new systems have thresholds of every ten seconds. As such, vehicle positioning may not always be as accurate as it could be. Furthermore, discrepancies between the scheduled locations and the location and size of the trigger boxes that surround the stops appear to be generating errors in reporting the actual location of vehicles.

Bus service on-time performance worsened during this audit period with results between 66 percent and 68 percent. NVTA reported that they have issued an RFP for a new CAD/AVL system to replace the existing system, and anticipates that the new system will be in place sometime during 2021. Once the system is in place, NVTA should continue reporting its on-time performance to MTC to ensure that the new system and monitoring procedures are recording accurate information. Should bus on-time performance continue to be at the same level, NVTA should develop strategies to leverage the new technology to improve schedule adherence.

2. TAKE STEPS TO REDUCE THE HIGH RATES OF TRIP CANCELLATIONS, LATE CANCELLATIONS, AND NO-SHOWS ON THE PARATRANSIT SERVICE.

[Reference Section: VI. Functional Performance Indicator Trends]

Trip cancellations and late cancellations on NVTA's paratransit service are consistently around 30 percent and 10 percent, respectively. Furthermore, the rate of no-shows not only is unusually high, but increased from 7.2 percent to 9.0 percent over the audit period.

NVTA should examine the reasons for the large number of cancellations, late cancellations, and no-shows to determine how policies and procedures can be modified to reduce their number.

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

Functional Performance Inputs - Systemwide (All Modes)

| Data Item | FY2018 | FY2019 | FY2020 | Source |
|-----------------------------|--------------|--------------|--------------|----------------|
| Total Operating Costs | \$10,697,525 | \$11,137,759 | \$11,456,609 | NTD F-40 |
| Administrative Costs | \$1,974,093 | \$2,036,927 | \$2,187,235 | NTD F-40 |
| Vehicle Service Hours | 110,339 | 112,331 | 107,414 | NTD S-10 MB+DR |
| Marketing Costs | \$114,864 | \$62,547 | \$84,074 | NVTA Staff |
| Unlinked Passenger Trips | 1,099,777 | 1,059,168 | 824,827 | NTD S-10 MB+DR |
| Farebox Revenue (All Modes) | \$1,233,441 | \$1,141,869 | \$902,170 | NTD F-10 |

Functional Performance Inputs – Bus Service

| Data Item | FY2018 | FY2019 | FY2020 | Source |
|--|-------------|-------------|-------------|---------------------------|
| Vehicle Service Miles | 1,479,476 | 1,489,139 | 1,457,304 | NTD S-10 MB |
| Total Vehicle Miles | 1,557,918 | 1,576,485 | 1,505,153 | NTD S-10 MB |
| Vehicle Service Hours | 82,365 | 83,350 | 78,124 | NTD S-10 MB |
| Total Vehicle Hours | 103,755 | 104,123 | 98,150 | NTD S-10 MB |
| Unlinked Passenger Trips | 1,000,202 | 955,467 | 736,341 | NTD S-10 MB |
| Farebox Revenue | \$956,349 | \$858,281 | \$605,205 | NTD F-10 |
| Total Operating Costs | \$7,889,072 | \$8,165,855 | \$8,685,573 | NTD F-30 MB |
| Passenger Miles | 9,581,355 | 7,090,062 | 6,009,947 | NTD S-10 MB |
| Vehicle Operations Costs | \$5,283,217 | \$5,474,579 | \$5,726,665 | NTD F-30 MB |
| Local Support (a) | (d) | (d) | (d) | |
| TDA Oper. Cost Exclusions - PUC 99247 (b) | (d) | (d) | (d) | |
| TDA Oper. Cost Exclusions - PUC 99268.17 (c) | (d) | (d) | (d) | |
| Trips On-Time | 68.1% | 66.6% | 66.0% | Avail |
| Total Trips (Scheduled) | 500,038 | 476,487 | 238,460 | Avail |
| Complaints | 99.0 | 130.0 | 150.0 | HappyFox/Complaints Log |
| Missed Trips | 34 | 28 | 64 | MB-CB NTD |
| Vehicle Maintenance Costs | \$872,007 | \$882,936 | \$975,885 | NTD F-30 MB |
| Non-Vehicle/Facility Maintenance Costs | \$33,864 | \$55,429 | \$85,914 | NTD F-30 MB |
| Spare Vehicles (Total less Maximum Service) | 13 | 8 | 24 | NTD S-10 MB |
| Total Vehicles | 44 | 41 | 57 | NTD S-10 MB |
| Revenue Vehicle Mechanical System Failures - Total | 52 | 43 | 38 | NTD R-20 |
| Revenue Vehicle Mechanical System Failures - Major | 15 | 17 | 10 | NTD R-20 |
| Preventable Accidents (NTD Guidelines) | 12 | 11 | 16 | Transdev Incident Reports |
| Casualty/Liability Costs | \$284,535 | \$274,334 | \$305,857 | NTD F-30 MB |

(a) Local Support includes the following (USOA revenue class in parentheses):

- Auxiliary transportation revenue (406)
- Taxes directly levied (408)
- Local cash grants and reimbursements (409)
- Local special fare assistance (410)
- Subsidy from other sectors of operation (440)
- Other non-federal/non-state grant funds or other revenues

(b) Operating expense object classes exclusive of the following pursuant to PUC Section 99247:

- depreciation and amortization expenses
- subsidies for commuter rail services operated on railroad lines under the jurisdiction of the Federal Railroad Administration
- costs for providing charter services
- vehicle lease costs
- principal and interest payments on capital projects funded with certificates of participation

(c) Operating expense object class exclusions pursuant to PUC Section 99268.17:

- additional operating costs for federally required ADA paratransit service that exceed prior year costs (CPI adjusted)
- cost increases beyond the CPI change for: fuel; alternative fuel programs; power (including electricity);
- insurance premiums/liability claims payouts; state and federal mandates
- start-up costs for new services (not more than two years)

(d) Not available

Functional Performance Inputs – Paratransit

| Data Item | FY2018 | FY2019 | FY2020 | Source |
|--|-------------|-------------|-------------|--|
| Vehicle Service Miles | 241,589 | 250,352 | 228,605 | NTD S-10 DR |
| Total Vehicle Miles | 299,709 | 318,120 | 289,166 | NTD S-10 DR |
| Vehicle Service Hours | 27,974 | 28,981 | 29,290 | NTD S-10 DR |
| Total Vehicle Hours | 32,864 | 33,994 | 34,116 | NTD S-10 DR |
| Unlinked Passenger Trips | 99,575 | 103,701 | 88,486 | NTD S-10 DR |
| Farebox Revenue | \$277,092 | \$283,588 | \$296,965 | NTD F-10 |
| Total Operating Costs | \$2,808,453 | \$2,971,904 | \$2,771,036 | NTD F-30 DR |
| Passenger Miles | 706,983 | 643,647 | 251,609 | NTD S-10 DR |
| Vehicle Operations Costs | \$2,399,361 | \$2,556,216 | \$2,373,410 | NTD F-30 DR |
| Local Support (a) | (d) | (d) | (d) | |
| TDA Oper. Cost Exclusions - PUC 99247 (b) | (d) | (d) | (d) | |
| TDA Oper. Cost Exclusions - PUC 99268.17 (c) | (d) | (d) | (d) | |
| Trips On-Time (within 30 minute window) | 23,382 | 24,654 | 18,909 | ADA Paratransit Ops.Report |
| Total Trips | 23,388 | 24,659 | 18,913 | ADA Paratransit Ops.Report |
| Complaints | 20 | 4 | 8 | ADA Paratransit Ops.Report/HappyFox/Complaints |
| Missed Trips | 0 | 0 | 0 | ADA Paratransit Ops.Report |
| Total ADA Trips | 23,388 | 24,659 | 18,913 | ADA Paratransit Ops.Report |
| ADA Trip Denials | 0 | 0 | 0 | ADA Paratransit Ops.Report |
| Trip Cancellations | 7,131 | 6,975 | 5,833 | ADA Paratransit Ops.Report |
| Late Trip Cancellations | 2,307 | 2,506 | 1,988 | ADA Paratransit Ops.Report |
| No Shows | 1,684 | 1,945 | 1,706 | ADA Paratransit Ops.Report |
| Vehicle Maintenance Costs | \$98,236 | \$97,656 | \$87,960 | NTD F-30 DR |
| Non-Vehicle/Facility Maintenance Costs | \$36,747 | \$34,016 | \$19,540 | NTD F-30 DR |
| Spare Vehicles (Total less Maximum Service) | 19 | 16 | 10 | NTD S-10 DR |
| Total Vehicles | 29 | 24 | 24 | NTD S-10 DR |
| Revenue Vehicle Mechanical System Failures - Total | 3 | 8 | 8 | NTD R-20 |
| Revenue Vehicle Mechanical System Failures - Major | 0 | 0 | 4 | NTD R-20 |
| Preventable Accidents | 1 | 1 | 2 | ADA Paratransit Ops.Report |

(a) Local Support includes the following (USOA revenue class in parentheses):

- Auxiliary transportation revenue (406)
- Taxes directly levied (408)
- Local cash grants and reimbursements (409)
- Local special fare assistance (410)
- Subsidy from other sectors of operation (440)
- Other non-federal/non-state grant funds or other revenues

(b) Operating expense object classes exclusive of the following pursuant to PUC Section 99247:

- depreciation and amortization expenses
- subsidies for commuter rail services operated on railroad lines under the jurisdiction of the Federal Railroad Administration
- costs for providing charter services
- vehicle lease costs
- principal and interest payments on capital projects funded with certificates of participation

(c) Operating expense object class exclusions pursuant to PUC Section 99268.17:

- additional operating costs for federally required ADA paratransit service that exceed prior year costs (CPI adjusted)
- cost increases beyond the CPI change for: fuel; alternative fuel programs; power (including electricity);
- insurance premiums/liability claims payouts; state and federal mandates
- start-up costs for new services (not more than two years)

(d) Not available