Triennial Performance Audit

of the

Napa Valley Transportation Authority (NVTA)

Fiscal Years 2020/21, 2021/22 and 2022/23

FINAL AUDIT REPORT

prepared for the

METROPOLITAN TRANSPORTATION COMMISSION

by

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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 2021 through 2023 (from July 1, 2020 through June 30, 2023).

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 have been incorporated into this final report. Highlights of 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.

There was one discrepancy noted for the paratransit services in FY2021 during the peak of the COVID pandemic. NVTA experienced an 11 percent decline in ridership from the prior year, yet vehicle service hours and miles both increased more than 30 percent and operating costs increased over 43 percent the same year. Typically, reduced ridership would result in decreased service hours and miles. NVTA explained that due to the pandemic, demand response transportation was restricted to the number of passengers on board the vehicles due to state mandated distancing requirements. This resulted in more trips being required, and more service hours and miles, to transport fewer passengers.

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 FY2018 through FY2023:

- The trend in operating cost per hour rose steadily throughout the analysis period, increasing an average of 11.8 percent per year in actual dollars and 8.8 percent in inflation-adjusted dollars.

- Passenger productivity exhibited steadily declining trends, with passengers per hour decreasing an average of 11 percent per year, and passengers per mile decreasing an average of 10.9 percent per year.

- Over the six-year analysis period, cost per passenger increased an average of 25.6 percent annually in actual dollars and 22.2 percent in inflation-adjusted dollars.

The following is a brief summary of the component operating costs trend highlights for the bus service between FY2018 through FY2023:

- Purchased transportation costs increased in most years of the analysis period but averaged an increase of just over four percent per year. Purchased transportation comprised over 75 percent of total operating costs each year.

- Labor and fringe benefits costs increased an average of eight and 5.9 percent per year, respectively, but only comprised about three percent of annual total operating costs.

- Services costs fluctuated over the analysis period but increased an average of 8.6 percent annually. Services costs represent less than five percent of total operating costs.

- Materials and supplies, the second largest cost category, also exhibited up and down annual changes, resulting in an average annual increase of 8.7 percent.

- Other expenses rose in almost every year, but generally comprised less than one percent of total operating costs.

- Paratransit – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2018 through FY2023:

- Paratransit cost per hour increased an average of 2.3 percent per year over the six years in actual terms, but exhibited a slight 0.5 percent decrease in constant, inflation-adjusted terms.

- Passenger productivity declined through the analysis period, with an 8.6 percent average annual decrease in passengers per hour, and 6.8 percent in passengers per mile.

- Cost per passenger rose in every year except FY2022, posting an average increase of 11.9 percent per year in actual terms and an 8.9 percent per year increase in inflation-adjusted terms.

The following is a brief summary of the component operating costs trend highlights for paratransit between FY2018 through FY2023:

- Total operating costs increased an average of 5.7 percent per year. The highest annual increase (43.7 percent) occurred in FY2021, likely due to passenger limits required due to the COVID pandemic, resulting in higher service miles and hours. NVTA will be providing additional information on that FY2021 cost increase.

- Purchased transportation costs represented by far the largest portion of the total costs, ranging between 82 and 85 percent during the review period, and increased an average of 5.6 percent per year.

- While representing a small portion of total operating costs, both in-house labor and fringe benefits costs increased about 10 percent annually over the six-year period.

- Fluctuations from year to year notwithstanding, services and material and supplies costs averaged modest increases over the analysis period, at 1.4 percent and 2.8 percent per year, respectively.

- Casualty/liability and other expenses both experienced double digit average annual increases but comprised less than five percent of total operating costs combined.

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. The prior audit found that schedule adherence on NVTA's bus system remained in a range of 66 to 68 percent, down from 76 to 78 percent in the preceding audit period. It was recommended that NVTA and its contractor continue to monitor on-time performance and develop strategies toward improving on-time performance for its bus services. NVTA identified several causes for decreased bus schedule adherence, including an outdated CAD/AVL system, and operator related issues, including COVID related absences, reduction of the fixed-route services during the pandemic, and increased operator training.

NVTA implemented several strategies to improve on-time performance, including procuring a new GMS Syncromatics CAD/AVL system in mid-2021, updating the on-board mobile units to the latest software version, implementing contractor log-in monitoring and observation to address operator errors, and reestablishing the fixed-route schedule and routes to pre-pandemic levels. While some of the schedule adherence problems are beyond NVTA control, such as COVID related staffing issues and missed trips related to them, the on-time performance remains problematic, as seen in the current audit period on-time performance percentages. The implementation of this recommendation is still in progress and has been carried forward into this audit.

The second recommendation in the previous audit is that NVTA take steps to reduce the rates of trip cancellations, late trip cancellations, and no-show incidents observed on NVTA's paratransit services over the audit period. The percentage of cancellations and late cancellations was calculated at about 30 percent and 10 percent, respectively, and the percentage of no-shows increased from 7.2 percent to nine percent over the last audit period. NVTA explained that the COVID pandemic had a negative impact on the number of cancellations and no-shows. NVTA indicated it had been overly accommodating to riders during the pandemic, but realized it needed to more strictly enforce its cancellation and no-show policies to decrease the percentages of cancellations and no-shows.

NVTA's efforts appear to be working, as the current audit period shows cancellations down over 13 percent and late cancellations down almost two percent overall. The trend in no-show riders did increase during this audit period, from 5.1 percent in FY2021 to 6.2 percent in FY2023, but those percentages are lower than those recorded for no-shows in the prior audit. NVTA is encouraged to continue monitoring the percentage of no-shows to try to negate the current trend, but no recommendation is made for specific activities. This recommendation is considered implemented.

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 (All Modes) – The following is a brief summary of the systemwide functional trend highlights between FY2021 and FY2023:
  - Administrative costs fluctuated between FY2021 and FY2022 but ended up increasing in terms of percentage of total operating costs

(about five percent) and administrative costs per vehicle service hour (over 37 percent).

- Marketing costs decreased significantly by about 84 percent overall, both in terms of percentage of total administrative costs and in cost per passenger trip.

- Revenue recovery showed an improving trend during the audit period, increasing 17 percent overall, suggesting the beginning of a recovery from the pandemic years.

- Bus Service – The following is a brief summary of the bus service functional trend highlights between FY2021 and FY2023:

  - Service Planning results showed increasing costs per passenger mile, mixed performance in terms of in-service miles and hours, with a small increase in in-service miles, and a small decrease in in-service hours, and consistent improvement in passenger productivity between FY2021 and FY2023.

  - Operations results showed an almost nine percent increase in terms of vehicle operations costs as a percentage of total operating cost, and a 48.8 percent increase in operating cost per vehicle service hour, largely due to a new operating contract that began in FY2021. Schedule adherence decreased by 14 percent overall, and the rate of complaints decreased by 45 percent. Farebox recovery increased over 40 percent during the audit period, while the TDA fare recovery ratio, which includes local support less operating cost exclusions, increased by more than 24 percent. The number of missed trips saw a significant overall percentage increase (614 percent), but in actual performance, comprised less than one percent of total trips each year.

  - Maintenance costs were lower overall, with a 30 percent decrease as a percent of total operating costs, and a six percent decrease in maintenance cost per service mile. The spare ratio decreased by 53.3 percent overall. Performance in the rate of mechanical failures fluctuated, with mean distance between major mechanical failures and all failures increasing between FY2021 and FY2022, but then

decreasing in FY2023, by about 63 percent and 42 percent, respectively.

– The rate of preventable accidents increased modestly from 1.10 per 100,000 miles in FY2021, to 1.47 in FY2023.

- Paratransit – The following is a brief summary of the paratransit functional trend highlights between FY2021 and FY2023:

  – Service Planning results showed a modest eight percent decrease in total operating cost per passenger mile, and mixed performance in terms of in-service miles (13.6 percent decrease), and hours (3.2 percent increase), operated as a percentage of total miles and hours. Passenger productivity also exhibited mixed results with a 14.3 percent increase in passenger per vehicle service mile and a 3.4 percent decrease in passengers per vehicle service hour.

  – Operations results showed decreases both in terms of vehicle operations costs as a percentage of total operating costs, and vehicle operations cost per hour. The farebox recovery ratio increased by about eight percent, while schedule adherence remained consistently high throughout the audit period. No complaints were recorded during the audit period.

    No ADA trip denials were reported during the entire audit period, while both total trip cancellations and late cancellations rates decreased, by 13.3 percent and 1.4 percent, respectively. The no-show did increase from 5.1 percent to 6.2 percent between FY2021 and FY2023.

  – Maintenance performance results showed significantly higher costs over the audit period in terms of maintenance costs as a percentage of total costs, and maintenance costs per vehicle mile. Although the overall trend in service reliability (i.e., mean distance between failures) was negative, there were never more than eleven failures reported in any year.

  – No preventable accidents were reported in any year of the audit period.

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]

   It was recommended that NVTA and its contractor continue to monitor on-time performance and develop strategies toward improving on-time performance for its bus services. NVTA identified several causes for decreased bus schedule adherence, including an outdated CAD/AVL system, and operator related issues, including COVID related absences, reduction of the fixed-route services during the pandemic, and increased operator training.

   NVTA implemented several strategies to improve on-time performance, including procuring a new GMS Syncromatics CAD/AVL system in mid-2021, updating the on-board mobile units to the latest software version, implementing contractor log-in monitoring and observation to address operator errors, and reestablishing the fixed-route schedule and routes to pre-pandemic levels. While some of the schedule adherence problems are beyond NVTA control, such as COVID related staffing issues and missed trips related to them, the on-time performance remains problematic, as seen in the current audit period on-time performance percentages, which are down by about 14 percent overall. It is recommended that NVTA continue its efforts in monitoring the on-time performance of its bus service and working with the contractor to improve schedule adherence.

2. TAKE STEPS TO IMPROVE MECHANICAL RELIABILITY ON NVTA'S BUS AND PARATRANSIT SERVICES.
[Reference Section: VI. Functional Performance Indicator Trends]

The mean distance between major and all mechanical failures on NVTA's bus system decreased overall by 63 percent and 41 percent, respectively, during the audit period, from 100,407 miles to 37,201 miles for major failures, and from 32,389 to 18,906 miles for all failures, despite more positive results in the interim year. For the paratransit side, mean distance between major failures decreased 3.8 percent overall from 185,453 miles to 178,468 miles, and 56 percent overall for all failures from 74,181 to 32,449 miles. In actual numbers, these results represent an almost doubling of bus system total failures from 31 in FY2021 to 61 in FY2023, while major failures tripled from 10 to 31 in the same period. The numbers for paratransit were not as high, with total failures increasing from five to eleven, and major failures remaining at one or two per year.

NVTA has identified the age of both its fixed-route and paratransit fleets as a major contributor to its mechanical reliability. NVTA has experienced both administrative and mechanical delays in upgrading its revenue vehicle fleet. NVTA received a federal NOLO low-emission vehicle grant for five electric buses in FY2016/2017, however due to delays in testing and manufacturing the vehicles, they were not delivered until FY2022, resulting in NVTA running buses that should have been replaced for an additional four years past their useful service life. On the paratransit side, NVTA has experienced delays in reeiving federal funding for vehicles through its funding partner, Caltrans. Delays of up to two years between the federal grant award and receiving a final Standard Agreement from Caltrans to purchase vehicles again resulted in NVTA operating revenue vehicles beyond their useful service life, increasing the frequency of breakdowns.

Although the number of failures is not inordinately high, the increase, especially between FY2022 and FY2023 on the bus side, points to a potentially troublesome maintenance issue which NVTA should address in coordination with its operating contractor. While delays in purchasing new vehicles are beyond NVTA's control, efforts should be made to improve mechanical reliability, such as strategies to improve mechanic training, increased staffing as necessary, and enhanced monitoring activities to ensure that mechanical issues are identified and corrected before they have a chance to escalate further.

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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 2021 through 2023 (from July 1, 2020 through June 30, 2023).

An overview of NVTA 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 NVTA 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 both phases. Comments received from NVTA and MTC staff regarding the draft report were incorporated into this final audit report.

Exhibit 1: System Overview

Location

Headquarters: 625 Burnell Street, Napa CA 94559

Establishment

In 1998, the Napa Country Transportation & Planning Agency (NCTPA) was formed by the cities of American Canyon, Calistoga, Napa, St. Helena, the town of Yountville, and the County of Napa. The joint powers agreement was updated in May 1998 to provide public transportation services in Napa County. 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 NVTA's transit services are provided through a third-party contract with Transdev Services. 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 Board of Supervisors, 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

NVTA administrative staff is located on the 2nd floor of the Soscol Gateway Transit Center at 625 Burnell Street in Napa. NVTA has three Park and Ride facilities in Napa and one in Yountville.

NVTA's Vine fixed-route fleet includes 45 transit vehicles, including 7 battery electric buses, and 15 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. Electric vehicles charge on site at 720 Jackson Street. NVTA will be moving to a new bus maintenance facility expected to be in service in February 2024. Electric vehicles will charge on site at the new bus maintenance facility located at 101 Sheehy Court in Napa.

The current bus yard and new maintenance facility also houses Transdev Services employees. Nine additional community shuttle vehicles are stored and fueled in their respective cities but return to the Jackson Street yard for maintenance.

Service Data

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, and lifeline taxi programs.

Fixed-route Vine service operates locally in the City of Napa on six routes (Routes B through G). In addition, there are two regional routes- Routes 10, which

provides regional service between Calistoga and Napa Valley College; and Route 11 which provides service between Redwood Park & Ride in the City of Napa and the San Francisco Bay Ferry Terminal in Vallejo. Three express routes: - Routes 11X (Napa-Vallejo Express), 21 (Napa-Solano Express), and 29 (Napa-BART Express) provide commuter express service with limited stops.

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 11X, 21 and 29 operate only on weekdays. NVTA breaks out its fares into three fare categories, full fare, youth fare, and half fare. Full cash fare is $1.60 paid by individuals between the ages of 19 and 64, a youth fare of $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 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) are also available.

NVTA also currently operates four community shuttles: American Canyon Transit, Calistoga Shuttle, St. Helena Butterfly, and Yountville Bee. All are on-demand services 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 ¾ 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 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 a more linear and bidirectional service.

In the wake of the COVID-19 pandemic, Vine Transit quickly adapted to the changing transportation demands of the residents of Napa County. Shifting from fixed route service to a primarily on-demand service model allowed more flexibility for transit riders during this time. As health conditions improved in Napa County, NVTA gradually returned to fixed route service models, implementing local Routes N, S, E, and W in the City of Napa. As of August 13, 2023, Vine Transit restructured service to emulate pre-pandemic operations and provide

expanded fixed route transit service within the City of Napa through the implementation of new fixed routes B-G.

Planned Changes

NVTA'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 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, completing construction of a new maintenance facility, equipment purchases to improve efficiency, effectiveness and safety, and acquisition of real-time signage technology.

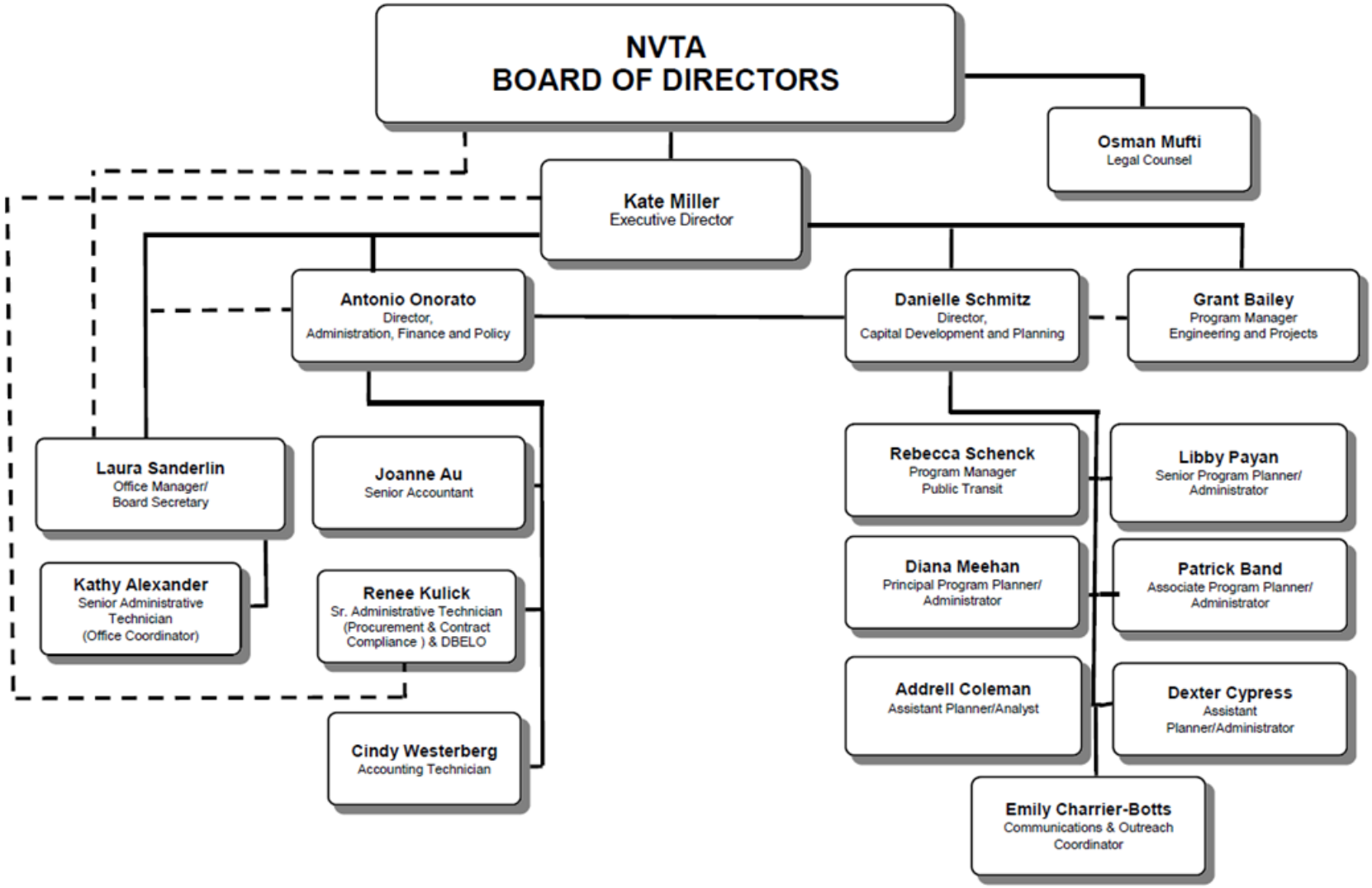
Staff

At the end of the audit period, the NVTA administrative staff consisted of 16 employee positions organized as follows. Of these positions, 1.5 full time equivalent (FTE) was devoted to public transit operations.

:

Organizational Unit	Number of Positions
Executive Director's Office	1
Administration, Finance, and Policy	6
Capital Development and Planning	8
Engineering and Projects	1
TOTAL	16

Exhibit 2: Audit Period Organization Chart



II. REVIEW OF TDA DATA COLLECTION AND REPORTING METHODS

This section focuses on the five performance indicators required by TDA law. These indicators have been defined by the state PUC to evaluate the transit operator's efficiency, effectiveness, and economy. The purpose of this review is to determine if 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.

There was one discrepancy noted for the paratransit services in FY2021 during the peak of the COVID pandemic. NVTA experienced an 11 percent decline in ridership from the prior year, yet vehicle service hours and miles both increased more than 30 percent and operating costs increased over 43 percent the same year. Typically, reduced ridership would result in decreased service hours and miles. NVTA explained that due to the pandemic, demand response transportation was restricted to the number of passengers on board the vehicles due to state mandated distancing requirements. This resulted in more trips being required, and more service hours and miles, to transport fewer passengers.

Exhibit 3.1: Compliance with TDA Data Collection and Reporting Requirements

TDA Statistic	TDA Definition	Compliance Finding	Verification Information
Operating Cost	"Operating cost" means all costs in the operating expense object classes exclusive of the costs in the depreciation and amortization expense object class of the uniform system of accounts and records adopted by the Controller pursuant to Section 99243. Also excluded are all subsidies for commuter rail services operated on railroad lines under the jurisdiction of the Federal Railroad Administration, all direct costs for providing charter services, all vehicle lease costs, and principal and interest payments on capital projects funded with certificates of participation.	In Compliance	• 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	"Vehicle service hours" means the total number of hours that each transit vehicle is in revenue service, including layover time.	In Compliance	• 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 in 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	• 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	• 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 be 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	• 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	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Operating Cost (Actual $)	$7,889,072	$8,165,855	$8,685,573	$5,704,979	$9,037,432	$10,179,735
Annual Change	*- -*	*3.5%*	*6.4%*	*-34.3%*	*58.4%*	*12.6%*
Vehicle Service Hours	82,365	83,350	78,124	46,749	60,474	60,830
Annual Change	*- -*	*1.2%*	*-6.3%*	*-40.2%*	*29.4%*	*0.6%*
Vehicle Service Miles	1,479,476	1,489,139	1,457,304	894,942	1,052,870	1,086,917
Annual Change	*- -*	*0.7%*	*-2.1%*	*-38.6%*	*17.6%*	*3.2%*
Unlinked Passengers	1,000,202	955,467	736,341	236,082	369,444	413,166
Annual Change	*- -*	*-4.5%*	*-22.9%*	*-67.9%*	*56.5%*	*11.8%*
Employee Full-Time Equivalents	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*
Annual Change	*- -*	*- -*	*- -*	*- -*	*- -*	*- -*

Sources: FY2018 through FY2020 - Prior Performance Audit Report
FY2021 through FY2023 - NTD Reports

(a) Not applicable as NVTA service is provided by private contractor

Exhibit 3.3: TDA Statistics – Paratransit

TDA Statistic	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023
Operating Cost (Actual $)	$2,808,453	$2,971,904	$2,771,036	$3,964,363	$3,177,680	$3,708,684
Annual Change	*- -*	*5.8%*	*-6.8%*	*43.1%*	*-19.8%*	*16.7%*
Vehicle Service Hours	27,974	28,981	29,290	38,592	33,449	32,933
Annual Change	*- -*	*3.6%*	*1.1%*	*31.8%*	*-13.3%*	*-1.5%*
Vehicle Service Miles	241,589	250,352	228,605	310,614	258,281	258,397
Annual Change	*- -*	*3.6%*	*-8.7%*	*35.9%*	*-16.8%*	*0.0%*
Unlinked Passengers	99,575	103,701	88,486	78,711	71,821	74,829
Annual Change	*- -*	*4.1%*	*-14.7%*	*-11.0%*	*-8.8%*	*4.2%*
Employee Full-Time Equivalents	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*
Annual Change	*- -*	*- -*	*- -*	*- -*	*- -*	*- -*

Sources: FY2018 through FY2020 - Prior Performance Audit Report
FY2021 through FY2023 - NTD Reports

(a) Not applicable as NVTA service is provided by private contractor

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.

In addition to presenting performance for the three years of the audit period (FY2021 through FY2023), 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 FY2021 to FY2023 trend lines have been combined with those from the prior audit period (FY2018 through FY2020) 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 NVTA'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 NVTA'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 11.8 percent annually during the six-year review period.
  - The cost per hour ranged from a low of $95.78 in FY2018 to a high of $167.35 in FY2023.
  - The rise in cost per hour was driven by increases in total operating costs, including a new contract with the operations contractor beginning in late 2021 combined with decreased service levels in response to the COVID pandemic, specifically in FY2020 and FY2021, which exacerbated this trend.
  - In FY2018 constant dollars, there was an average annual increase in this indicator of 8.8 percent.

- Passengers per Vehicle Service Hour (Exhibit 4.2)

  - A key indicator of passenger productivity, passengers per hour exhibited a steady decline between FY2018 and FY2021, before recovering a bit in the last two years of the analysis period.

  - Passengers per hour decreased from 12.1 in FY2018 to 5.0 in FY2021, before increasing to 6.8 by FY2023, as the pandemic waned, and ridership and service levels began improving.

  - Productivity was greatly impacted by the COVID pandemic, with a 75 percent decrease in ridership, and an almost 44 percent decrease in service hours between FY2019 and FY2021 .

- Passengers per Vehicle Service Mile (Exhibit 4.2)

  - Similar to passengers per hour, passengers per mile also exhibited a steady decline between FY2018 and FY2021, before seeing some recovery in the last two years of the analysis period.

  - From its peak of 0.68 passengers per mile in FY2018, the performance of this indicator dropped to 0.26 passengers per mile in FY2021 due to the pandemic impacts, before improving to 0.38 in FY2023.

  - Between FY2019 and FY2021, vehicle service miles decreased almost 40 percent during the pandemic years.

- Operating Cost per Passenger (Exhibit 4.3)

  - A key measure of cost effectiveness, the cost per passenger rose consistently between FY2018 and FY2023, from $7.89 to $24.64.

  - The overall change in this indicator over the analysis period was an average increase of 25.6 percent per year. Adjusted for inflation, the resulting average annual change was 22.2 percent per year.

  - The increase in cost per passenger is due to the decline in ridership during the pandemic combined with operating costs increasing in all but one year (FY2021) of the six-year analysis period.

* * * * *

The following is a brief summary of the bus service TDA performance trend highlights over the six-year period of FY2018 through FY2023:

- The trend in operating cost per hour rose steadily throughout the analysis period, increasing an average of 11.8 percent per year in actual dollars and 8.8 percent in inflation-adjusted dollars.
- Passenger productivity exhibited steadily declining trends, with passengers per hour decreasing an average of 11 percent per year, and passengers per mile decreasing an average of 10.9 percent per year.
- Over the six-year analysis period, cost per passenger increased an average of 25.6 percent annually in actual dollars and 22.2 percent in inflation-adjusted dollars.

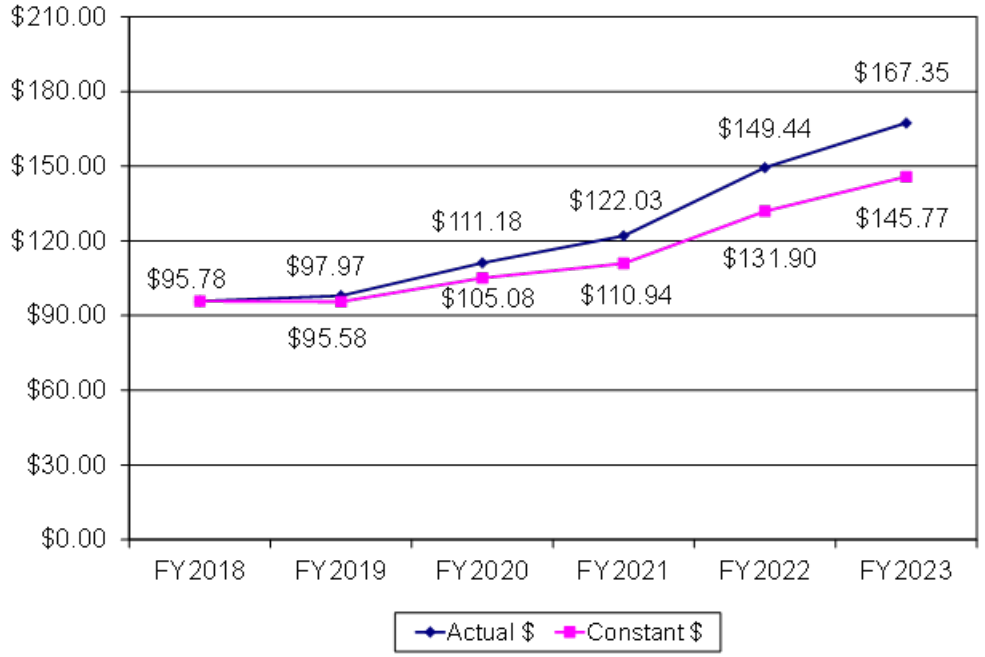
Exhibit 4: TDA Indicator Performance - Bus Service

	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	Av. Ann. Chg.
Performance Indicators							
Op. Cost per Vehicle Svc. Hour (Actual $)	$95.78	$97.97	$111.18	$122.03	$149.44	$167.35	- -
Annual Change	- -	*2.3%*	*13.5%*	*9.8%*	*22.5%*	*12.0%*	*11.8%*
Op. Cost per Vehicle Svc. Hour (Constant $)	$95.78	$95.58	$105.08	$110.94	$131.90	$145.77	- -
Annual Change	- -	*-0.2%*	*9.9%*	*5.6%*	*18.9%*	*10.5%*	*8.8%*
Passengers per Vehicle Service Hour	12.1	11.5	9.4	5.0	6.1	6.8	- -
Annual Change	- -	*-5.6%*	*-17.8%*	*-46.4%*	*21.0%*	*11.2%*	*-11.0%*
Passengers per Vehicle Service Mile	0.68	0.64	0.51	0.26	0.35	0.38	- -
Annual Change	- -	*-5.1%*	*-21.3%*	*-47.8%*	*33.0%*	*8.3%*	*-10.9%*
Op. Cost per Passenger (Actual $)	$7.89	$8.55	$11.80	$24.17	$24.46	$24.64	- -
Annual Change	- -	*8.4%*	*38.0%*	*104.9%*	*1.2%*	*0.7%*	*25.6%*
Op. Cost per Passenger (Constant $)	$7.89	$8.34	$11.15	$21.97	$21.59	$21.46	- -
Annual Change	- -	*5.7%*	*33.7%*	*97.0%*	*-1.7%*	*-0.6%*	*22.2%*
Vehicle Service Hours per FTE	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*	- -
Annual Change	- -	- -	- -	- -	- -	- -	- -
Input Data							
Operating Cost (Actual $)	$7,889,072	$8,165,855	$8,685,573	$5,704,979	$9,037,432	$10,179,735	- -
Annual Change	- -	*3.5%*	*6.4%*	*-34.3%*	*58.4%*	*12.6%*	*5.2%*
Operating Cost (Constant $)	$7,889,072	$7,966,688	$8,209,426	$5,186,345	$7,976,551	$8,867,365	- -
Annual Change	- -	*1.0%*	*3.0%*	*-36.8%*	*53.8%*	*11.2%*	*2.4%*
Vehicle Service Hours	82,365	83,350	78,124	46,749	60,474	60,830	- -
Annual Change	- -	*1.2%*	*-6.3%*	*-40.2%*	*29.4%*	*0.6%*	*-5.9%*
Vehicle Service Miles	1,479,476	1,489,139	1,457,304	894,942	1,052,870	1,086,917	- -
Annual Change	- -	*0.7%*	*-2.1%*	*-38.6%*	*17.6%*	*3.2%*	*-6.0%*
Unlinked Passengers	1,000,202	955,467	736,341	236,082	369,444	413,166	- -
Annual Change	- -	*-4.5%*	*-22.9%*	*-67.9%*	*56.5%*	*11.8%*	*-16.2%*
Employee Full-Time Equivalents	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*	- -
Annual Change	- -	- -	- -	- -	- -	- -	- -
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%	*3.7%*

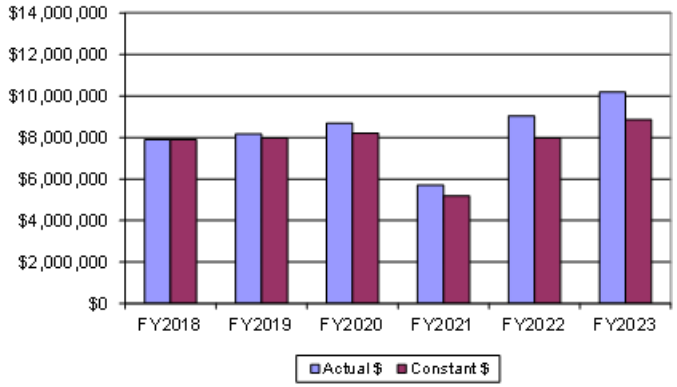
(a) Not applicable as NVTA service is provided by private contractor

Sources: FY2018 through FY2020 - Prior Performance Audit Report
FY2021 through FY2023 - 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

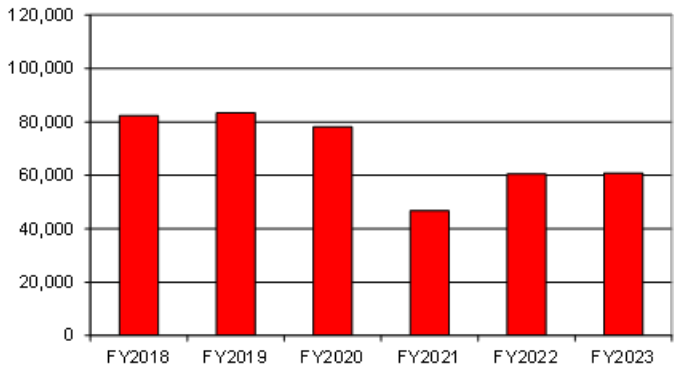
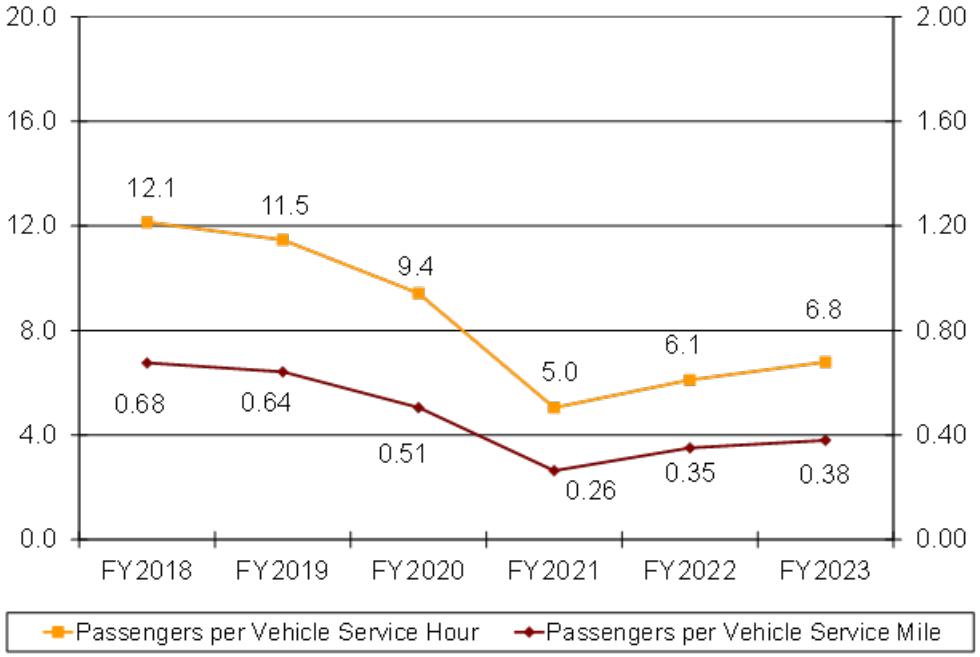
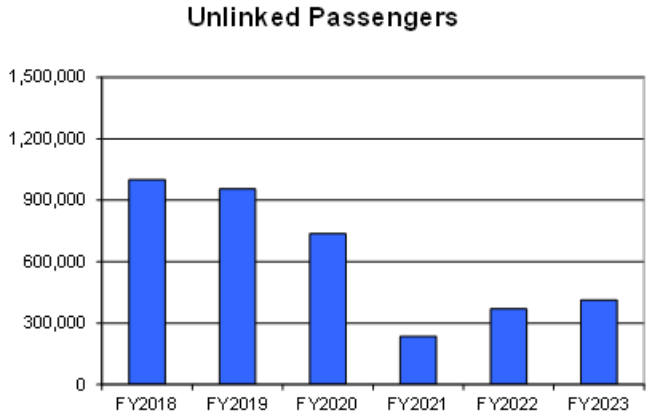
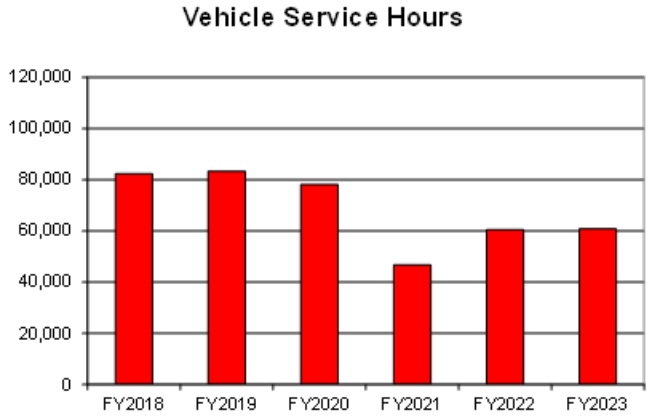


Exhibit 4.2: Passengers per Hour and per Mile – Bus Service







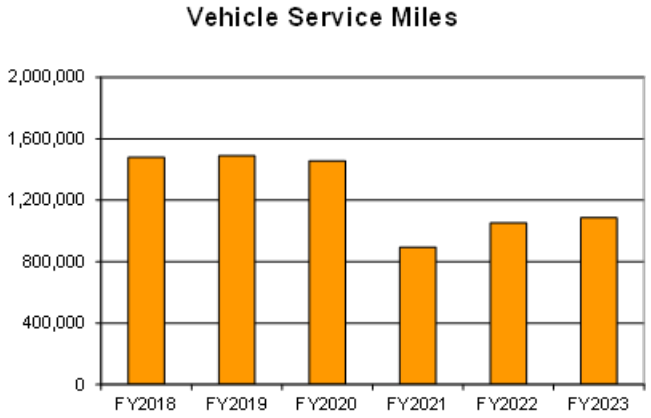
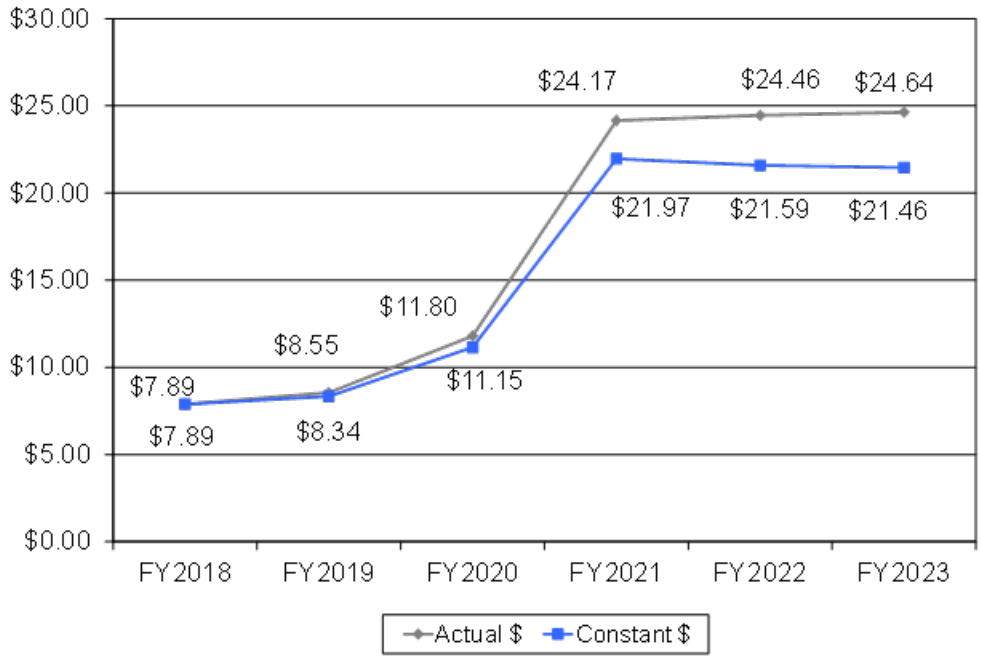
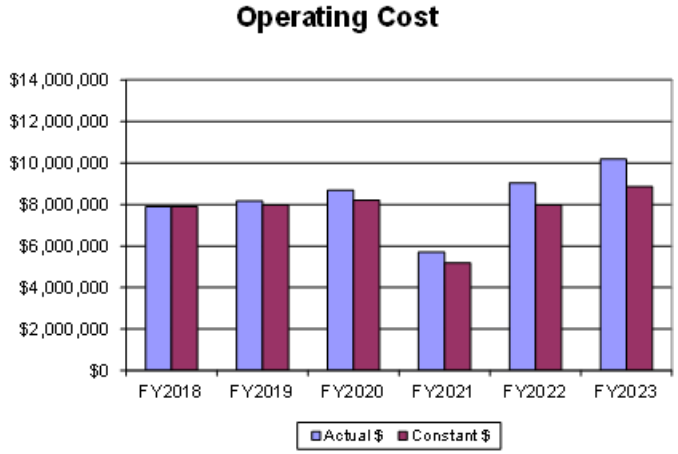
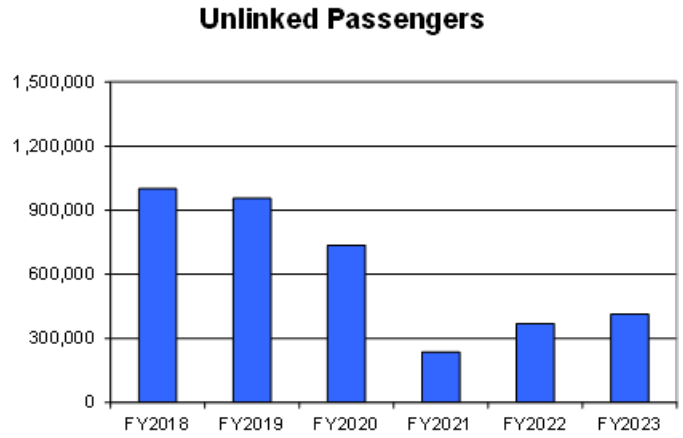


Exhibit 4.3: Operating Cost per Passenger – Bus Service







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 5.2 percent annually on average during the six-year review period. Almost every cost category experienced double digit decreases in FY2021 at the height of the pandemic, then showed increases in both FY2022 and FY2023, as transit service began recovering.
- In-house labor costs increased an average of eight percent per year, while fringe benefits costs increased by 5.9 percent annually. However, these categories together comprise between two to 2.5 percent of total operating costs.
- • Services costs increased an average of 8.6 percent per year overall, but also experienced wide fluctuations over the six-year analysis period. The largest single-year increase occurred in FY2023 when services costs rose over 320 percent, but an increase of 114 percent was seen in FY2019, while decreases of 20 percent and 85 percent were seen in FY2021 and FY2022. Overall, services comprised anywhere from one to five percent of total costs.
- Purchased transportation costs are the largest category of expense, comprising three-quarters or more of the total operating costs. These costs increased an average of 4.1 percent annually over the six-year period.
- Materials and supplies are the second largest category of expense, representing between 11 percent and 16 percent of total operating costs. Year-to-year changes in these costs resulted in an average annual increase of 8.7 percent across the six-year period.

- Similar to services, casualty/liability costs fluctuated from year-to-year reflecting changes in claims activity and settlements over the analysis period. The net result is an average increase of 9.1 percent per year over the review period.

- Other expenses also fluctuated between FY2018 and FY2023, resulting in an average annual change of 16.1 percent per year over the entire period. Other expenses comprised less than one percent of total costs in every year except FY2020.

* * * * *

The following is a brief summary of the bus service component operating costs trend highlights between FY2018 and FY2023:

- Purchased transportation costs increased in most years of the analysis period but averaged an increase of just over four percent per year. Purchased transportation comprised over 75 percent of total operating costs each year.

- Labor and fringe benefits costs increased an average of eight and 5.9 percent per year, respectively, but only comprised about three percent of annual total operating costs.

- Services costs fluctuated over the analysis period but increased an average of 8.6 percent annually. Services costs represent less than five percent of total operating costs.

- Materials and supplies, the second largest cost category, also exhibited up and down annual changes, resulting in an average annual increase of 8.7 percent.

- Other expenses rose in almost every year, but generally comprised less than one percent of total operating costs.

Exhibit 4.4: Component Cost Trends – Bus Service

	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	*Av. Ann. Chg.*
COST CATEGORIES							
Labor (Salaries/Wages)	$151,903	$214,227	$168,847	$120,465	$169,993	$223,061	- -
Annual Change	- -	*41.0%*	*-21.2%*	*-28.7%*	*41.1%*	*31.2%*	*8.0%*
Fringe Benefits *(a)*	$27,442	$38,702	$30,127	$31,048	$33,621	$36,502	- -
Annual Change	- -	*41.0%*	*-22.2%*	*3.1%*	*8.3%*	*8.6%*	*5.9%*
Services	$185,820	$159,429	$341,117	$274,185	$66,790	$281,058	
Annual Change	- -	*-14.2%*	*114.0%*	*-19.6%*	*-75.6%*	*320.8%*	*8.6%*
Purchased Transportation	$6,128,855	$6,115,731	$6,496,814	$4,399,432	$7,084,941	$7,489,677	- -
Annual Change	- -	*-0.2%*	*6.2%*	*-32.3%*	*61.0%*	*5.7%*	*4.1%*
Materials/Supplies *(b)*	$1,071,903	$1,343,670	$1,126,721	$625,420	$1,434,425	$1,628,818	- -
Annual Change	- -	*25.4%*	*-16.1%*	*-44.5%*	*129.4%*	*13.6%*	*8.7%*
Casualty/Liability	$284,535	$274,334	$305,857	$237,485	$207,087	$439,122	- -
Annual Change	- -	*-3.6%*	*11.5%*	*-22.4%*	*-12.8%*	*112.0%*	*9.1%*
Other Expenses *(c)*	$38,614	$19,762	$216,090	$16,944	$40,575	$81,497	- -
Annual Change	- -	*-48.8%*	*993.5%*	*-92.2%*	*139.5%*	*100.9%*	*16.1%*
Total	$7,889,072	$8,165,855	$8,685,573	$5,704,979	$9,037,432	$10,179,735	- -
Annual Change	- -	*3.5%*	*6.4%*	*-34.3%*	*58.4%*	*12.6%*	*5.2%*
OPERATING STATISTICS							
Vehicle Service Hours	82,365	83,350	78,124	46,749	60,474	60,830	- -
Annual Change	- -	*1.2%*	*-6.3%*	*-40.2%*	*29.4%*	*0.6%*	*-5.9%*

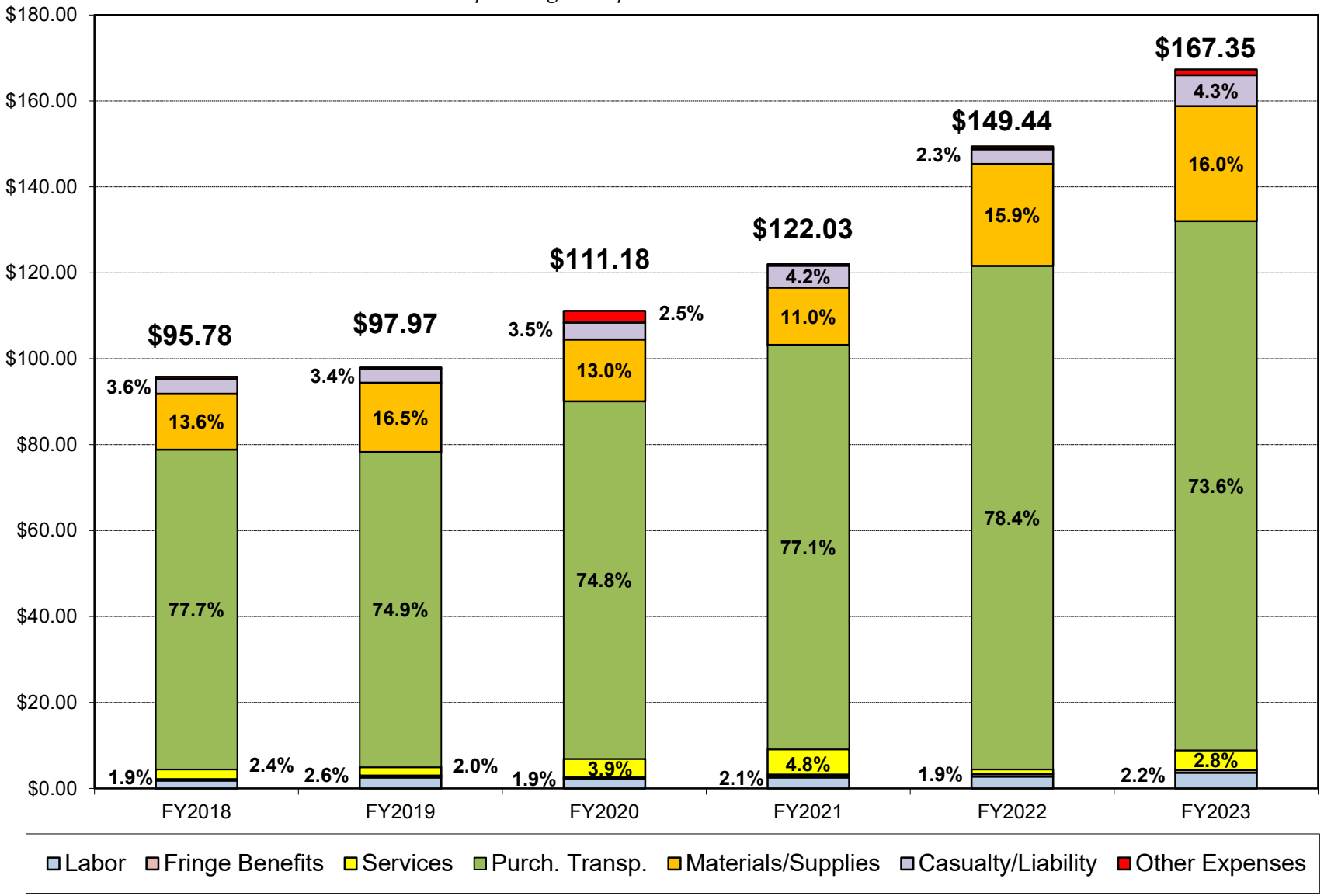
(a) Incudes paid absences

(b) Includes fuel/lubricants, tires/tubes, and other materials/supplies

(c) 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 an 8.6 percent increase in FY2021, at the height of the pandemic, and an 18.5 percent increase in FY2023 when cost rose to $112.61 per hour. The FY2023 increase was likely due to increased costs from the new operating agreement with the service operations contractor.
  - Overall, the cost per hour increased an average of 2.3 percent per year over the six years.
  - In inflation-adjusted dollars, cost efficiency remained steady overall demonstrating an average annual decrease of 0.5 percent per year.

- Passengers per Vehicle Service Hour (Exhibit 5.2)
  - Productivity decreased throughout most of the review period from 3.6 passengers per vehicle service hour in FY2018 and FY2019 to 2.3 in FY2023. Passengers per hour was lowest at 2.0 in FY2021.
  - During the six-year analysis period, ridership fell an average of 5.6 percent annually, outpacing an increase in service hours of an average of 3.3 percent.
  - Overall, passengers per hour decreased an average of 8.6 percent per year over the review period.

- Passengers per Vehicle Service Mile (Exhibit 5.2)

- Performance in passengers per vehicle service mile also decreased throughout the six-year analysis period.

- This indicator held at 0.41 passengers per mile in FY2018 and FY2019, decreasing to 0.29 passengers per mile in FY2023. Passengers per mile was lowest at 0.25 in FY2021.

- As with passenger per hour, the average annual decrease in passengers was higher than the 1.4 percent annual increase in service miles over the analysis period.

- Operating Cost per Passenger (Exhibit 5.3)

  - The cost per passenger increased from $28.20 in FY2018 to $49.56 in FY2023, with a high of $50.37 in FY2021. The average 5.6 percent annual loss in ridership combined with an annual average 5.7 percent increase in operating costs contributed to the decline in cost effectiveness.

  - Overall, cost per passenger showed an average annual increase of 11.9 percent in actual dollars and 8.9 percent in inflation-adjusted dollars.

* * * * *

The following is a brief summary of the paratransit TDA performance trend highlights over the six-year period of FY2018 through FY2023:

- Paratransit cost per hour increased an average of 2.3 percent per year over the six years in actual terms, but exhibited a slight 0.5 percent decrease in constant, inflation-adjusted terms.

- Passenger productivity declined through the analysis period, with an 8.6 percent average annual decrease in passengers per hour, and 6.8 percent in passengers per mile.

- Cost per passenger rose in every year except FY2022, posting an average increase of 11.9 percent per year in actual terms and an 8.9 percent per year increase in inflation-adjusted terms.

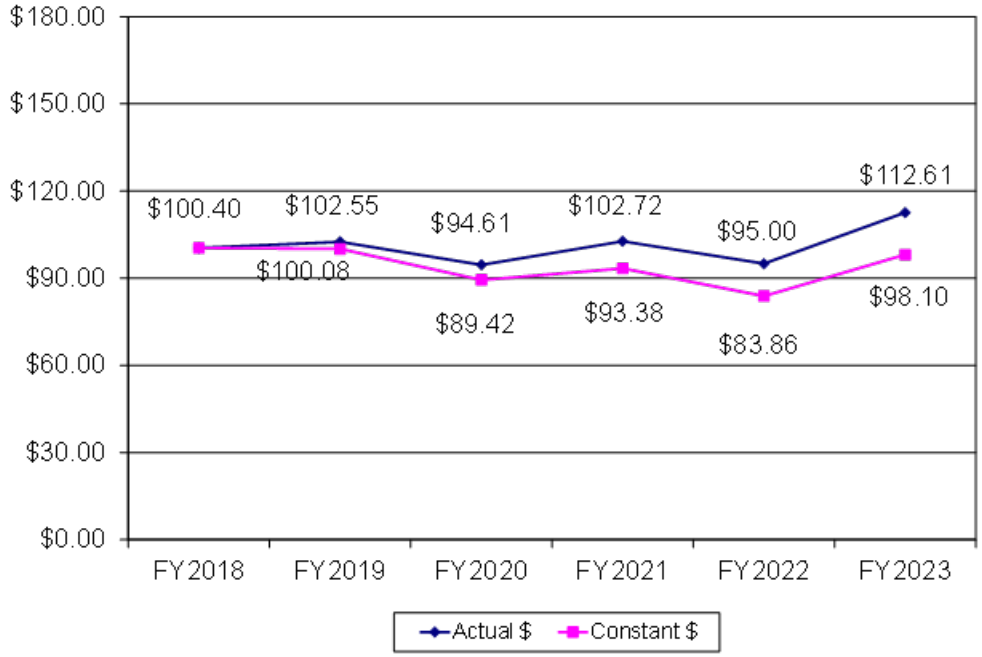
Exhibit 5: TDA Indicator Performance – Paratransit

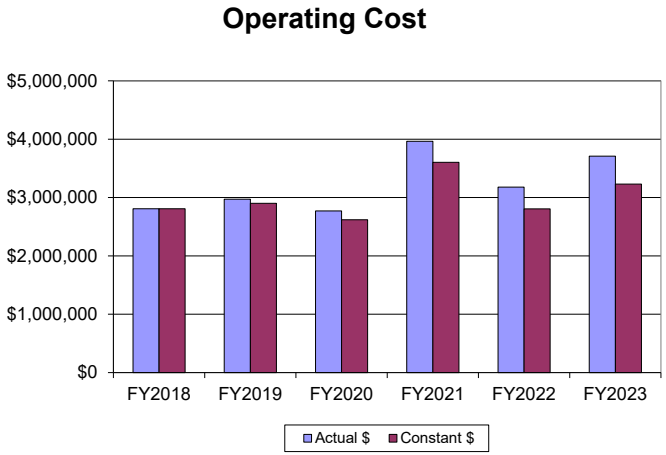
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	*Av. Ann. Chg.*
Performance Indicators							
Op. Cost per Vehicle Svc. Hour (Actual $)	$100.40	$102.55	$94.61	$102.72	$95.00	$112.61	- -
Annual Change	- -	*2.1%*	*-7.7%*	*8.6%*	*-7.5%*	*18.5%*	*2.3%*
Op. Cost per Vehicle Svc. Hour (Constant $)	$100.40	$100.08	$89.42	$93.38	$83.86	$98.10	- -
Annual Change	- -	*-0.3%*	*-10.6%*	*4.4%*	*-10.2%*	*17.0%*	*-0.5%*
Passengers per Vehicle Service Hour	3.6	3.6	3.0	2.0	2.1	2.3	- -
Annual Change	- -	*0.5%*	*-15.6%*	*-32.5%*	*5.3%*	*5.8%*	*-8.6%*
Passengers per Vehicle Service Mile	0.41	0.41	0.39	0.25	0.28	0.29	- -
Annual Change	- -	*0.5%*	*-6.6%*	*-34.5%*	*9.7%*	*4.1%*	*-6.8%*
Op. Cost per Passenger (Actual $)	$28.20	$28.66	$31.32	$50.37	$44.24	$49.56	- -
Annual Change	- -	*1.6%*	*9.3%*	*60.8%*	*-12.2%*	*12.0%*	*11.9%*
Op. Cost per Passenger (Constant $)	$28.20	$27.97	$29.60	$45.79	$39.06	$43.18	- -
Annual Change	- -	*-0.8%*	*5.8%*	*54.7%*	*-14.7%*	*10.5%*	*8.9%*
Vehicle Service Hours per FTE	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*	- -
Annual Change	- -	- -	- -	- -	- -	- -	- -
Input Data							
Operating Cost (Actual $)	$2,808,453	$2,971,904	$2,771,036	$3,964,363	$3,177,680	$3,708,684	- -
Annual Change	- -	*5.8%*	*-6.8%*	*43.1%*	*-19.8%*	*16.7%*	*5.7%*
Operating Cost (Constant $)	$2,808,453	$2,900,389	$2,619,153	$3,603,845	$2,804,999	$3,230,748	- -
Annual Change	- -	*3.3%*	*-9.7%*	*37.6%*	*-22.2%*	*15.2%*	*2.8%*
Vehicle Service Hours	27,974	28,981	29,290	38,592	33,449	32,933	- -
Annual Change	- -	*3.6%*	*1.1%*	*31.8%*	*-13.3%*	*-1.5%*	*3.3%*
Vehicle Service Miles	241,589	250,352	228,605	310,614	258,281	258,397	- -
Annual Change	- -	*3.6%*	*-8.7%*	*35.9%*	*-16.8%*	*0.0%*	*1.4%*
Unlinked Passengers	99,575	103,701	88,486	78,711	71,821	74,829	- -
Annual Change	- -	*4.1%*	*-14.7%*	*-11.0%*	*-8.8%*	*4.2%*	*-5.6%*
Employee Full-Time Equivalents	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*	*(a)*	- -
Annual Change	- -	- -	- -	- -	- -	- -	- -
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%	*3.7%*

(a) Not applicable as NVTA service is provided by private contractor

Sources: FY2018 through FY2020 - Prior Performance Audit Report
FY2021 through FY2023 - NTD Reports
CPI Data - U.S. Department of Labor, Bureau of Labor Statistics

Exhibit 5.1: Operating Cost per Vehicle Service Hour – Paratransit





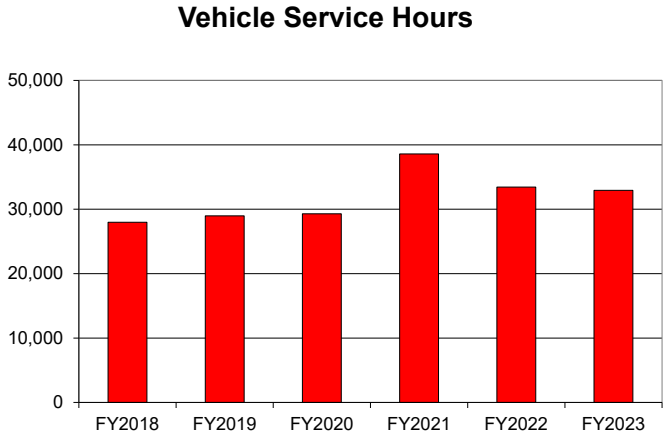
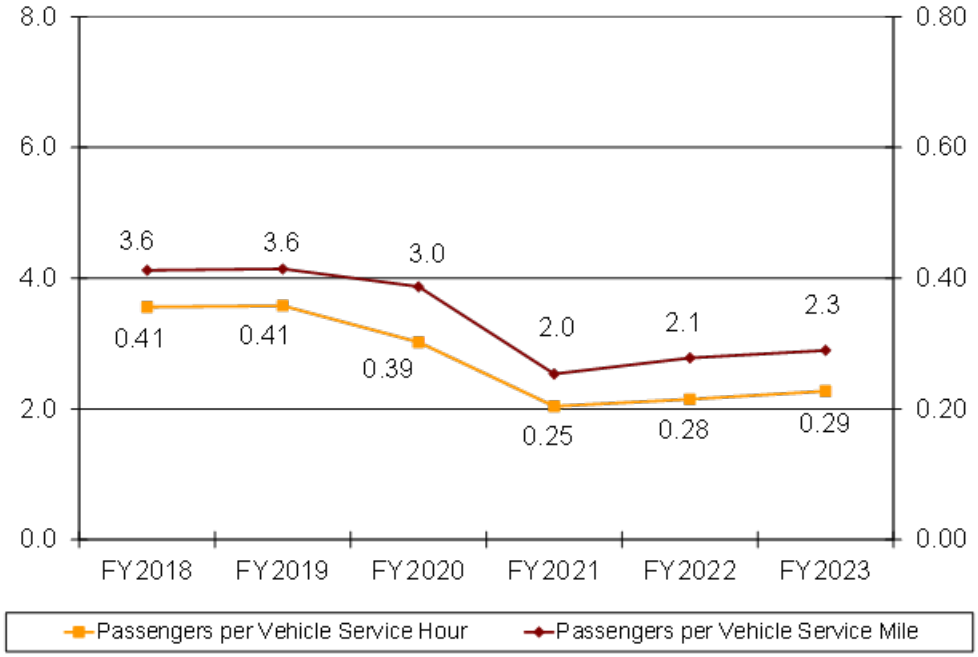
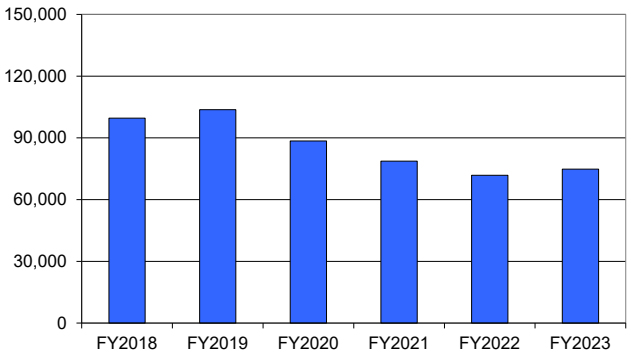


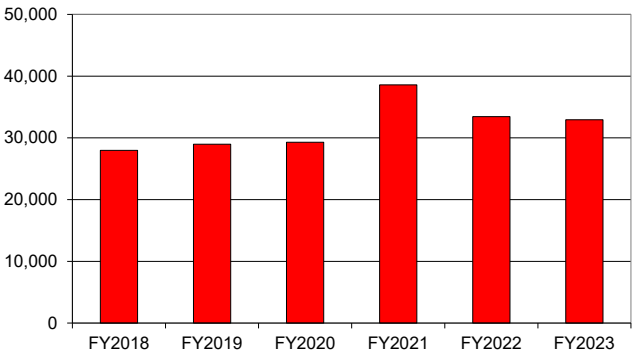
Exhibit 5.2: Passengers per Hour and per Mile – Paratransit



Unlinked Passengers



Vehicle Service Hours



Vehicle Service Miles

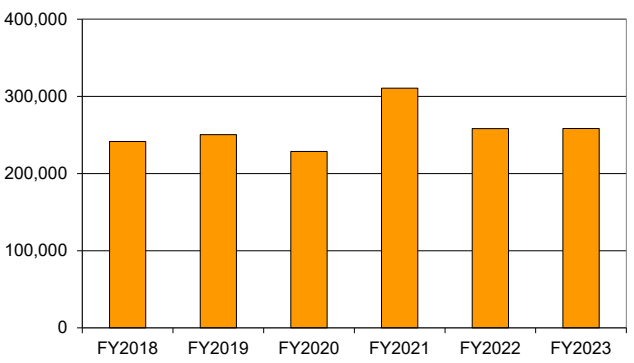
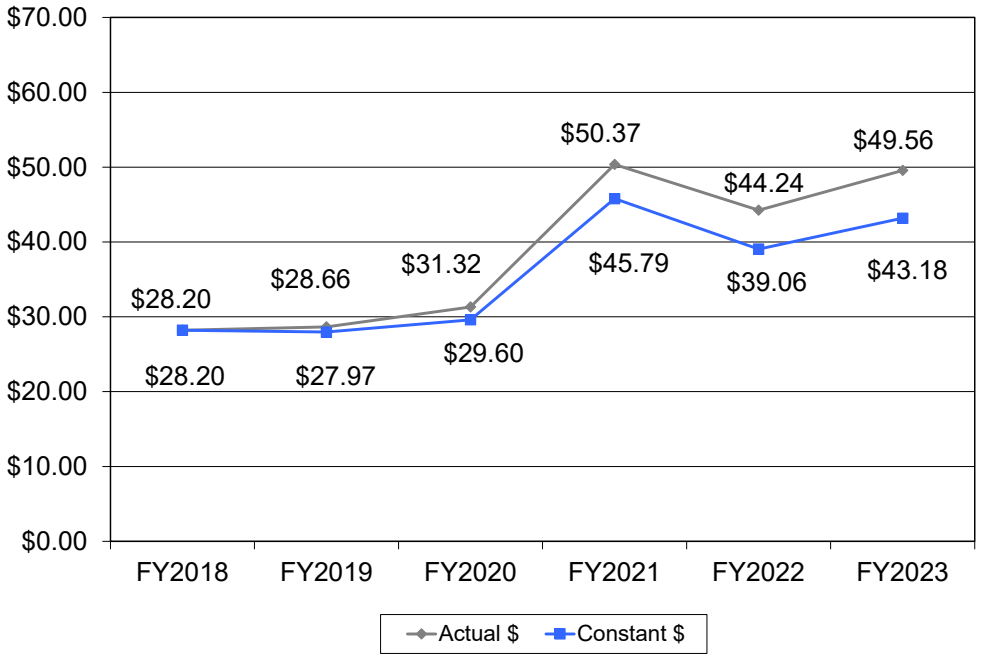
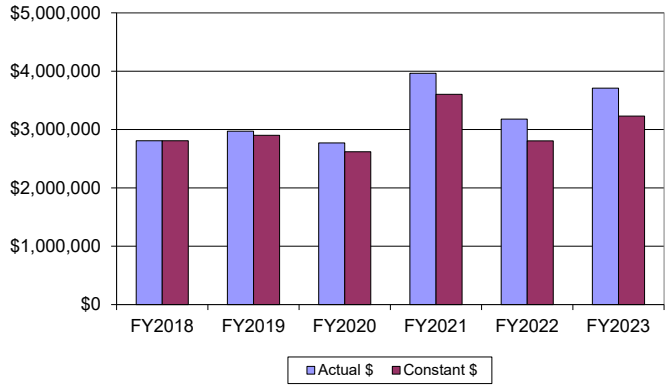


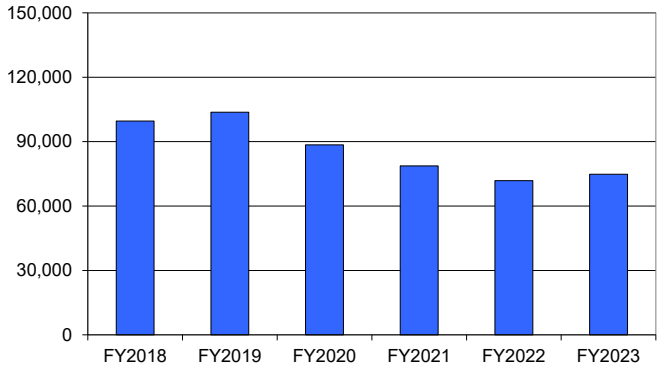
Exhibit 5.3: Operating Cost per Passenger – Paratransit



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 5.7 percent annually on average during the six-year period. The largest single-year increase occurred in FY2021 when operating costs increased 43.1 percent, mirroring a 43.7 percent increase in purchased transportation costs that year, likely due to increased service hours and miles required by passenger limits placed on the demand response vehicles. NVTA will be providing additional information on that FY2021 cost increase.

- Purchased transportation costs represent the largest portion of the total costs throughout the review period, ranging between 83 and 85 percent.

- While not major components of total costs, averaging less than two percent of total costs, in-house labor and fringe benefits costs both increased over the six-year period, averaging nine percent per year and 11.6 percent per year, respectively.

- Services costs remained steady over the review period, increasing an average of 1.4 percent per year. Services comprised between two and three percent of the total operating costs.

- Materials and supplies, the second largest cost category (about 8.5 percent of total costs per year), fluctuated each year of the six-year period, ending with an average 2.8 percent annual increase.

- Casualty and liability costs exhibited an average annual change of 15.5 percent per year, while miscellaneous other costs increased 52.5 percent per year. The categories combined averaged less than five percent of total costs.

* * * * *

The following is a brief summary of the paratransit component operating costs trend highlights between FY2018 and FY2023:

- Total operating costs increased an average of 5.7 percent per year. The highest annual increase (43.7 percent) occurred in FY2021, likely due to passenger limits required due to the COVID pandemic, resulting in higher service miles and hours. NVTA will be providing additional information on that FY2021 cost increase.
- Purchased transportation costs represented by far the largest portion of the total costs, ranging between 82 and 85 percent during the review period, and increased an average of 5.6 percent per year.
- While representing a small portion of total operating costs, both in-house labor and fringe benefits costs increased about 10 percent annually over the six-year period.
- Fluctuations from year to year notwithstanding, services and material and supplies costs averaged modest increases over the analysis period, at 1.4 percent and 2.8 percent per year, respectively.
- Casualty/liability and other expenses both experienced double digit average annual increases but comprised less than five percent of total operating costs combined.

Exhibit 5.4: Component Costs Trends – Paratransit

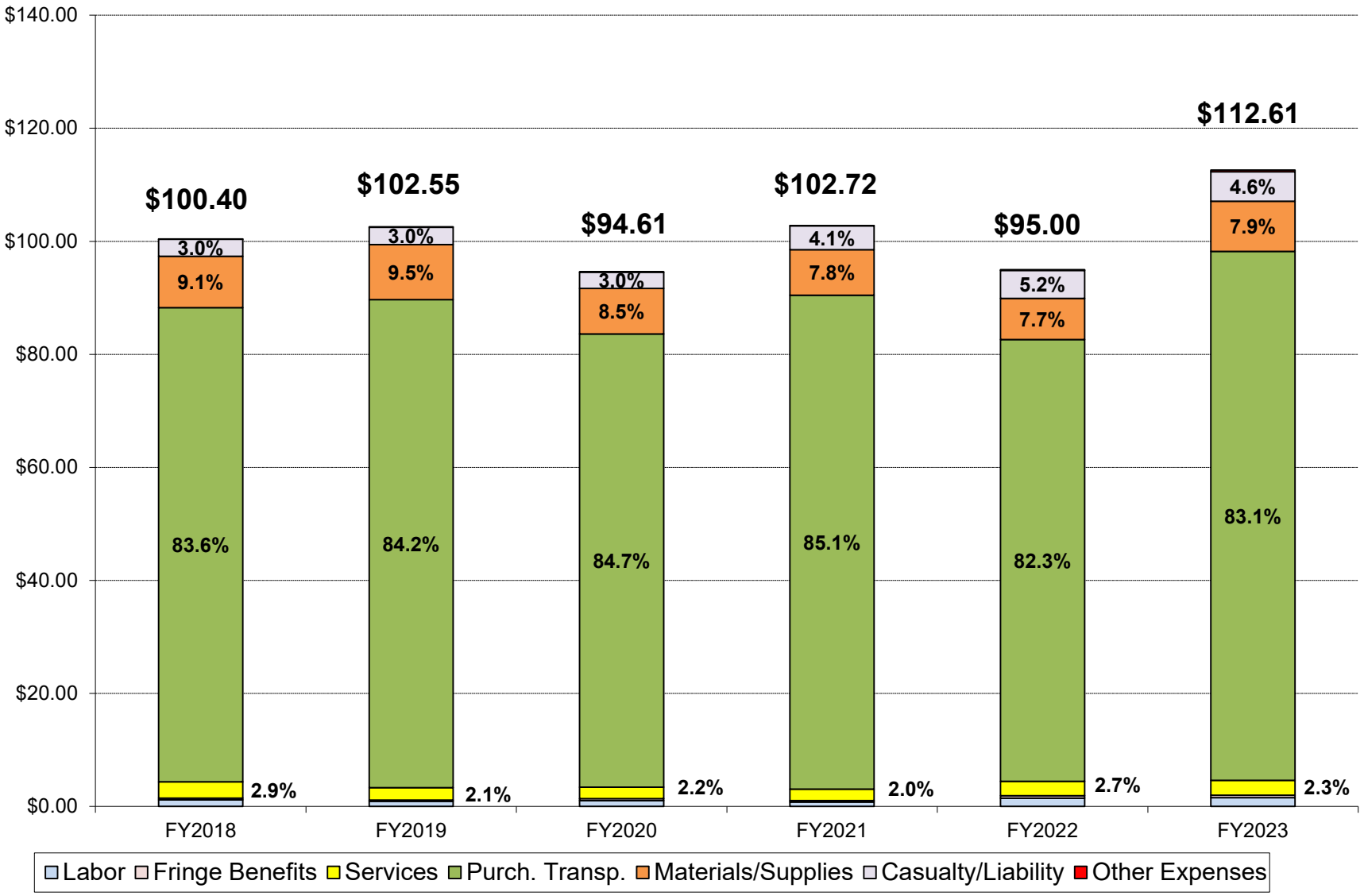
	FY2018	FY2019	FY2020	FY2021	FY2022	FY2023	*Av. Ann. Chg.*
COST CATEGORIES							
Labor (Salaries/Wages)	$33,361	$26,190	$30,832	$30,111	$49,320	$51,311	- -
Annual Change	- -	*-21.5%*	*17.7%*	*-2.3%*	*63.8%*	*4.0%*	*9.0%*
Fringe Benefits	$8,340	$6,547	$9,523	$10,739	$14,118	$14,451	- -
Annual Change	- -	*-21.5%*	*45.5%*	*12.8%*	*31.5%*	*2.4%*	*11.6%*
Services	$80,362	$63,386	$60,261	$77,491	$85,601	$86,152	- -
Annual Change	- -	*-21.1%*	*-4.9%*	*28.6%*	*10.5%*	*0.6%*	*1.4%*
Purchased Transportation	$2,346,819	$2,502,397	$2,348,023	$3,373,365	$2,614,167	$3,082,327	- -
Annual Change	- -	*6.6%*	*-6.2%*	*43.7%*	*-22.5%*	*17.9%*	*5.6%*
Materials/Supplies *(a)*	$254,648	$282,436	$236,809	$309,832	$244,274	$291,899	- -
Annual Change	- -	*10.9%*	*-16.2%*	*30.8%*	*-21.2%*	*19.5%*	*2.8%*
Casualty/Liability	$83,680	$89,569	$84,473	$162,774	$165,372	$172,304	- -
Annual Change	- -	*7.0%*	*-5.7%*	*92.7%*	*1.6%*	*4.2%*	*15.5%*
Other Expenses *(b)*	$1,243	$1,379	$1,115	$51	$4,828	$10,240	- -
Annual Change	- -	- -	*-19.1%*	*-95.4%*	*9366.7%*	*112.1%*	*52.5%*
Total	$2,808,453	$2,971,904	$2,771,036	$3,964,363	$3,177,680	$3,708,684	- -
Annual Change	- -	*5.8%*	*-6.8%*	*43.1%*	*-19.8%*	*16.7%*	*5.7%*
OPERATING STATISTICS							
Vehicle Service Hours	27,974	28,981	29,290	38,592	33,449	32,933	- -
Annual Change	- -	*3.6%*	*1.1%*	*31.8%*	*-13.3%*	*-1.5%*	*3.3%*

(a) Incudes paid absences
(b) Includes fuel/lubricants, tires/tubes, and other materials/supplies
(c) Includes utilities, taxes, and miscellaneous expenses

Source: FY2018 through FY2020 - Prior Performance Audit Report, FY2021 through FY2023 - NTD Reports

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	CHP Certification - The CHP has, within the 13 months prior to each TDA claim submitted by an operator, certified the operator's compliance with Vehicle Code Section 1808 following a CHP inspection of the operator's terminal	In Compliance	Satisfactory Inspections: • 2021: 12/02/2021 • 2022: 11/16/2022 • 2023: 02/02/2024 (delayed due to pandemic)
PUC99264	Operator-to-Vehicle Staffing - The operator does not routinely staff with two or more persons public transportation vehicles designed to be operated by one person	In Compliance	• No provision for excess vehicle staffing in Transit Operations Services Agreement #2016-12 with Transdev Services, Inc., dated September 1, 2016. • No provision for excess vehicle staffing in Transit Operations Services Agreement #21-12 with Transdev Services, Inc., dated December 22, 2021.
PUC99314.5 (e)(1)(2)	Part Time Drivers and Contracting - Operators receiving STA funds are not precluded by contract from employing part-time drivers or from contracting with common carriers	In Compliance	NVTA contracts with Transdev Services, Inc. to provide its fixed-route and paratransit services.
PUC99155	Reduced Fare Eligibility - For any operator who received TDA Article 4 funds, if the operator offers reduced fares to senior citizens and disabled persons, applicant will honor the federal Medicare identification card, the California Department of Motor Vehicles disability ID card, the Regional Transit Connection Discount Card, or any other current identification card issued by another transit operator that is valid for the type of transportation service or discount requested; and if the operator offers reduced fares to senior citizens, it also offers the same reduced fare to disabled patrons	In Compliance	NVTA's website Fares & Passes section: https://vinetransit.com/fares/

Code Reference	Operator Compliance Requirements	Compliance Finding	Verification Information
PUC99155.1 (a)(1)(2)	Welfare to Work Coordination - Operators must coordinates with county welfare departments in order to ensure that transportation moneys available for purposes of assisting recipients of aid are expended efficiently for the benefit of that population; if a recipient of CalWORKs program funds by the county, the operator shall give priority to the enhancement of public transportation services for welfare-to-work purposes and to the enhancement of transportation alternatives, such as, but not limited to, subsidies or vouchers, van pools, and contract paratransit operations, in order to promote welfare-to-work purposes	In Compliance	• NVTA is a stakeholder in the MTC Coordinated Public Transit-Human Services Transportation Plan, directed by MTC as the RTAP and MPO for the Bay Area. The plan includes services such as paratransit services and vouchers expanding outreach and transportation support by partnering with community-based organizations. • NVTA also acts as the Consolidated Transportation Service Agency (CTSA) for Napa County. As such, NVTA coordinates with the Napa County Health and Human Services welfare department (and CalWORKs program), to ensure that transportation moneys available for assisting aid recipients are expended efficiently for the benefit of that population.
PUC99314.7, Govt Code 66516, MTC Res. Nos. 3837, 4073	Joint Revenue Sharing Agreement - The operator has current joint fare revenue sharing agreements in place with transit operators in the MTC region with which its service connects, and submitted copies of agreements to MTC	In Compliance	• Signatory participant in Amended and Restated Clipper® Memorandum of Understanding (October 2022). The 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)	Process for Evaluation of Passenger Needs - The operator has an established process in place for evaluating the needs and types of passengers being served	In Compliance	• NVTA 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.

V. STATUS OF PRIOR AUDIT RECOMMENDATIONS

NVTA's prior performance audit was completed in June 2021. 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 66 to 68 percent, down from 76 to 78 percent in the preceding audit period. It was recommended that NVTA and its contractor continue to monitor on-time performance and develop strategies toward improving on-time performance for its bus services. NVTA identified several causes for decreased bus schedule adherence, including an outdated CAD/AVL system, and operator related issues, including COVID related absences, reduction of the fixed-route services during the pandemic, and increased operator training.

NVTA implemented several strategies to improve on-time performance, including procuring a new GMV Syncromatics CAD/AVL system in mid-2021, updating the on-board mobile units to the latest software version, implementing contractor log-in monitoring and observation to address operator errors, and reestablishing the fixed-route schedule and routes to pre-pandemic levels. While some of the schedule adherence problems are beyond NVTA control, such as COVID related staffing issues and missed trips related to them, the on-time performance remains problematic, as seen in the current audit period on-time performance percentages. The implementation of this recommendation is still in progress and has been carried forward into this audit.

The second recommendation in the previous audit is that NVTA take steps to reduce the rates of trip cancellations, late trip cancellations, and no-show incidents observed on NVTA's paratransit services over the audit period. The percentage of cancellations and late cancellations was calculated at about 30 percent and 10 percent, respectively, and the percentage of no-shows increased from 7.2 percent to nine percent over the last audit period. NVTA explained that the COVID pandemic had a negative impact on the number of cancellations and no-shows. NVTA indicated it had been overly accommodating to riders during the pandemic, but realized it needed to more strictly

enforce its cancellation and no-show policies to decrease the percentages of cancellations and no-shows.

NVTA's efforts appear to be working, as the current audit period shows cancellations down over 13 percent and late cancellations down almost two percent overall. The trend in no-show riders did increase during this audit period, from 5.1 percent in FY2021 to 6.2 percent in FY2023, but those percentages are lower than those recorded for no-shows in the prior audit. NVTA is encouraged to continue monitoring the percentage of no-shows to try to negate the current trend, but no recommendation is made for specific activities. This recommendation is considered implemented.

Exhibit 7: Status of Prior Audit Recommendations

Recommendation	Actions Taken	Evaluation
1. Continue to monitor schedule adherence on the bus service and develop strategies for improvement.	• NVTA procured a new CAD/AVL system in March 2021; transition from old system to new system occurred in • NVTA used the old Avail system through 2021, then switched to new GMV system on Jan. 1, 2022. • Other factors impacting schedule adherence during the period included: elimination of local fixed routes during COVD, then re-introducing them in late FY2021 and FY2022; driver behavior including absentee status during COVID outbreaks, leaving stops early, and not starting trips on-time; increased missed trips due to operator unavailability due to illness; and limited connectivity of the AVL system. • NVTA is working to address this issue in two ways including retraining staff and addressing AVL connectivity. In FY 22/23 NVTA took the following actions. - Updated the mobile data units to latest software version. - Replaced one broken Mobile data unit. - Installed AT&T SIM cards on all buses to serve as backups to the existing Verizon Sim cards. - Driver logging monitoring and observation to try and address human errors from new drivers. - Had GMV Syncromatics on-site to service 5 vehicles.	Implementation in Progress

Recommendation	Actions Taken	Evaluation
	• Current on-time performance for this audit period was 67 percent for FY2021, decreasing to 58 percent for both FY2022 and FY2023.	
2. Take steps to reduce the high rates of trip cancellations, late cancellations, and no-shows on the paratransit service.	• COVID had an impact on cancellations, late cancellations and no-shows throughout the audit period. • NVTA worked with TransDev to ensure notices were being sent to anyone who violates the trip cancelation policy. • NVTA had been overly accommodating of individual circumstances during COVID, but the Agency now needs to strictly enforce the policy to improve the overall paratransit system. • Current audit period shows trip cancellations down 13.3 percent, late cancellations down 1.4 percent, and no-shows show an increasing trend, up 21.7 percent, from 5.1 percent to 6.2 percent, but those no-show percentages are lower than recorded in the prior audit period.	Implemented

VI. FUNCTIONAL PERFORMANCE INDICATOR TRENDS

To further assess NVTA'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 NVTA or for which input data were maintained by NVTA 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 fluctuated over the audit period, decreasing from 15.4 percent in FY2021 to 13.3 percent in FY2022, before ending the period at 16.2 percent of total operating costs.
- Administrative costs per vehicle service hour rose from $17.43 per vehicle service hour in FY2021 to $23.99 in FY2023.
- Marketing costs decreased overall, from 4.2 percent of total administrative costs in FY2021 to 0.7 percent of total administrative costs in FY2023. Marketing cost per passenger trip also declined, from 19.6 percent to 3.1 percent over the audit period.
- The systemwide farebox recovery ratio increased from 4.6 percent in FY2021 to 5.4 percent in FY2023, indicating that the system is beginning to recover from the COVID pandemic.

* * * * *

The following is a brief summary of the systemwide functional trend highlights between FY2021 and FY2023:

- Administrative costs fluctuated between FY2021 and FY2022 but ended up increasing in terms of percentage of total operating costs (about five percent) and administrative costs per vehicle service hour (over 37 percent).
- Marketing costs decreased significantly by about 84 percent overall, both in terms of percentage of total administrative costs and in cost per passenger trip.
- Revenue recovery showed an improving trend during the audit period, increasing 17 percent overall, suggesting the beginning of a recovery from the pandemic years.

Exhibit 8: Functional Performance Trends – Systemwide

FUNCTION/Indicator	Actual Performance		
	FY2021	FY2022	FY2023
MANAGEMENT, ADMINISTRATION & MARKETING			
Administrative Cost/Total Operating Cost	15.4%	13.3%	16.2%
Annual Percent Change	- -	*-13.2%*	*21.3%*
Three Year Percent Change	- -	- -	*5.3%*
Adminstrative Cost/Vehicle Service Hour	$17.43	$17.36	$23.99
Annual Percent Change	- -	*-0.4%*	*38.2%*
Three Year Percent Change	- -	- -	*37.7%*
Marketing Cost/Total Administrative Cost	4.2%	1.7%	0.7%
Annual Percent Change	- -	*-58.7%*	*-60.8%*
Three Year Percent Change	- -	- -	*-83.8%*
Marketing Cost/Unlinked Passenger Trip	19.6%	6.3%	3.1%
Annual Percent Change	- -	*-67.7%*	*-51.2%*
Three Year Percent Change	- -	- -	*-84.2%*
Farebox Revenue/Operating Cost	4.6%	4.1%	5.4%
Annual Percent Change	- -	*-11.3%*	*31.9%*
Three Year Percent Change	- -	- -	*17.0%*

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 9.

- Service Planning
  - The operating cost per passenger mile increased from $2.19 in FY2021 to $2.71 in FY2023, an increase of about 23 percent. This was the result of declining passenger miles.
  - The ratio of vehicle service miles to total miles increased from 89.1 percent to 94.2 percent over the audit period.
  - The percentage of vehicle service hours to total hours decreased slightly from 82.3 percent to 78.3 percent.
  - Passengers carried per service mile increased from 0.26 to 0.38, while passengers per service hour increased from 5.05 to 6.79 between FY2021 and FY2023.

- Operations
  - Vehicle operations costs as a percentage of total operating costs fluctuated over the audit period, from 69.3 percent in FY2021 to 80.2 percent in FY2022, before ending at 75.2 percent in FY2023.
  - Vehicle operations costs per service hour showed consistent increases between FY2021 and FY2023, from $84.61 in FY2021 to $125.86 in FY2023, a 48 percent increase. This is attributed to the increase in operating costs during the period outpacing the increase in service hours, specifically a new contract executed with the operating contractor in FY2021.
  - Schedule adherence decreased over the audit period from 67.6 percent to 58.1 percent during the audit period.

- Farebox revenue increased from 3.4 percent to 4.9 percent between FY2021 and FY2023. The TDA recovery ratio, reflecting farebox revenue plus local support less operating cost exclusions, also showed an increase, from 9.9 percent in FY2021 to 12.3 percent in FU2023.

- The rate of complaints declined from 6.2 per 10,000 boardings to 3.4 per 10,000 boardings between FY2021 and FY2023.

- The incidence of missed trips significantly increased percentage wise but remained at less than one percent of total trips throughout the audit period.

- Maintenance

  - Total maintenance costs decreased from 11 percent of total operating costs to 7.7 percent over the audit period.

  - Vehicle maintenance costs per service mile also decreased from $0.63 per mile to $0.59 per mile between FY2021 and FY2023.

  - The vehicle spare ratio decreased from 35.7 percent in FY2021 to 16.7 percent in FY2023.

  - The mean distance between major failures fluctuated over the period, increasing about six percent between FY2021 and FY2022, before decreasing by 65 percent in FY2023. The mean distance between all failures showed a similar trend, increasing about 29 percent over the first two years, before decreasing almost 55 percent in FY2023.

- Safety

  - The rate of preventable accidents per 100,000 vehicle miles ticked up from 1.10 in FY2021 to 1.47 in FY2023, an overall increase of almost 35b percent.

* * * * *

The following is a brief summary of the bus service functional trend highlights between FY2021 and FY2023:

- Service Planning results showed increasing costs per passenger mile, mixed performance in terms of in-service miles and hours, with a small increase in in-service miles, and a small decrease in in-service hours, and consistent improvement in passenger productivity between FY2021 and FY2023.

- Operations results showed an almost nine percent increase in terms of vehicle operations costs as a percentage of total operating cost, and a 48.8 percent increase in operating cost per vehicle service hour, largely due to a new operating contract that began in FY2021. Schedule adherence decreased by 14 percent overall, and the rate of complaints decreased by 45 percent. Farebox recovery increased over 40 percent during the audit period, while the TDA fare recovery ratio, which includes local support less operating cost exclusions, increased by more than 24 percent. The number of missed trips saw a significant overall percentage increase (614 percent), but in actual performance, comprised less than one percent of total trips each year.

- Maintenance costs were lower overall, with a 30 percent decrease as a percent of total operating costs, and a six percent decrease in maintenance cost per service mile. The spare ratio decreased by 53.3 percent overall. Performance in the rate of mechanical failures fluctuated, with mean distance between major mechanical failures and all failures increasing between FY2021 and FY2022, but then decreasing in FY2023, by about 63 percent and 42 percent, respectively.

- The rate of preventable accidents increased modestly from 1.10 per 100,000 miles in FY2021, to 1.47 in FY2023.

Exhibit 9: Functional Performance Trends – Bus Service

FUNCTION/Indicator	Actual Performance		
	FY2021	FY2022	FY2023
SERVICE PLANNING			
Total Operating Cost/Passenger Mile	$2.19	$2.62	$2.71
Annual Percent Change	- -	*19.2%*	*3.5%*
Three Year Percent Change	- -	- -	*23.3%*
Vehicle Service Miles/Total Miles	89.1%	90.1%	94.2%
Annual Percent Change	- -	*1.1%*	*4.6%*
Three Year Percent Change	- -	- -	*5.7%*
Vehicle Service Hours/Total Hours	82.3%	80.0%	78.3%
Annual Percent Change	- -	*-2.8%*	*-2.2%*
Three Year Percent Change	- -	- -	*-4.9%*
Passengers/Vehicle Service Mile	0.26	0.35	0.38
Annual Percent Change	- -	*33.0%*	*8.3%*
Three Year Percent Change	- -	- -	*44.1%*
Passengers/Vehicle Service Hour	5.05	6.11	6.79
Annual Percent Change	- -	*21.0%*	*11.2%*
Three Year Percent Change	- -	- -	*34.5%*
OPERATIONS			
Vehicle Operations Cost/Total Operating Cost	69.3%	80.2%	75.2%
Annual Percent Change	- -	*15.6%*	*-6.2%*
Three Year Percent Change	- -	- -	*8.5%*
Vehicle Operations Cost/Vehicle Service Hour	$84.61	$119.81	$125.86
Annual Percent Change	- -	*41.6%*	*5.1%*
Three Year Percent Change	- -	- -	*48.8%*
Farebox Revenue/Operating Cost	3.4%	4.0%	4.9%
Annual Percent Change	- -	*15.6%*	*23.5%*
Three Year Percent Change	- -	- -	*42.7%*
TDA Recovery Ratio *(a)*	*(b)*	*(b)*	*(b)*
Annual Percent Change	- -	- -	- -
Three Year Percent Change	- -		- -
Percentage of Trips On-Time	67.6%	58.2%	58.1%
Annual Percent Change	- -	*-13.9%*	*-0.2%*
Three Year Percent Change	- -	- -	*-14.1%*
Complaints/10,000 Boardings	6.2	4.7	3.4
Annual Percent Change	- -	*-23.9%*	*-28.0%*
Three Year Percent Change	- -	- -	*-45.2%*
Missed Trips/Total Trips	0.11%	0.41%	0.79%
Annual Percent Change	- -	*276.9%*	*89.4%*
Three Year Percent Change	- -	- -	*613.9%*

FUNCTION/Indicator	Actual Performance		
	FY2021	FY2022	FY2023
MAINTENANCE			
Vehicle + Non-Veh. Maint. Cost/Total Operating Cost	11.0%	6.5%	7.7%
Annual Percent Change	- -	*-41.3%*	*18.2%*
Three Year Percent Change	- -	- -	*-30.7%*
Vehicle Maintenance Cost/Vehicle Service Mile	$0.63	$0.49	$0.59
Annual Percent Change	- -	*-22.6%*	*21.4%*
Three Year Percent Change	- -	- -	*-6.1%*
Spare Vehicles/Total Vehicles	35.7%	7.1%	16.7%
Annual Percent Change	- -	*-80.0%*	*133.3%*
Three Year Percent Change	- -	- -	*-53.3%*
Mean Distance between Major Failures (Miles)	100,407	106,243	37,201
Annual Percent Change	- -	*5.8%*	*-65.0%*
Three Year Percent Change	- -	- -	*-62.9%*
Mean Distance between All Failures (Miles)	32,389	41,738	18,906
Annual Percent Change	- -	*28.9%*	*-54.7%*
Three Year Percent Change	- -	- -	*-41.6%*
SAFETY			
Preventable Accidents/100,000 Vehicle Miles	1.10	1.28	1.47
Annual Percent Change	- -	17.2%	14.8%
Three Year Percent Change	- -	- -	34.6%

(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 decreased from $19.33 in FY2021 to $17.65 in FY2023, a decrease of almost nine percent.
  - The portion of vehicle miles traveled that were in service decreased from 83.7 percent to 72.4 percent over the audit period, while the portion of vehicle hours spent in service increased from 79.3 percent to 81.8 percent.
  - Passenger productivity was mixed during the audit period, with passengers per service mile increasing over 14 percent, while passengers per service hour declined just over three percent.

- Operations

  - Vehicle operations costs as a percentage of total operating costs decreased from 84.4 percent to 73.2 percent during the audit period.

  - Vehicle operations costs per service hour decreased from $100.07 in FY2021 to $82.41 in FY2023, or 17.6 percent lower overall.

  - The farebox recovery ratio inched up from 6.4 percent to 6.9 percent over the audit period. Data for the TDA recovery ratio was not available.

  - Schedule adherence was consistently at 100 percent throughout the audit period.

  - There were no complaints reported during the audit period, only seven missed trips recorded over the three years (all in FY2023), and no ADA trip denials reported for the audit period.

  - Total trip cancellations decreased slightly from 27.8 percent to 24.1 percent of total ADA trips. Late trip cancellations remained mostly steady at approximately 11 percent of ADA trips.

- The passenger no-show rate increased in each year, from 5.1 percent in FY2021 to 6.2 percent in FY2020.

- Maintenance

  - Total maintenance costs ranged from 6.3 percent to 13.2 percent of total operating costs during the audit period.

  - Vehicle maintenance costs per service mile increased from $0.72 to $1.79 per service mile over the audit period.

  - The percentage of spare vehicles to total vehicles decreased from 33.3 percent in FY2021 to 20.8 percent in FY2023.

  - The mean distance between major failure rate decreased by about four percent from 185,453 miles to 178,468 miles between major failures reported during the audit period.

  - The mean distance between all failures declined from 74,181 miles in FY2021 to 32,449 miles in FY2023, a decrease of 56.3 percent. Although this decrease appears substantial, it represents a change from five total failures in FY2021 to eleven total failures in FY2023.

- Safety

  - There were no preventable accidents reported during any year of the current audit period.

* * * * *

The following is a brief summary of the paratransit functional trend highlights between FY2021 and FY2023:

- Service Planning results showed a modest eight percent decrease in total operating cost per passenger mile, and mixed performance in terms of in-service miles (13.6 percent decrease), and hours (3.2 percent increase),

operated as a percentage of total miles and hours. Passenger productivity also exhibited mixed results with a 14.3 percent increase in passenger per vehicle service mile and a 3.4 percent decrease in passengers per vehicle service hour.

- Operations results showed decreases both in terms of vehicle operations costs as a percentage of total operating costs, and vehicle operations cost per hour. The farebox recovery ratio increased by about eight percent, while schedule adherence remained consistently high throughout the audit period. No complaints were recorded during the audit period.

  No ADA trip denials were reported during the entire audit period, while both total trip cancellations and late cancellations rates decreased, by 13.3 percent and 1.4 percent, respectively. The no-show did increase from 5.1 percent to 6.2 percent between FY2021 and FY2023.

- Maintenance performance results showed significantly higher costs over the audit period in terms of maintenance costs as a percentage of total costs, and maintenance costs per vehicle mile. Although the overall trend in service reliability (i.e., mean distance between failures) was negative, there were never more than eleven failures reported in any year.

- No preventable accidents were reported in any year of the audit period.

Exhibit 10: Functional Performance Trends – Paratransit

FUNCTION/Indicator	Actual Performance		
	FY2021	FY2022	FY2023
SERVICE PLANNING			
Total Operating Cost/Passenger Mile	$19.33	$14.62	$17.65
Annual Percent Change	- -	*-24.4%*	*20.7%*
Three Year Percent Change	- -	- -	*-8.7%*
Vehicle Service Miles/Total Miles	83.7%	74.4%	72.4%
Annual Percent Change	- -	*-11.1%*	*-2.7%*
Three Year Percent Change	- -	- -	*-13.6%*
Vehicle Service Hours/Total Hours	79.3%	99.4%	81.8%
Annual Percent Change	- -	*25.3%*	*-17.7%*
Three Year Percent Change	- -	- -	*3.2%*
Passengers/Vehicle Service Mile	0.25	0.28	0.29
Annual Percent Change	- -	*9.7%*	*4.1%*
Three Year Percent Change	- -	- -	*14.3%*
Passengers/Vehicle Service Hour	2.35	1.86	2.27
Annual Percent Change	- -	*-20.9%*	*22.1%*
Three Year Percent Change	- -	- -	*-3.4%*
OPERATIONS			
Vehicle Operations Cost/Total Operating Cost	84.4%	77.4%	73.2%
Annual Percent Change	- -	*-8.3%*	*-5.5%*
Three Year Percent Change	- -	- -	*-13.3%*
Vehicle Operations Cost/Vehicle Service Hour	$100.07	$63.76	$82.41
Annual Percent Change	- -	*-36.3%*	*29.3%*
Three Year Percent Change	- -	- -	*-17.6%*
Farebox Revenue/Operating Cost	6.4%	4.5%	6.9%
Annual Percent Change	- -	*-28.7%*	*51.7%*
Three Year Percent Change	- -	- -	*8.1%*
TDA Recovery Ratio *(a)*	*(b)*	*(b)*	*(b)*
Annual Percent Change	- -	- -	- -
Three Year Percent Change	- -		- -
Percentage of Trips On-Time	100.0%	100.0%	100.0%
Annual Percent Change	- -	*0.0%*	*0.0%*
Three Year Percent Change	- -	- -	*0.0%*
Complaints/1,000 Passenger Trips	0.0	0.0	0.0
Annual Percent Change	- -	- -	- -
Three Year Percent Change	- -	- -	- -
Missed Trips/Total Trips	0.0%	0.0%	0.1%
Annual Percent Change	- -	- -	- -
Three Year Percent Change	- -	- -	- -

FUNCTION/Indicator	Actual Performance		
	FY2021	FY2022	FY2023
OPERATIONS (Continued)			
ADA Trip Denials/Total ADA Trips	0.00%	0.00%	0.00%
Annual Percent Change	- -	- -	- -
Three Year Percent Change	- -	- -	- -
Trip Cancellations/Total ADA Trips	27.8%	26.3%	24.1%
Annual Percent Change	- -	*-5.2%*	*-8.6%*
Three Year Percent Change	- -	- -	*-13.3%*
Late Cancellations/Total ADA Trips	11.1%	8.4%	10.9%
Annual Percent Change		*-24.1%*	*30.0%*
Three Year Percent Change			*-1.4%*
No-Shows/Total ADA Trips	5.1%	5.5%	6.2%
Annual Percent Change	- -	*7.8%*	*12.9%*
Three Year Percent Change	- -	- -	*21.7%*
MAINTENANCE			
Vehicle + Non-Veh. Maint. Cost/Total Operating Cost	6.3%	9.2%	13.2%
Annual Percent Change	- -	*46.4%*	*43.0%*
Three Year Percent Change	- -	- -	*109.4%*
Vehicle Maintenance Cost/Vehicle Service Mile	$0.72	$1.05	$1.79
Annual Percent Change	- -	*46.5%*	*70.6%*
Three Year Percent Change	- -	- -	*149.9%*
Spare Vehicles/Total Vehicles	33.3%	8.3%	20.8%
Annual Percent Change	- -	*-75.0%*	*150.0%*
Three Year Percent Change	- -	- -	*-37.5%*
Mean Distance between Major Failures (Miles)	185,453	347,031	178,468
Annual Percent Change	- -	*87.1%*	*-48.6%*
Three Year Percent Change	- -	- -	*-3.8%*
Mean Distance between All Failures (Miles)	74,181	34,703	32,449
Annual Percent Change	- -	*-53.2%*	*-6.5%*
Three Year Percent Change	- -	- -	*-56.3%*
SAFETY			
Preventable Accidents/100,000 Vehicle Miles	0.00	0.00	0.00
Annual Percent Change	- -	- -	- -
Three Year Percent Change	- -	- -	- -

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

(b) Not available

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 FY2021 through 2023 (from July 1, 2020 through June 30, 2023). 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.

  There was one discrepancy noted for the paratransit services in FY2021 during the peak of the COVID pandemic. NVTA experienced an 11 percent decline in ridership from the prior year, yet vehicle service hours and miles both increased more than 30 percent and operating costs increased over 43 percent the same year. Typically, reduced ridership would result in decreased service hours and miles. NVTA explained that due to the pandemic, demand response transportation was restricted to the number of passengers on board the vehicles due to state mandated distancing requirements. This resulted in more trips being required, and more service hours and miles, to transport fewer passengers.

- 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 FY2018 through FY2023:

- The trend in operating cost per hour rose steadily throughout the analysis period, increasing an average of 11.8 percent per year in actual dollars and 8.8 percent in inflation-adjusted dollars.
- Passenger productivity exhibited steadily declining trends, with passengers per hour decreasing an average of 11 percent per year, and passengers per mile decreasing an average of 10.9 percent per year.
- Over the six-year analysis period, cost per passenger increased an average of 25.6 percent annually in actual dollars and 22.2 percent in inflation-adjusted dollars.

The following is a brief summary of the component operating costs trend highlights for the bus service between FY2018 and FY2023:

- Purchased transportation costs increased in most years of the analysis period but averaged an increase of just over four percent per year. Purchased transportation comprised over 75 percent of total operating costs each year.
- Labor and fringe benefits costs increased an average of eight and 5.9 percent per year, respectively, but only comprised about three percent of annual total operating costs.
- Services costs fluctuated over the analysis period but increased an average of 8.6 percent annually. Services costs represent less than five percent of total operating costs.

- Materials and supplies, the second largest cost category, also exhibited up and down annual changes, resulting in an average annual increase of 8.7 percent.

- Other expenses rose in almost every year, but generally comprised less than one percent of total operating costs.

Paratransit – The following is a brief summary of the TDA performance trend highlights over the six-year period of FY2018 through FY2023:

- Paratransit cost per hour increased an average of 2.3 percent per year over the six years in actual terms, but exhibited a slight 0.5 percent decrease in constant, inflation-adjusted terms.

- Passenger productivity declined through the analysis period, with an 8.6 percent average annual decrease in passengers per hour, and 6.8 percent in passengers per mile.

- Cost per passenger rose in every year except FY2022, posting an average increase of 11.9 percent per year in actual terms and an 8.9 percent per year increase in inflation-adjusted terms.

The following is a brief summary of the component operating costs trend highlights for paratransit between FY2018 and FY2021:

- Total operating costs increased an average of 5.7 percent per year. The highest annual increase (43.7 percent) occurred in FY2021, likely due to passenger limits required due to the COVID pandemic, resulting in higher service miles and hours. NVTA will be providing additional information on that FY2021 cost increase.

- Purchased transportation costs represented by far the largest portion of the total costs, ranging between 82 and 85 percent during the review period, and increased an average of 5.6 percent per year.

- While representing a small portion of total operating costs, both in-house labor and fringe benefits costs increased about 10 percent annually over the six-year period.

- Fluctuations from year to year notwithstanding, services and material and supplies costs averaged modest increases over the analysis period, at 1.4 percent and 2.8 percent per year, respectively.

- Casualty/liability and other expenses both experienced double digit average annual increases but comprised less than five percent of total operating costs combined.

- PUC Compliance – 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 – The prior audit found that schedule adherence on NVTA's bus system remained in a range of 66 to 68 percent, down from 76 to 78 percent in the preceding audit period. It was recommended that NVTA and its contractor continue to monitor on-time performance and develop strategies toward improving on-time performance for its bus services. NVTA identified several causes for decreased bus schedule adherence, including an outdated CAD/AVL system, and operator related issues, including COVID related absences, reduction of the fixed-route services during the pandemic, and increased operator training.

  NVTA implemented several strategies to improve on-time performance, including procuring a new GMS Syncromatics CAD/AVL system in mid-2021, updating the on-board mobile units to the latest software version, implementing contractor log-in monitoring and observation to address operator errors, and reestablishing the fixed-route schedule and routes to pre-pandemic levels. While some of the schedule adherence problems are beyond NVTA control, such as COVID related staffing issues and missed trips related to them, the on-time performance remains problematic, as seen in the current audit period on-time performance percentages. The implementation of this recommendation is still in progress and has been carried forward into this audit.

The second recommendation in the previous audit is that NVTA take steps to reduce the rates of trip cancellations, late trip cancellations, and no-show incidents observed on NVTA's paratransit services over the audit period. The percentage of cancellations and late cancellations was calculated at about 30 percent and 10 percent, respectively, and the percentage of no-shows increased from 7.2 percent to nine percent over the last audit period. NVTA explained that the COVID pandemic had a negative impact on the number of cancellations and no-shows. NVTA indicated it had been overly accommodating to riders during the pandemic, but realized it needed to more strictly enforce its cancellation and no-show policies to decrease the percentages of cancellations and no-shows.

NVTA's efforts appear to be working, as the current audit period shows cancellations down over 13 percent and late cancellations down almost two percent overall. The trend in no-show riders did increase during this audit period, from 5.1 percent in FY2021 to 6.2 percent in FY2023, but those percentages are lower than those recorded for no-shows in the prior audit. NVTA is encouraged to continue monitoring the percentage of no-shows to try to negate the current trend, but no recommendation is made for specific activities. This recommendation is considered implemented.

- 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 FY2021 and FY2023:

  – Administrative costs fluctuated between FY2021 and FY2022 but ended up increasing in terms of percentage of total operating costs (about five percent) and administrative costs per vehicle service hour (over 37 percent).

  – Marketing costs decreased significantly by about 84 percent overall, both in terms of percentage of total administrative costs and in cost per passenger trip.

– Revenue recovery showed an improving trend during the audit period, increasing 17 percent overall, suggesting the beginning of a recovery from the pandemic years.

Bus Service – The following is a brief summary of the bus service functional trend highlights between FY2021 and FY2023:

– Service Planning results showed increasing costs per passenger mile, mixed performance in terms of in-service miles and hours, with a small increase in in-service miles, and a small decrease in in-service hours, and consistent improvement in passenger productivity between FY2021 and FY2023.

– Operations results showed an almost nine percent increase in terms of vehicle operations costs as a percentage of total operating cost, and a 48.8 percent increase in operating cost per vehicle service hour, largely due to a new operating contract that began in FY2021. Schedule adherence decreased by 14 percent overall, and the rate of complaints decreased by 45 percent. Farebox recovery increased over 40 percent during the audit period, while the TDA fare recovery ratio, which includes local support less operating cost exclusions, increased by more than 24 percent. The number of missed trips saw a significant overall percentage increase (614 percent), but in actual performance, comprised less than one percent of total trips each year.

– Maintenance costs were lower overall, with a 30 percent decrease as a percent of total operating costs, and a six percent decrease in maintenance cost per service mile. The spare ratio decreased by 53.3 percent overall. Performance in the rate of mechanical failures fluctuated, with mean distance between major mechanical failures and all failures increasing between FY2021 and FY2022, but then decreasing in FY2023, by about 63 percent and 42 percent, respectively.

– The rate of preventable accidents increased modestly from 1.10 per 100,000 miles in FY2021, to 1.47 in FY2023.

Paratransit – The following is a brief summary of the paratransit functional

trend highlights between FY2021 and FY2023:

- Service Planning results showed a modest eight percent decrease in total operating cost per passenger mile, and mixed performance in terms of in-service miles (13.6 percent decrease), and hours (3.2 percent increase), operated as a percentage of total miles and hours. Passenger productivity also exhibited mixed results with a 14.3 percent increase in passenger per vehicle service mile and a 3.4 percent decrease in passengers per vehicle service hour.

- Operations results showed decreases both in terms of vehicle operations costs as a percentage of total operating costs, and vehicle operations cost per hour. The farebox recovery ratio increased by about eight percent, while schedule adherence remained consistently high throughout the audit period. No complaints were recorded during the audit period.

  No ADA trip denials were reported during the entire audit period, while both total trip cancellations and late cancellations rates decreased, by 13.3 percent and 1.4 percent, respectively. The no-show did increase from 5.1 percent to 6.2 percent between FY2021 and FY2023.

- Maintenance performance results showed significantly higher costs over the audit period in terms of maintenance costs as a percentage of total costs, and maintenance costs per vehicle mile. Although the overall trend in service reliability (i.e., mean distance between failures) was negative, there were never more than eleven failures reported in any year.

- No preventable accidents were reported in any year of the audit period.

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]

It was recommended that NVTA and its contractor continue to monitor on-time performance and develop strategies toward improving on-time performance for its bus services. NVTA identified several causes for decreased bus schedule adherence, including an outdated CAD/AVL system, and operator related issues, including COVID related absences, reduction of the fixed-route services during the pandemic, and increased operator training.

NVTA implemented several strategies to improve on-time performance, including procuring a new GMS Syncromatics CAD/AVL system in mid-2021, updating the on-board mobile units to the latest software version, implementing contractor log-in monitoring and observation to address operator errors, and reestablishing the fixed-route schedule and routes to pre-pandemic levels. While some of the schedule adherence problems are beyond NVTA control, such as COVID related staffing issues and missed trips related to them, the on-time performance remains problematic, as seen in the current audit period on-time performance percentages, which are down by about 14 percent overall. It is recommended that NVTA continue its efforts in monitoring the on-time performance of its bus service and working with the contractor to improve schedule adherence.

2. TAKE STEPS TO IMPROVE MECHANICAL RELIABILITY ON NVTA'S BUS AND PARATRANSIT SERVICES.
[Reference Section: VI. Functional Performance Indicator Trends]

The mean distance between major and all mechanical failures on NVTA's bus system decreased overall by 63 percent and 41 percent, respectively, during the audit period, from 100,407 miles to 37,201 miles for major failures, and from 32,389 to 18,906 miles for all failures, despite more positive results in the interim year.

For the paratransit side, mean distance between major failures decreased 3.8 percent overall from 185,453 miles to 178,468 miles, and 56 percent overall for all failures from 74,181 to 32,449 miles. In actual numbers, these results represent an almost doubling of bus system total failures from 31 in FY2021 to 61 in FY2023, while major failures tripled from 10 to 31 in the same period. The numbers for paratransit were not as high, with total failures increasing from five to eleven, and major failures remaining at one or two per year.

NVTA has identified the age of both its fixed-route and paratransit fleets as a major contributor to its mechanical reliability. NVTA has experienced both administrative and mechanical delays in upgrading its revenue vehicle fleet. NVTA received a federal NOLO low-emission vehicle grant for five electric buses in FY2016/2017, however due to delays in testing and manufacturing the vehicles, they were not delivered until FY2022, resulting in NVTA running buses that should have been replaced for an additional four years past their useful service life. On the paratransit side, NVTA has experienced delays in reeiving federal funding for vehicles through its funding partner, Caltrans. Delays of up to two years between the federal grant award and receiving a final Standard Agreement from Caltrans to purchase vehicles again resulted in NVTA operating revenue vehicles beyond their useful service life, increasing the frequency of breakdowns.

Although the number of failures is not inordinately high, the increase, especially between FY2022 and FY2023 on the bus side, points to a potentially troublesome maintenance issue which NVTA should address in coordination with its operating contractor. While delays in purchasing new vehicles are beyond NVTA's control, efforts should be made to improve mechanical reliability, such as strategies to improve mechanic training, increased staffing as necessary, and enhanced

monitoring activities to ensure that mechanical issues are identified and corrected before they have a chance to escalate further.

APPENDIX A:
INPUT STATISTICS FOR
FUNCTIONAL PERFORMANCE MEASURES

Functional Performance Inputs - Systemwide (All Modes)

Data Item	FY2021	FY2022	FY2023	Source
Total Operating Costs	$9,669,342	$12,215,112	$13,888,419	NTD F-40
Administrative Costs	$1,487,089	$1,630,689	$2,249,337	NTD F-40
Vehicle Service Hours	85,341	93,923	93,763	NTD S-10 MB+DR
Marketing Costs	$61,807	$27,960	$15,102	Annual Comp. Financial Report
Unlinked Passenger Trips	314,793	441,265	487,995	NTD S-10 MB+DR
Farebox Revenue (All Modes)	$448,121	$501,972	$752,940	NTD F-10

Functional Performance Inputs – Bus Service

Data Item	FY2021	FY2022	FY2023	Source
Vehicle Service Miles	894,942	1,052,870	1,086,917	NTD S-10 MB
Total Vehicle Miles	1,004,073	1,168,670	1,153,245	NTD S-10 MB
Vehicle Service Hours	46,749	60,474	60,830	NTD S-10 MB
Total Vehicle Hours	56,791	75,560	77,708	NTD S-10 MB
Unlinked Passenger Trips	236,082	369,444	413,166	NTD S-10 MB
Farebox Revenue	$195,137	$357,426	$497,036	NTD F-10
Total Operating Costs	$5,704,979	$9,037,432	$10,179,735	NTD F-30 MB
Passenger Miles	2,599,236	3,454,810	3,761,085	NTD S-10 MB
Vehicle Operations Costs	$3,955,420	$7,245,145	$7,656,070	NTD F-30 MB
Local Support *(a)*	$0	$0	$0	
TDA Oper. Cost Exclusions - PUC 99247 *(b)*	$0	$0	$0	
TDA Oper. Cost Exclusions - PUC 99268.17 *(c)*	$0	$0	$0	
Trips On-Time	67.6%	59.4%	58.1%	Board Reports (CAD/AVL & GMV systems)
Total Trips (Scheduled)	38,148	69,650	68,064	Trip Calculation Spreadsheet
Complaints	147	175	141	HappyFox software tracking
Missed Trips	42	289	535	Missed Trips Log
Vehicle Maintenance Costs	$566,704	$515,879	$646,484	NTD F-30 MB
Non-Vehicle/Facility Maintenance Costs	$62,838	$69,197	$132,479	NTD F-30 MB
Spare Vehicles (Total less Maximum Service)	10	2	5	NTD S-10 MB
Total Vehicles	28	28	30	NTD S-10 MB
Revenue Vehicle Mechanical System Failures - Total	31	28	61	NTD R-20
Revenue Vehicle Mechanical System Failures - Major	10	11	31	NTD R-20
Preventable Accidents (NTD Guidelines)	11	15	17	Incidents Log

(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)*

Functional Performance Inputs – Paratransit

Data Item	FY2021	FY2022	FY2023	Source
Vehicle Service Miles	310,614	258,281	258,397	NTD S-10 DR
Total Vehicle Miles	370,906	347,031	356,936	NTD S-10 DR
Vehicle Service Hours	33,449	38,592	32,933	NTD S-10 DR
Total Vehicle Hours	42,175	38,823	40,241	NTD S-10 DR
Unlinked Passenger Trips	78,711	71,821	74,829	NTD S-10 DR
Farebox Revenue	$252,984	$144,546	$255,904	NTD F-10
Total Operating Costs	$3,964,363	$3,177,680	$3,708,684	NTD F-30 DR
Passenger Miles	205,077	217,324	210,176	NTD S-10 DR
Vehicle Operations Costs	$3,347,085	$2,460,529	$2,713,955	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)	100.0%	100.0%	100.0%	ADA Paratransit Ops.Summary Report
Total Trips	3,316	6,344	13,340	ADA Paratransit Ops.Summary Report
Complaints	0	0	0	ADA Paratransit Ops.Summary Report
Missed Trips	0	0	7	ADA Paratransit Ops.Summary Report
Total ADA Trips	4,578	8,710	18,216	ADA Paratransit Ops.Summary Report
ADA Trip Denials	0	0	0	ADA Paratransit Ops.Summary Report
Trip Cancellations	1,272	2,295	4,386	ADA Paratransit Ops.Summary Report
Late Trip Cancellations	507	732	1,990	Trapeze
No Shows	234	480	1,133	ADA Paratransit Ops.Summary Report
Vehicle Maintenance Costs	$222,183	$270,570	$461,887	NTD F-30 DR
Non-Vehicle/Facility Maintenance Costs	$28,023	$23,103	$28,207	NTD F-30 DR
Spare Vehicles (Total less Maximum Service)	8	2	5	NTD S-10 DR
Total Vehicles	24	24	24	NTD S-10 DR
Revenue Vehicle Mechanical System Failures - Total	5	10	11	NTD R-20
Revenue Vehicle Mechanical System Failures - Major	2	1	2	NTD R-20
Preventable Accidents	0	0	0	ADA Paratransit Ops.Summary 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