

Triennial Performance Audit

of the

Solano County Transit (SolTrans)

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

FINAL AUDIT REPORT

prepared for the



by



June 2024

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 Solano County Transit (SolTrans). 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 SolTrans, 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 SolTrans' 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 SolTrans' performance based on the results of the previous sections.

Comments received from SolTrans and MTC staff regarding the draft report have been incorporated into this final report. Highlights from the key activities are presented in this executive summary.

Results and Conclusions

Review of TDA Data Collection and Reporting Methods - The purpose of this review is to determine if SolTrans is in compliance with the TDA requirements for data collection and reporting. The review is limited to the five data items needed to calculate the TDA-mandated performance indicators. This review has determined, based on the information provided, SolTrans appears to be in compliance with the data collection and reporting requirements for the five TDA statistics.

The statistics collected over the period appear to be consistent with the TDA definitions. Further, statistics generally indicate consistency in terms of the direction and magnitude of the year-to-year changes across the statistics, that is, increases or decreases in annual operating costs are relatively proportional to increases or decreases in annual vehicle service hours.

However, in some years there are inconsistencies in terms of the direction and magnitude of the year-to-year changes across the statistics. In FY2019, fixed-route operating costs and unlinked passengers increased as hours and miles decreased. Then in FY2020 fixed-route statistics began moving in the same direction, although costs were not always commensurate with the other statistics. On the paratransit side, statistics generally trended in the same direction during most years, although costs decreased in FY2022, while the other statistics increased substantially.

Performance Indicators and Trends – SolTrans’ 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 summary of the TDA performance trend highlights over the six-year period of FY2018 through FY2023:
 - There was an average annual increase in the operating cost per hour of 10.1 percent, which amounted to a 6.1 percent increase in inflation adjusted dollars.
 - The cost per passenger increased on average by 15.5 percent per year, resulting in an average annual increase of 11.4 percent in constant FY2018 dollars.
 - Passenger productivity declined, with passengers per vehicle service hour decreasing by 4.7 percent per year overall, and passengers per vehicle service mile decreasing by 9.9 percent annually.

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

- Purchased transportation costs increased by an average of 7.3 percent per year, and remained the largest component cost area at about 63.5 percent of total costs on average each year. The largest increase was 30.3 percent in FY2023.
- In-house labor and fringe benefit costs increased overall on average, by 5.3 percent and 12.9 percent, respectively. The two categories combined comprised from 10.4 to 12.9 percent of total operating costs in any year of the period.
- Services costs increased by 1.8 percent on average per year, and comprised about 11.5 percent of total operating costs in each year of the period. However, the category decreased from 13.1 percent of total costs in FY2018 to 9.9 percent of the total in FY2023.
- Costs increased annually over the review period for both materials/supplies (13.6 percent on average) and other expenses (12.6 percent on average). The share of these costs combined averaged between 10 to 16 percent of the total operating costs over

the review period.

- There was an average annual increase of 15.3 percent in casualty/liability, which comprised less than 0.7 percent of total costs in each year.
- Paratransit – The following is a summary of the TDA performance trend highlights over the six-year period of FY2018 through FY2023:
 - Cost efficiency showed a decrease, with an average annual increase in the operating cost per hour of 1.4 percent. This amounted to an average annual decrease of 2.2 percent in inflation adjusted dollars.
 - Cost effectiveness was similar, with the operating cost per passenger increasing an average of 2.1 percent per year, or 1.5 percent annual decrease when expressed as normalized FY2018 dollars.
 - Passenger productivity declined slightly, with only minor changes in passengers per hour, decreasing 0.7 percent per year on average, and passengers per mile decreasing 2.4 percent annually.

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

- Purchased transportation costs represented the largest portion of total paratransit operating costs, yet decreased from 75.3 to 69.2 percent during the period. Purchased transportation costs also decreased by 7.7 percent per year on average.
- An average annual decrease of 3.2 percent was seen in labor, while fringe benefits increased by 1.3 percent on average annually. The two categories increased from 11.3 percent of total costs in FY2018 to 15.1 percent in FY2023.
- Cost decreases occurred in the services (3.6 percent), and materials/supplies (5.1 percent) categories, while other expenses (4.2 percent) increased during the review period. Together, these categories combined represented 17.0 percent or less of total operating costs in every year of the period.

- An average annual increase of 16.9 percent was seen in the casualty/liability category, but this area comprises only one percent of total expenses.

Compliance with Statutory Requirements – SolTrans 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.

Status of Prior Audit Recommendation – There was one recommendation made in SolTrans’ prior performance audit. SolTrans has implemented the corrective action for the recommendation from the prior audit to examine the causes of the decline in miles between mechanical failures on the paratransit services.

- The recommendation was for SolTrans to examine the causes of its decline in miles between mechanical failures on paratransit services. The prior audit found maintenance results for paratransit services showed a substantial decrease in the mean distance between major failures, which declined overall by 61 percent, from 25,544 miles to 9,900 miles.
- SolTrans staff responded that after examination of the decline experienced during the prior audit period, the trend was due in large part to maintenance issues with aging 2011 cutaway vehicles that had exceeded their useful lives and were the cause of many of the paratransit mechanical failures. The 2011 cutaways have been retired and the need for road calls has dropped substantially in the current review period.
- SolTrans has implemented the corrective actions for the recommendation from the prior audit, listed in Exhibit 7. The current audit found a much improved mean distance between failures for all three years, ranging from 35,928 to 68,378 from FY2021 through FY2023. The actual number of major failures for paratransit were one, zero, and three, respectively, from FY2021 through FY2023.

Functional Performance Indicator Trends - To further assess SolTrans' 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 summary of the systemwide functional trend highlights between FY2021 and FY2023:
 - Administrative cost as percentage of total operating cost decreased in each year of the period and by 20.0 percent overall from FY2021 to FY2023. Administrative cost per service hour was also down each year and decreased by 16.6 percent in the same period.
 - Marketing cost as a percentage of total administrative cost increased overall by 40.9 percent in the period, but accounted for between just 1.0 and 1.5 percent of total administrative cost. Marketing cost decreased from \$0.14 to \$0.10 per passenger trip during the same period.
 - Systemwide farebox recovery ratio increased in each year, from 8.4 percent in FY2021 to 10.2 percent in FY2023, up 21.1 percent overall in the period.

- Bus Service – The following is a summary of the bus service functional trend highlights between FY2021 and FY2023:
 - Service Planning results showed operating cost per passenger mile decreasing 56.6 percent overall, with the largest decrease occurring in FY2023. Vehicle miles in service and vehicle hours in service both remained above 92 percent overall in each year, and passengers per vehicle service mile and hour increased 43.8 and 68.2 percent respectively, with the largest increases again occurring in FY2023.
 - In Operations, vehicle operations cost increased as a percentage of total operating cost overall (25.8 percent), as did operations cost per service hour (35.2 percent) during the audit period. Farebox recovery

increased by 18.4 percent in the period and stood at 10.6 percent in FY2023. The TDA recovery ratio was slightly higher and increased by 19.3 percent overall. Schedule adherence improved from 62.2 percent to about 65.6 percent over the three years, and the number of complaints increased from 9.2 to 12.0 per 100,000 miles. The percentage of missed trips increased by 21.0 percent in the period yet stood at just 1.06 percent of total trips in FY2023.

- Maintenance results were mixed, with maintenance cost increasing just 1.4 percent overall relative to total operating cost, but decreasing by 17.7 percent overall on a service mile basis. The vehicle spare ratio decreased by 25.1 percent over three years.
 - Vehicle reliability showed improvement with mean distance between major failures increasing by 126.8 percent from FY2021 to FY2023 and distance between all failures increasing by 116.7 percent in the same period.
 - Safety results demonstrated fluctuations in the rate of preventable accidents per 100,000 vehicle miles, but remained at fewer than two in each year, with an overall decrease of 42.9 percent in the period and a low of 0.8 in FY2023.
- Paratransit – The following is a summary of the paratransit functional trend highlights between FY2021 and FY2023:
 - Service Planning saw the cost per passenger mile decrease by 56.7 percent from FY2021 to FY2023, and percent of vehicle miles and vehicle hours in service increased by 18.5 percent and 30.0 percent, respectively. The latter two measures each surpassed 97 percent by FY2023.
 - Passenger productivity increased as well, with passengers per vehicle service mile increasing 0.4 percent in the period. Passengers per vehicle service hour increased from 1.55 to 2.05, an overall increase of 32.6 percent from FY2021 to FY2023.
 - Operations results included a 5.2 percent decrease in vehicle operations cost as a portion of total operating cost, and a 28.5 percent decrease in vehicle operations cost per service hour. Farebox

recovery mirrored TDA recovery ratio and increased by 47.2 percent during the three-year period, increasing from 3.1 to 4.6 percent.

- Schedule adherence fluctuated, but decreased by 11.7 percent overall, while complaints increased by 51.1 percent from FY2022 through FY2023. Complaint data was unavailable for FY2021 due to a vendor change.
- There were almost no missed trips and there were no ADA trip denials during the audit period. The rate of trip cancellations increased from 10.5 percent to 19.6 percent from FY2021 to FY2023. Late cancellations increased from 9.3 percent to 10.2 percent and passenger no-show rates increased slightly but remained below 1.9 percent in all three years.
- Vehicle maintenance cost increased 21.3 percent as a proportion of total operating cost in the period, from 11.8 percent to 14.3 percent. Vehicle maintenance costs per service mile decreased 28.9 percent. Spare ratio decreased by 21.4 percent overall.
- Miles between mechanical failures declined by 47.5 percent for major failures, and 21.2 percent for all failures. However, the actual number of failures was small, with total failures numbering one, zero and three in the three years of the period.
- Safety results saw a decrease in the number of preventable accidents per 100,000 miles over the audit period, from 1.9 in FY2022 to 0.9 in FY2023. Data for FY2021 was unavailable due to a vendor change.

Recommendations

No recommendations are suggested for SolTrans at this time based on the results of this triennial performance audit.

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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 Solano County Transit (SolTrans). The two modes operated by SolTrans, 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 SolTrans is provided in Exhibit 1. This is followed by a recent organization chart in Exhibit 2, which reflects the basic organizational structure during the audit period and beyond.

Performance Audit and Report Organization

This performance audit of SolTrans was conducted for MTC in accordance with its established procedures for performance audits. The audit consisted 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 SolTrans and MTC staff have been incorporated into this final report.

Exhibit 1: System Overview

Locations Operations and Maintenance Facility - 1850 Broadway Street, Vallejo, CA 95489
Administrative Offices & Transit Center – 311 Sacramento Street and 237 Georgia Street, Vallejo, CA 94590

Establishment Solano County Transit (SolTrans) is a Joint Powers Authority that provides public transportation to the southern Solano County cities of Vallejo and Benicia. SolTrans was created by a joint powers agreement approved in the fall of 2010 by the City of Benicia, the City of Vallejo, and the Solano Transportation Authority to build a unified public transit system in southern Solano County. On July 1, 2011, SolTrans officially took over the public transit programs from the cities of Vallejo and Benicia.

Board SolTrans has a six-member Board of Directors with four City Council members from Benicia and Vallejo and two members from regional planning agencies boards of directors – the Metropolitan Transportation Commission (MTC), and the Solano Transportation Authority (STA). The STA member is a non-voting, ex-officio member. There also two alternate members.

Facilities The SolTrans Operations and Maintenance facility is located on Broadway Street in Vallejo. It is the central base of operations for services and the contractor employees. SolTrans' agency staff are located in the administrative offices located at the Vallejo Transit Center at 311 Sacramento Street and 237 Georgia Street in Downtown Vallejo. SolTrans services are centered around three transit centers in Vallejo: the Vallejo Transit Center, the Sereno Transit Center on Sereno Drive in west Vallejo, and the Curtola Park and Ride Hub at Curtola Parkway and Lemon Street.

Service Data SolTrans provides local bus service to the Solano County cities of Vallejo and Benicia. They also provide express bus service connecting Solano County north to the City of Davis in Yolo County and south to the Contra Costa County communities of El Cerrito, Pleasant Hill, and Walnut Creek with regional connections to BART. SolTrans also operates express service connecting Fairfield and Vallejo with the San Francisco Ferry Terminal. Nine local fixed routes serve Vallejo, three limited-service routes operate during school in-service dates within Vallejo and Benicia, and five intercity routes connect to surrounding areas. In addition to fixed-route service, SolTrans provides ADA complementary paratransit bus service. SolTrans contracts with Transdev to operate and maintain both its fixed-route and paratransit services.

SolTrans operates nine local fixed-routes with a span of service Monday through Friday from 6:45 a.m. to 9:29 p.m., Saturdays 8:45 a.m. to 7:17 p.m. and two routes on Sunday 8:45 a.m. to 7:17 p.m. Express service runs weekdays from approximately 4:30 a.m. to 11:14 p.m., Saturdays 6:15 a.m. to 9:54 p.m. and two routes on Sunday from 8:07 a.m. to 9:59 p.m. Frequencies on local routes are fixed at either 30- or 60-minute headways consistently all day. Express route frequencies are variable but generally run on 30-to-60-minute headways during the peak periods and 60 to 120 minutes off-peak.

SolTrans' current fixed-route fleet consists of 57 revenue vehicles, including diesel-electric hybrid, compressed natural gas (CNG), and electric buses and diesel coaches with one battery-electric coach.

The local adult fare is \$2.00, the express fare within Solano County is \$2.75, and the express fare for travel to locations outside Solano County is \$5.00. Discounted fares are offered to senior patrons, disabled patrons, and Medicare cardholders at \$1.00 for local routes, \$1.35 for express travel within Solano County and \$2.50 for express routes. Daily and 31-day passes and discounted 10-ride tickets are also available

Complementary ADA paratransit service is provided by SolTrans Paratransit seven days a week during the same hours as the fixed route service. SolTrans' paratransit fleet consists of 8 revenue vehicles, including gasoline and compressed natural gas cutaway buses. The fare is \$4.00 per trip within. A \$40 10-Ride Pass is also available.

Recent Changes

SolTrans had two major contract changes that impacted operating expenses and metrics. On July 1, 2020 SolTrans issued an emergency extension to its transit services contract with National Express which increased rates and then on July 1, 2021 a new transit services contract began with Transdev that again increased contract rates to mirror changes in the marketplace for wages and rapid inflation in all areas of equipment, supplies and insurance.

SolTrans also had a major change in commuter service. In April and August of 2022, SolTrans took over operation of the Green and Blue Express Lines from Fairfield Transit that effectively doubled Express vehicle revenue hours. However, it greatly increased vehicle revenue miles due to the length of these routes. Fairfield also transferred 9 coaches to SolTrans expanding the fleet. Transitioning these routes to SolTrans triggered a contract negotiation with Transdev and further increased the contract cost due to the additional drivers and increased maintenance costs for the expanded fleet.

SolTrans also has the following projects in progress or has completed the following projects:

- Purchase and installation of a new AVL-CAD system on the fleet;
- Certification of APCs;
- Currently in construction of infrastructure to support a future, electric local fleet with completion expected September 2024;
- Installation of inductive charger at the Curtola Park-n-Ride;
- Issued purchase orders for 19 battery electric buses to replace diesel hybrids with the first 5 buses arriving December 2024;
- Installation of a dynamic-bay, passenger-loading system allowing SolTrans and external partners to run more service through the transit centers;
- Installation of real time signage at transit centers and the Curtola Park-n-Ride; and
- Purchase of 2 acres next door to the current Operations and Maintenance facility for expansion and future zero emission infrastructure

Planned Changes SolTrans is planning the following projects:

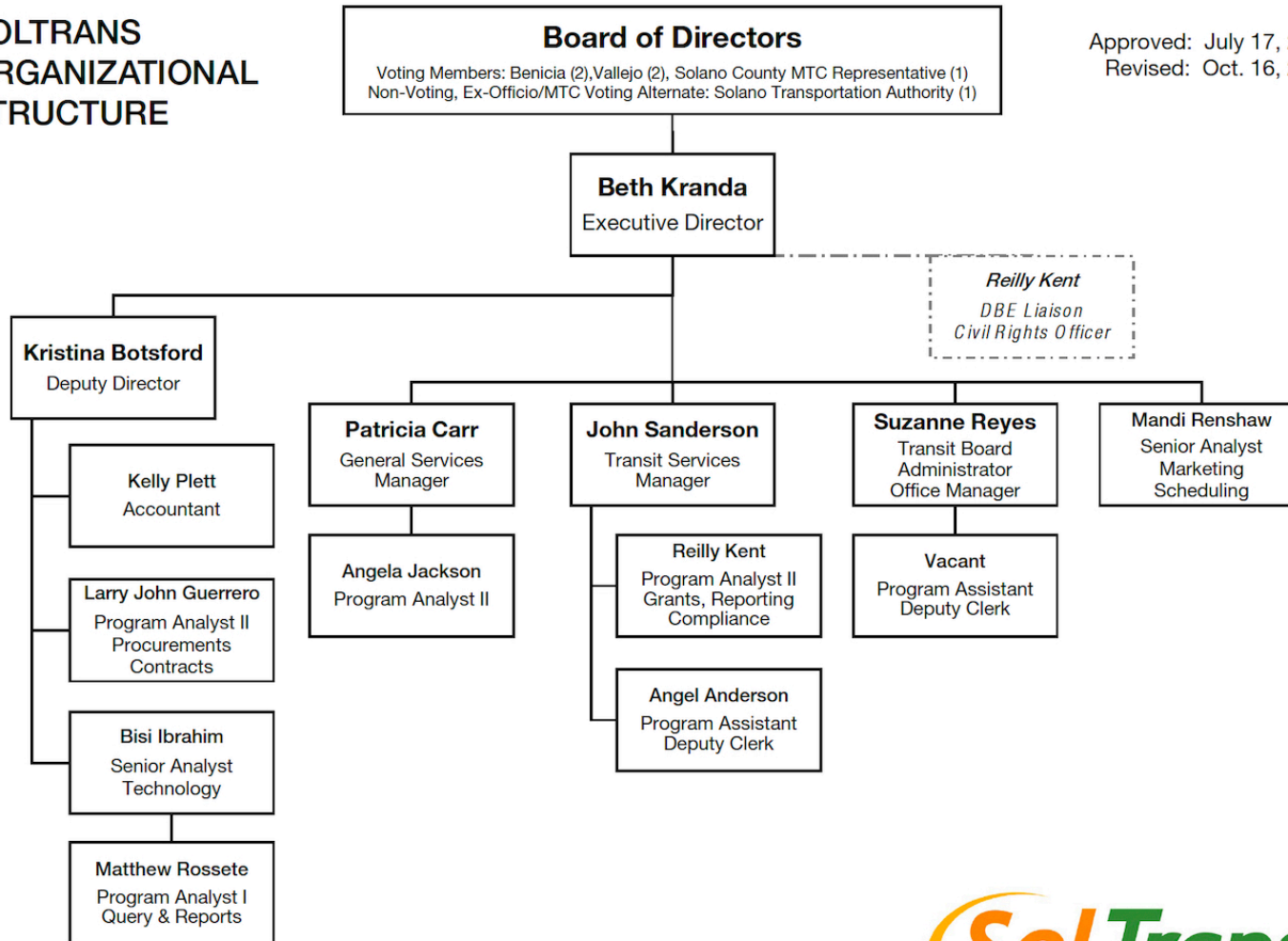
- Execute a contract in March 2024 to begin a comprehensive operational analysis on local and express routes;
- Beautification of the Sereno Transit Center including new shelters, landscaping, upgraded lighting, new camera system, and local artist murals to be completed by December 2024;
- Installation of the already-designed, inductive chargers to be placed at the Vallejo Transit Center and the York Street extension by 2025;
- Assess options for expanding our bus yard and operations to best utilize the newly purchased land.

Staff SolTrans currently has fourteen approved in-house positions:

- One (1) Executive Director;
- One (1) Deputy Director;
- One (1) Office Manager/Board Administrator;
- Four (4) Managers – Contracted Operations, Planning and Marketing, Technology, and General Services;
- One (1) Accountant;
- Four (4) Program Analysts I & II; and
- Two (2) Program Assistant/Deputy Board Clerks

Exhibit 2.1: Organization Chart FY2021-2023

SOLTRANS ORGANIZATIONAL STRUCTURE



Approved: July 17, 2019
Revised: Oct. 16, 2023



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 SolTrans 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 SolTrans covering the audit period has been reviewed. SolTrans' NTD reports include its bus and paratransit services.

Compliance with Requirements

To support this review, SolTrans staff confirmed that data collection and reporting procedures have at times changed from those described in the prior performance audit. In FY2021 SolTrans used Avail in order to collect statistics, utilizing a contractor, Solutions for Transit, for reporting. For FY2022 and FY2023 SolTrans transitioned to a new vendor, Connexionz (CNX), to collect and report statistics.

Based on the information provided as shown in Exhibit 3.1, SolTrans appears to be in compliance with the data collection and reporting requirements for the five TDA statistics.

Consistency of the Reported Statistics

The resulting TDA statistics for SolTrans' bus and paratransit services are shown in Exhibits 3.2 and 3.3, respectively. Included are statistics covering each fiscal year of the three-year audit period, plus the immediately preceding three fiscal years, resulting in a six-year trend. The statistics collected over the period appear to be consistent with the TDA definitions. Further, statistics generally indicate consistency in terms of the direction and magnitude of the year-to-year changes across the statistics, that is, increases or decreases in annual operating costs are relatively proportional to increases or decreases in annual vehicle service hours.

However, in some years there are inconsistencies in terms of the direction and magnitude of the year-to-year changes across the statistics. In FY2019, fixed-route operating costs and unlinked passengers increased as hours and miles decreased. Then in FY2020 fixed-route statistics began moving in the same direction, although costs were not always commensurate with the other statistics. On the paratransit side, statistics generally trended in the same direction during most years, although costs decreased in FY2022, while the other statistics increased substantially.

Exhibit 3.1: Compliance with TDA Data Collection and Reporting Requirements

| TDA Statistic | TDA Definition | Compliance Finding | Verification Information |
|-----------------------|---|--------------------|--|
| Operating Cost | <p>“Operating cost” means all costs in the operating expense object classes exclusive of the costs in the depreciation and amortization expense object class of the uniform system of accounts and records adopted by the Controller pursuant to Section 99243. Also excluded are all subsidies for commuter rail services operated on railroad lines under the jurisdiction of the Federal Railroad Administration, all direct costs for providing charter services, all vehicle lease costs, and principal and interest payments on capital projects funded with certificates of participation.</p> | In Compliance | <ul style="list-style-type: none"> • SolTrans maintains accounting records by mode. All direct or identifiable costs are coded to the appropriate mode. Indirect costs are allocated between fixed route and demand response services in a 90/10 split based on the average revenue hours of each mode • The FTA required SolTrans to conduct an Independent Auditor Statement – Financial Data (IAS-FD) performed by outside auditors due to implementation of a new accounting system in FY 2017-18. The report found no exceptions to data examined. |
| Vehicle Service Hours | <p>“Vehicle service hours” means the total number of hours that each transit vehicle is in revenue service, including layover time.</p> | In Compliance | <ul style="list-style-type: none"> • For fixed-route, in FY2020-21, SolTrans used Avail, a CAD/AVL system for hours and contracted with Solutions for Transit to create the report automatically. • In FY2021-22, SolTrans implemented a new CAD/AVL vendor, Connexionz (CNX), and new APC equipment through UTA as a subcontractor to CNX. SolTrans used contractor invoices for hours based on scheduled hours less missed trips, comparing the data to CNX and UTA during the system validation process. In July 2022, SolTrans APCs were certified by NTD. • In FY2022-23 SolTrans continued to use contractor invoices for hours based on validation of the data comparing actuals in CNX and UTA with scheduled hours and missed trips. • SolTrans understands its data sources, limitations and variances between systems. Each year SolTrans reports based on the best information |

| TDA Statistic | TDA Definition | Compliance Finding | Verification Information |
|-----------------------|---|--------------------|--|
| | | | <p>available and consistently works with vendors to create new reports to validate and reconcile data.</p> <ul style="list-style-type: none"> For demand response paratransit service, SolTrans uses Trapeze for collecting and reporting hours. |
| Vehicle Service Miles | “Vehicle service miles” means the total number of miles that each transit vehicle is in revenue service. | In Compliance | <ul style="list-style-type: none"> For fixed-route, in FY2020-21, SolTrans used Avail, a CAD/AVL system for miles and contracted with Solutions for Transit to create the report automatically. In FY2021-22, SolTrans implemented a new CAD/AVL vendor, Connexionz (CNX), and new APC equipment through UTA as a subcontractor to CNX. SolTrans used CNX and UTA data for miles with adjustments for missed trips, comparing the data to CNX and UTA during the system validation process. In FY2022-23, for revenue miles SolTrans used CNX and UTA data with adjustments for missed trips. For demand response paratransit service, SolTrans uses Trapeze for collecting and reporting miles. |
| Unlinked Passengers | “Unlinked passengers” means the number of boarding passengers, whether revenue producing or not, carried by the public transportation system. | In Compliance | <ul style="list-style-type: none"> For fixed-route, in FY2020-21, ridership was determined by adding GFI and Clipper data by route. SolTrans contracted with Solutions for Transit to create the report automatically. In FY2021-22, SolTrans implemented a new CAD/AVL vendor, Connexionz (CNX), and new APC equipment through UTA as subcontractor to CNX. For ridership, SolTrans combined Clipper and GFI data, and in July 2022 APCs were certified by NTD. In FY2022-23 SolTrans used APCs in UTA for ridership. |

| TDA Statistic | TDA Definition | Compliance Finding | Verification Information |
|--------------------------------|---|--------------------|--|
| | | | <ul style="list-style-type: none"> For demand response paratransit service, SolTrans uses Trapeze for collecting and reporting ridership. |
| Employee Full-Time Equivalents | 2,000 person-hours of work in one year constitute one employee. | In Compliance | <ul style="list-style-type: none"> SolTrans defines one FTE employee as 2,000 person-hours of work during a one-year period. |

Exhibit 3.2: TDA Statistics – Bus Service

| TDA Statistic | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|-------------------------------|--------------|--------------|--------------|--------------|--------------|--------------|
| Operating Cost (Actual \$) | \$11,908,654 | \$12,259,621 | \$12,069,980 | \$11,697,859 | \$13,841,810 | \$17,202,428 |
| <i>Annual Change</i> | -- | 2.9% | -1.5% | -3.1% | 18.3% | 24.3% |
| Vehicle Service Hours | 100,090 | 98,239 | 94,603 | 65,450 | 74,360 | 89,569 |
| <i>Annual Change</i> | -- | -1.8% | -3.7% | -30.8% | 13.6% | 20.5% |
| Vehicle Service Miles | 1,578,515 | 1,491,844 | 1,385,614 | 1,168,484 | 1,364,847 | 1,870,754 |
| <i>Annual Change</i> | -- | -5.5% | -7.1% | -15.7% | 16.8% | 37.1% |
| Unlinked Passengers | 1,347,760 | 1,411,192 | 1,071,308 | 412,068 | 557,305 | 948,468 |
| <i>Annual Change</i> | -- | 4.7% | -24.1% | -61.5% | 35.2% | 70.2% |
| Employee Full-Time Equivalent | (a) | (a) | (a) | (a) | (a) | -- |
| <i>Annual Change</i> | -- | -- | -- | -- | -- | -- |

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

Notes: Bus statistics include combined commuter bus and motor bus data for each year
 (a) Contracted service - FTEs not applicable

Exhibit 3.3: TDA Statistics – Paratransit

| TDA Statistic | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 |
|--------------------------------|-------------|-------------|-------------|-------------|-------------|-------------|
| Operating Cost (Actual \$) | \$1,789,663 | \$1,837,575 | \$1,639,703 | \$1,220,996 | \$1,156,307 | \$1,303,180 |
| <i>Annual Change</i> | -- | 2.7% | -10.8% | -25.5% | -5.3% | 12.7% |
| Vehicle Service Hours | 13,887 | 15,762 | 12,181 | 6,672 | 9,079 | 9,444 |
| <i>Annual Change</i> | -- | 13.5% | -22.7% | -45.2% | 36.1% | 4.0% |
| Vehicle Service Miles | 142,768 | 146,845 | 105,890 | 56,444 | 92,887 | 105,465 |
| <i>Annual Change</i> | -- | 2.9% | -27.9% | -46.7% | 64.6% | 13.5% |
| Unlinked Passengers | 29,527 | 34,971 | 25,293 | 10,312 | 15,435 | 19,352 |
| <i>Annual Change</i> | -- | 18.4% | -27.7% | -59.2% | 49.7% | 25.4% |
| Employee Full-Time Equivalents | (a) | (a) | (a) | (a) | (a) | -- |
| <i>Annual Change</i> | -- | -- | -- | -- | -- | -- |

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

Notes: (a) Contracted service - FTEs not applicable

III. TDA PERFORMANCE INDICATORS AND TRENDS

The performance trends for SolTrans' 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. SolTrans' 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 SolTrans' 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 SolTrans' 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 SolTrans' 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 10.1 percent annually during the six-year review period. The increase reflects growth in operating costs, especially in FY2022 and FY2023, while service hours decreased overall in the period, mainly in FY2021.
- The cost per hour increased in each year of the review period, ranging from \$118.98 in FY2018 to \$192.06 in FY2023. Modest increases occurred in most years, but a 40.1 percent increase in FY2021 meant a larger average increase overall during the period.
- In FY2018 constant dollars, there was an average annual increase of 6.1 percent in this indicator.

Passengers per Vehicle Service Hour (Exhibit 4.2)

- A key indicator of passenger productivity, passengers per hour, decreased an average of 4.7 percent annually during the six-year period. Sizable decreases of 21.2 percent in FY2020 and 44.4 percent in FY2021 demonstrated the substantial effect the response to the COVID-19 pandemic had on overall performance, while increases of 19.0 percent in FY2022 and 41.3 percent in FY2023 reflected an increase in passengers as pandemic-era affects receded.
- The decrease reflects a modest overall decrease in service hours, combined with greater decrease in passengers over the six-year period. A 61.5 percent decrease in ridership in FY2021 resulted in a 44.4 percent drop in this indicator that year. Passengers per hour increased in the two most recent years of the review period by 19.0 and 41.3 percent, respectively.
- Passengers per hour decreased from 13.5 in FY2018 to 6.3 in FY2021, before recovering somewhat to 10.6 in FY2023.

Passengers per Vehicle Service Mile (Exhibit 4.2)

- Similar to passengers per hour, passengers per mile also decreased overall, by 9.9 percent annually on average. A similar pattern emerged during the period with decreases of 18.3 percent in FY2020 and 54.4 percent in FY2021 followed by increases of 15.8 percent in FY2022 and 24.2 percent in FY2023.
- An overall decrease in ridership that outweighed a small increase in vehicle service miles over the review period contributed to the average annual decrease in passengers per mile. The large decrease in ridership in FY2021 resulted in a 54.4 percent decline in this indicator that year.
- Passengers per mile decreased overall from 0.85 passengers per mile in FY2018 to 0.51 passengers per mile in FY2023.

Operating Cost per Passenger (Exhibit 4.3)

- A key measure of cost effectiveness, the cost per passenger increased from \$8.84 in FY2018 to \$28.39 in FY2021, before declining the next two years to \$18.14 in FY2023, reflecting the decline in ridership during the pandemic and subsequent burgeoning recovery in recent years.
- The cost per passenger decreased in three years of the review period, reflecting an increase in ridership in years bookending the pandemic, on either side of substantial ridership declines seen in FY2020 and FY2021.
- Overall, cost per passenger increased an average of 15.5 percent annually overall, but decreased by 12.5 percent in FY2022 and 27.0 percent in FY2023. With the impact of inflation removed from the cost side (normalization), cost per passenger exhibited an average annual increase of 11.4 percent per year.

* * * * *

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

- There was an average annual increase in the operating cost per hour of 10.1 percent, which amounted to a 6.1 percent increase in inflation adjusted dollars.
- The cost per passenger increased on average by 15.5 percent per year, resulting in an average annual increase of 11.4 percent in constant FY2018 dollars.
- Passenger productivity declined, with passengers per vehicle service hour decreasing by 4.7 percent per year overall, and passengers per vehicle service mile decreasing by 9.9 percent annually.

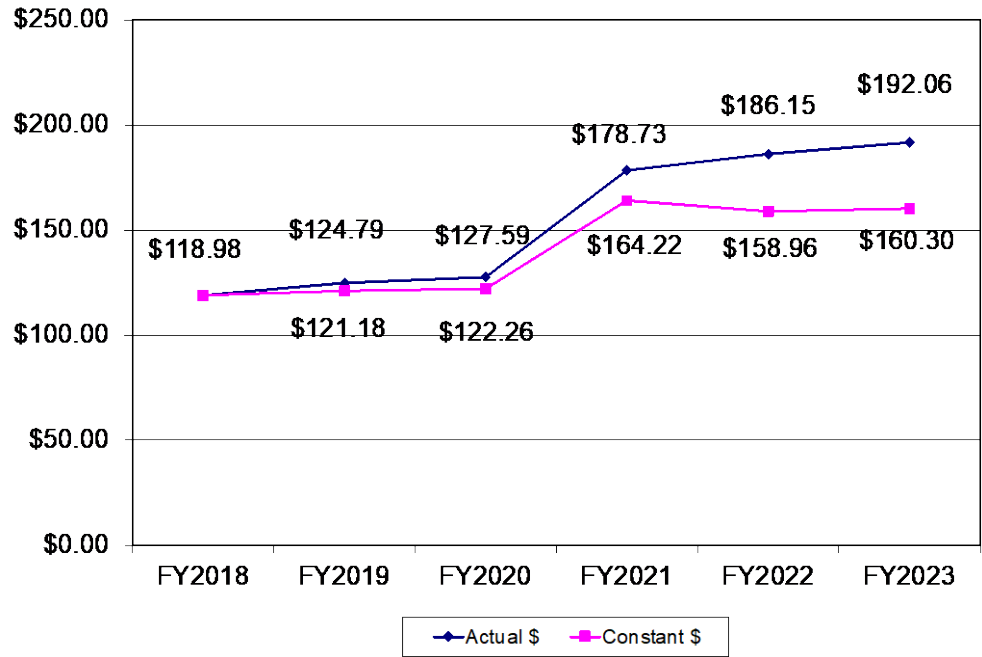
Exhibit 4: TDA Indicator Performance - Bus Service

| | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 | Av. Ann. Chg. |
|--|--------------|--------------|--------------|--------------|--------------|--------------|---------------|
| Performance Indicators | | | | | | | |
| Op. Cost per Vehicle Svc. Hour (Actual \$) | \$118.98 | \$124.79 | \$127.59 | \$178.73 | \$186.15 | \$192.06 | -- |
| <i>Annual Change</i> | -- | 4.9% | 2.2% | 40.1% | 4.1% | 3.2% | 10.1% |
| Op. Cost per Vehicle Svc. Hour (Constant \$) | \$118.98 | \$121.18 | \$122.26 | \$164.22 | \$158.96 | \$160.30 | -- |
| <i>Annual Change</i> | -- | 1.8% | 0.9% | 34.3% | -3.2% | 0.8% | 6.1% |
| Passengers per Vehicle Service Hour | 13.5 | 14.4 | 11.3 | 6.3 | 7.5 | 10.6 | -- |
| <i>Annual Change</i> | -- | 6.7% | -21.2% | -44.4% | 19.0% | 41.3% | -4.7% |
| Passengers per Vehicle Service Mile | 0.85 | 0.95 | 0.77 | 0.35 | 0.41 | 0.51 | -- |
| <i>Annual Change</i> | -- | 10.8% | -18.3% | -54.4% | 15.8% | 24.2% | -9.9% |
| Op. Cost per Passenger (Actual \$) | \$8.84 | \$8.69 | \$11.27 | \$28.39 | \$24.84 | \$18.14 | -- |
| <i>Annual Change</i> | -- | -1.7% | 29.7% | 152.0% | -12.5% | -27.0% | 15.5% |
| Op. Cost per Passenger (Constant \$) | \$8.84 | \$8.44 | \$10.80 | \$26.08 | \$21.21 | \$15.14 | -- |
| <i>Annual Change</i> | -- | -4.5% | 28.0% | 141.6% | -18.7% | -28.6% | 11.4% |
| Vehicle Service Hours per FTE | (a) | (a) | (a) | (a) | (a) | (a) | -- |
| <i>Annual Change</i> | -- | -- | -- | -- | -- | -- | -- |
| Input Data | | | | | | | |
| Operating Cost (Actual \$) | \$11,908,654 | \$12,259,621 | \$12,069,980 | \$11,697,859 | \$13,841,810 | \$17,202,428 | -- |
| <i>Annual Change</i> | -- | 2.9% | -1.5% | -3.1% | 18.3% | 24.3% | 7.6% |
| Operating Cost (Constant \$) | \$11,908,654 | \$11,904,383 | \$11,566,369 | \$10,748,440 | \$11,820,484 | \$14,358,321 | -- |
| <i>Annual Change</i> | -- | 0.0% | -2.8% | -7.1% | 10.0% | 21.5% | 3.8% |
| Vehicle Service Hours | 100,090 | 98,239 | 94,603 | 65,450 | 74,360 | 89,569 | -- |
| <i>Annual Change</i> | -- | -1.8% | -3.7% | -30.8% | 13.6% | 20.5% | -2.2% |
| Vehicle Service Miles | 1,578,515 | 1,491,844 | 1,385,614 | 1,168,484 | 1,364,847 | 1,870,754 | -- |
| <i>Annual Change</i> | -- | -5.5% | -7.1% | -15.7% | 16.8% | 37.1% | 3.5% |
| Unlinked Passengers | 1,347,760 | 1,411,192 | 1,071,308 | 412,068 | 557,305 | 948,468 | -- |
| <i>Annual Change</i> | -- | 4.7% | -24.1% | -61.5% | 35.2% | 70.2% | -6.8% |
| Employee Full-Time Equivalents | (a) | (a) | (a) | (a) | (a) | (a) | -- |
| <i>Annual Change</i> | -- | -- | -- | -- | -- | -- | -- |
| Bay Area CPI - Annual Change | -- | 3.0% | 1.3% | 4.3% | 7.6% | 2.3% | -- |
| - Cumulative Change | -- | 3.0% | 4.4% | 8.8% | 17.1% | 19.8% | 3.7% |

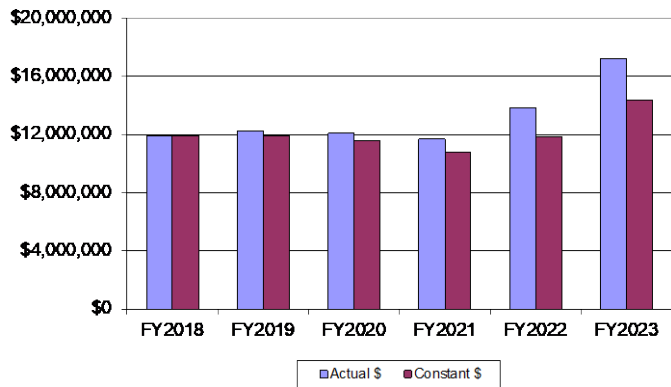
Sources: FY2018 through FY2020 - Prior Performance Audit Report
FY2021 through FY2023 - NTD Reports
CPI Data - U.S. Department of Labor, Bureau of Labor Statistics

Notes: Bus statistics include combined commuter bus and motor bus data for each year
(a) Contracted service - FTEs not applicable

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



Operating Cost



Vehicle Service Hours

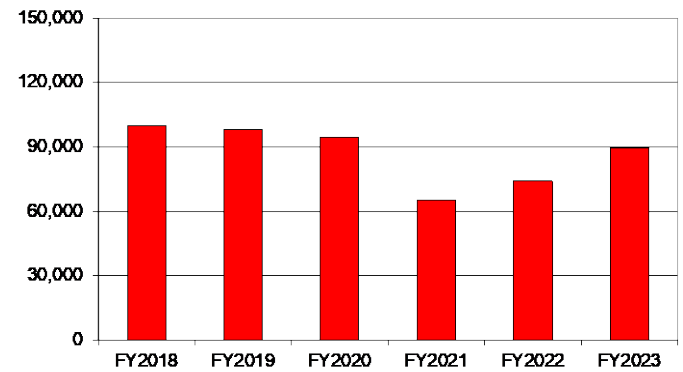
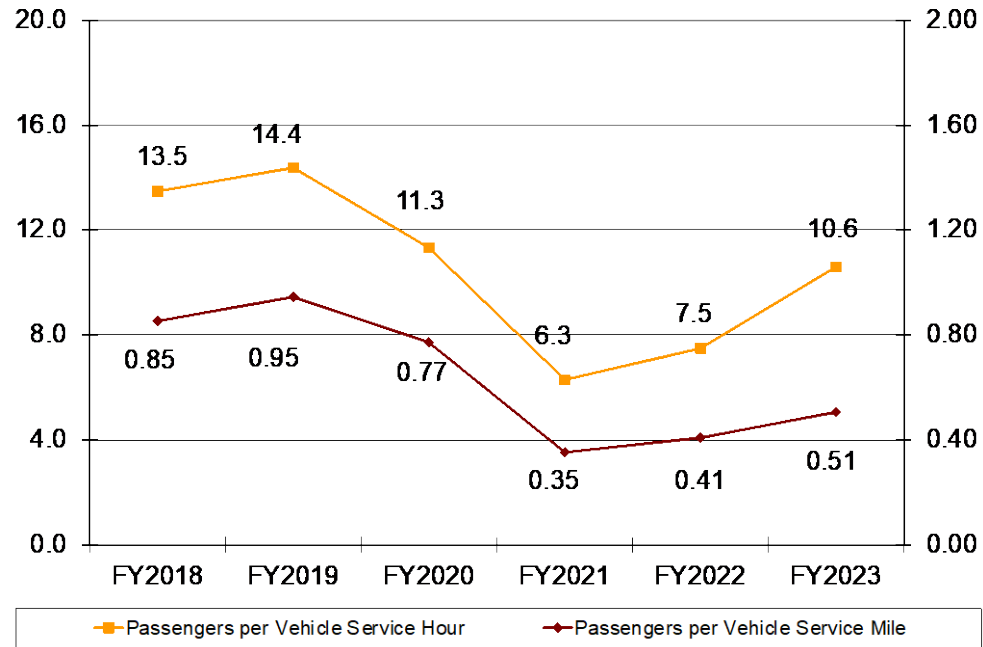
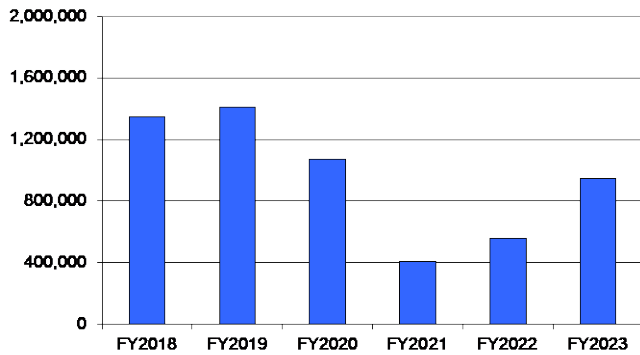


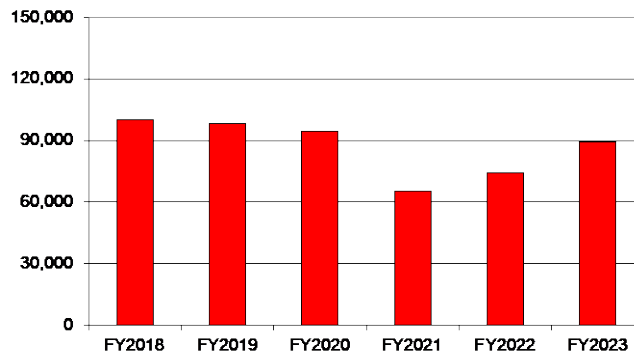
Exhibit 4.2: Passengers per Hour and per Mile – Bus Service



Unlinked Passengers



Vehicle Service Hours



Vehicle Service Miles

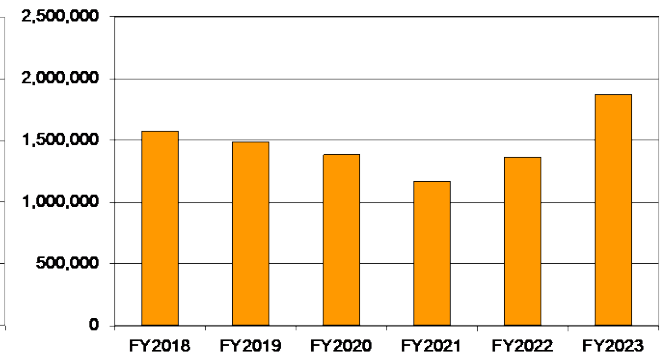
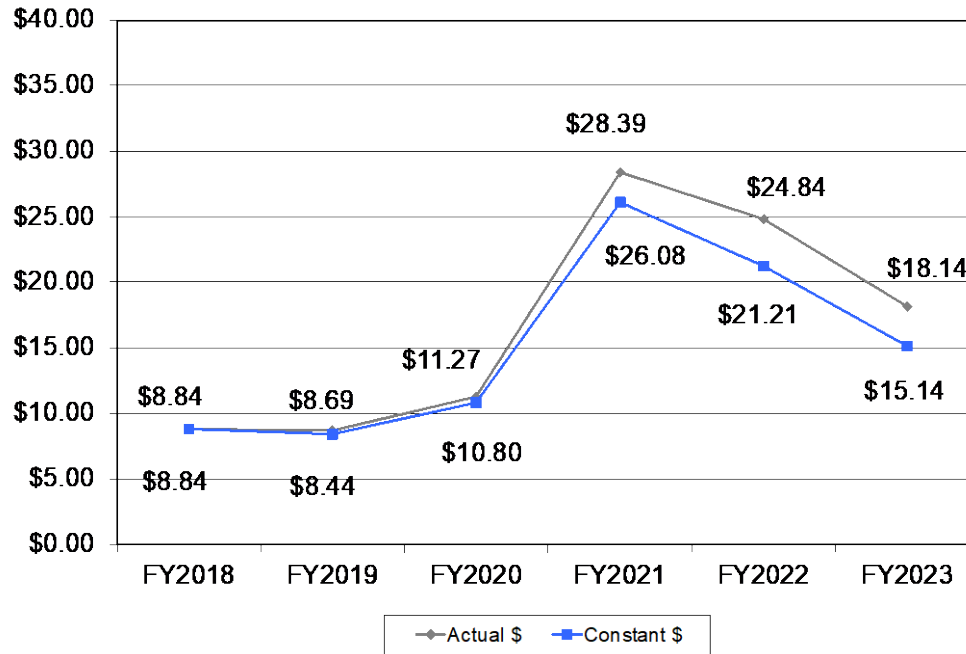
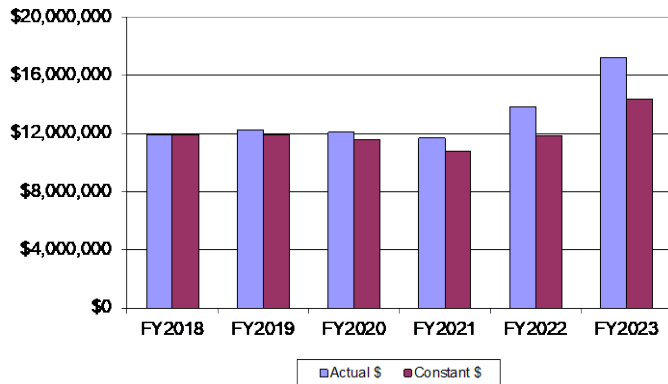


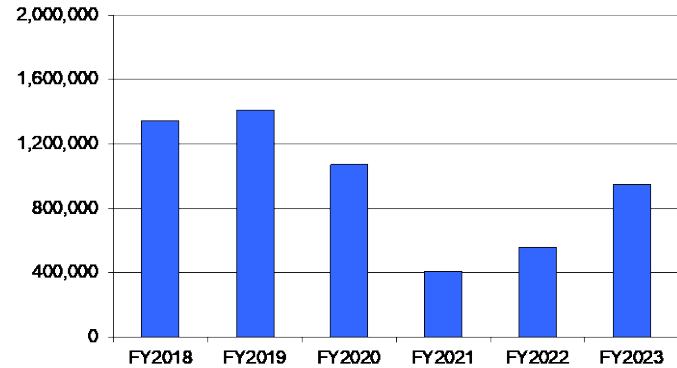
Exhibit 4.3: Operating Cost per Passenger – Bus Service



Operating Cost



Unlinked Passengers



Bus Service Component Costs

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

- In-house labor costs increased an annual average of 5.3 percent over the six-year period, with increases of 9.0 percent in FY2019, 9.6 percent in FY2020 and 9.5 percent in FY2022.
- Fringe benefits costs increased an average of 12.9 percent annually. This is mostly due to large increases occurring in FY2019 (25.6 percent) and FY2023 (23.0 percent). Prior to FY2018, health insurance was provided as a stipend allocated to the salary category. In FY2018, a recommendation from the Comprehensive Operational Analysis changed health insurance to being included with fringe benefit costs, which explains the earlier increase.
- Services costs increased by about 1.8 percent on average per year. Services costs averaged about 11.5 percent of total operating costs over the review period. The category increased by 46.2 percent in FY2022 with smaller decreases in four other years.
- Purchased transportation costs increased by an annual average of 7.3 percent per year and were the largest component of total operating costs at about 63.5 percent each year on average. The largest increase was 30.3 percent in FY2023.
- Costs for both materials/supplies, (which includes fuels/lubricants) and other expenses increased on average per year by 13.6 and 12.6, respectively. These categories combined share of total operating costs increased from 12.1 to 15.7 percent over the review period.
- Casualty/liability costs increased by 15.3 percent per year from FY2018 to FY2023. This cost category comprised less than one percent of total

operating costs annually, but saw large percentage increases in the three most recent years.

* * * * *

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

- Purchased transportation costs increased by an average of 7.3 percent per year, and remained the largest component cost area at about 63.5 percent of total costs on average each year. The largest increase was 30.3 percent in FY2023.
- In-house labor and fringe benefit costs increased overall on average, by 5.3 percent and 12.9 percent, respectively. The two categories combined comprised from 10.4 to 12.9 percent of total operating costs in any year of the period.
- Services costs increased by 1.8 percent on average per year, and comprised about 11.5 percent of total operating costs in each year of the period. However, the category decreased from 13.1 percent of total costs in FY2018 to 9.9 percent of the total in FY2023.
- Costs increased annually over the review period for both materials/supplies (13.6 percent on average) and other expenses (12.6 percent on average). The share of these costs combined averaged between 10 to 16 percent of the total operating costs over the review period.
- There was an average annual increase of 15.3 percent in casualty/liability, which comprised less than 0.7 percent of total costs in each year.

Exhibit 4.4: Component Cost Trends – Bus Service

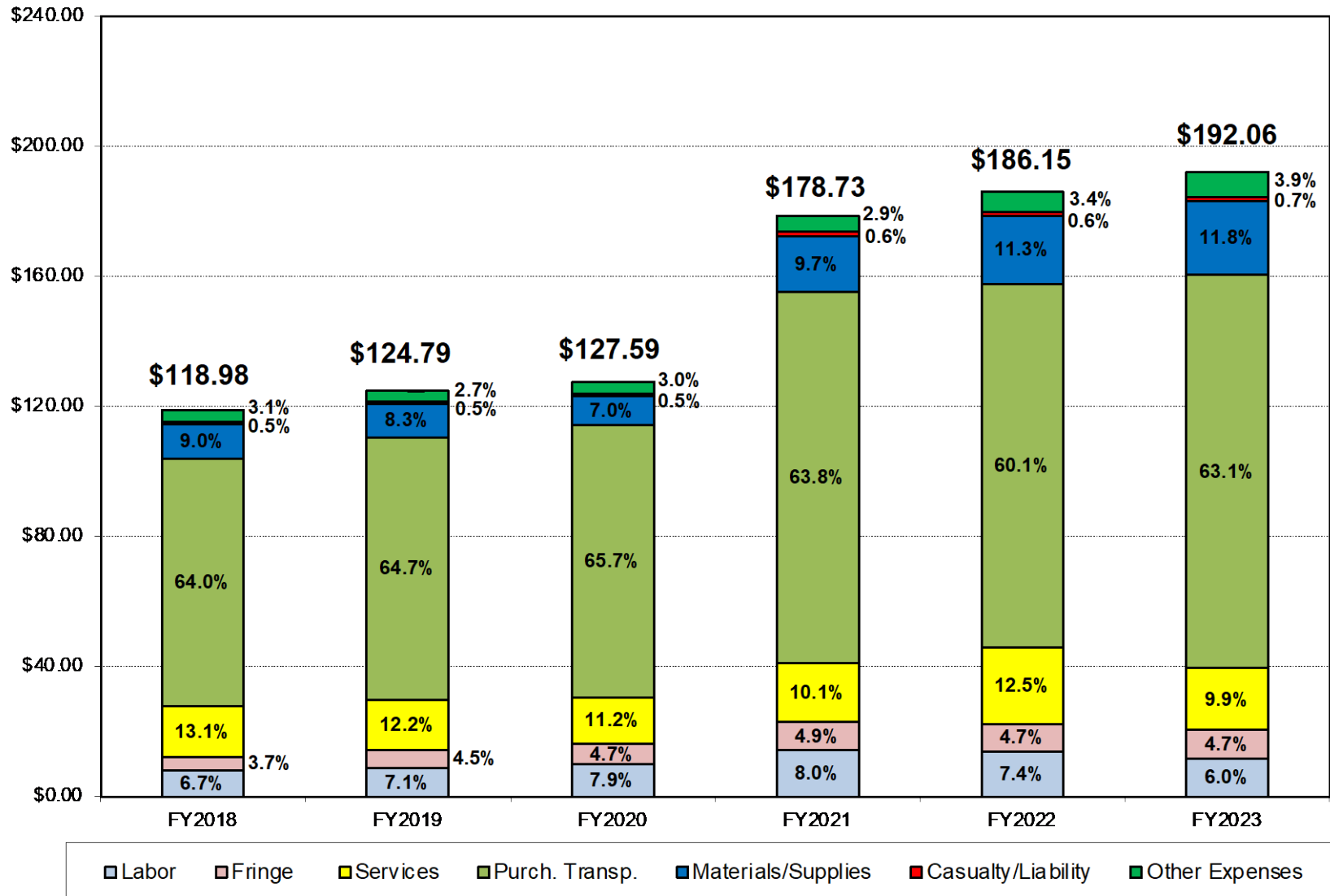
| | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 | Av. Ann. Chg. |
|-----------------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------------|---------------|
| COST CATEGORIES | | | | | | | |
| Labor - (Salaries, Wages) | \$796,410 | \$868,148 | \$951,723 | \$930,591 | \$1,019,021 | \$1,032,048 | -- |
| <i>Annual Change</i> | -- | 9.0% | 9.6% | -2.2% | 9.5% | 1.3% | 5.3% |
| Fringe Benefits (a) | \$436,769 | \$548,665 | \$573,290 | \$577,727 | \$651,889 | \$801,550 | -- |
| <i>Annual Change</i> | -- | 25.6% | 4.5% | 0.8% | 12.8% | 23.0% | 12.9% |
| Services | \$1,555,457 | \$1,498,776 | \$1,356,651 | \$1,184,006 | \$1,731,212 | \$1,697,513 | -- |
| <i>Annual Change</i> | -- | -3.6% | -9.5% | -12.7% | 46.2% | -1.9% | 1.8% |
| Purchased Transportation | \$7,619,100 | \$7,929,668 | \$7,932,519 | \$7,460,256 | \$8,324,269 | \$10,850,341 | -- |
| <i>Annual Change</i> | -- | 4.1% | 0.0% | -6.0% | 11.6% | 30.3% | 7.3% |
| Materials/Supplies | \$1,068,365 | \$1,016,488 | \$841,096 | \$1,140,262 | \$1,564,793 | \$2,023,875 | -- |
| <i>Annual Change</i> | -- | -4.9% | -17.3% | 35.6% | 37.2% | 29.3% | 13.6% |
| Casualty/Liability | \$60,355 | \$61,794 | \$57,015 | \$66,816 | \$85,050 | \$122,989 | -- |
| <i>Annual Change</i> | -- | 2.4% | -7.7% | 17.2% | 27.3% | 44.6% | 15.3% |
| Other Expenses (a) | \$372,198 | \$336,082 | \$357,686 | \$338,201 | \$465,576 | \$674,112 | -- |
| <i>Annual Change</i> | -- | -9.7% | 6.4% | -5.4% | 37.7% | 44.8% | 12.6% |
| Total | \$11,908,654 | \$12,259,621 | \$12,069,980 | \$11,697,859 | \$13,841,810 | \$17,202,428 | -- |
| <i>Annual Change</i> | -- | 2.9% | -1.5% | -3.1% | 18.3% | 24.3% | 7.6% |
| OPERATING STATISTICS | | | | | | | |
| Vehicle Service Hours | 100,090 | 98,239 | 94,603 | 65,450 | 74,360 | 89,569 | -- |
| <i>Annual Change</i> | -- | -1.8% | -3.7% | -30.8% | 13.6% | 20.5% | -2.2% |

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

Notes: (a) Includes Fringe Benefits and Paid Absences
(b) Includes Fuel and Lubricants, Tires and Tubes, and Other Materials and Supplies
(c) Includes Taxes, Utilities, and Miscellaneous Expenses
Bus Statistics include combined commuter bus and motor bus data for each year

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 SolTrans' 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)

- SolTrans' paratransit cost per hour increased overall in the review period, from \$128.87 in FY2018 to \$137.99 in FY2023. Decreases of 22.7 and 45.2 percent in vehicle service hours in the FY2020 and FY2021 pandemic years led to a high of \$183.00 per hour in FY2021. The indicator subsided to \$127.36 in FY2022 as service hours increased by 36.1 percent that year as a nascent recovery commenced.
- Overall performance was the result of volatility, including declines in vehicle service hours outpacing smaller yet still substantial decreases in operating costs in FY2020 and FY2021, leading to cost per hour increases in those years. The 36.1 increase in hours as costs declined again in FY2022 and corresponding 30.4 percent decrease in cost per hour was sizeable enough to lower the average annual increase to 1.4 percent.
- With the effects of inflation removed, cost per hour exhibited an average annual decrease of 2.2 percent.

Passengers per Vehicle Service Hour (Exhibit 5.2)

- Passengers per vehicle service hour decreased slightly overall from 2.1 to 2.0 passengers from FY2018 and FY2023, with a low of 1.5 in the pandemic year of FY2021 along the way.
- The trend amounted to an average annual decrease of 0.7 percent. Annual passenger levels decreased at a higher rate than service hours in FY2020 and FY2021 and passengers counts recovered at a higher rate than hours in FY2022 and FY2023. The net result was that substantial decreases per hour in FY2020 and FY2021 were countered by increases per hour in FY2022 and FY2023 to arrive at an average decrease of 0.7.

Passengers per Vehicle Service Mile (Exhibit 5.2)

- Performance in passengers per vehicle service mile declined slightly, with an average decrease of 2.4 percent over the six-year period.
- The performance was in part the result of a 59.2 percent decrease in passengers during the pandemic year of 2021 as service miles declined at a lower rate, leading to a decrease of 23.5 for the indicator that year. Gains in three other years during the period were enough to counter the 59 percent decrease and lead to the small average annual decrease.
- SolTrans’ paratransit service carried 0.21 passengers per mile in FY2018, and 0.18 passengers per mile in both FY2021 and FY2023.

Operating Cost per Passenger (Exhibit 5.3)

- The cost per passenger rose by 2.1 percent per year on average through the review period, increasing from \$60.61 in FY2018 to \$118.41 in FY2021, before subsiding to \$67.34 in FY2023.
- This performance was the result of an average annual decrease in operating costs being outpaced by the average annual decrease in ridership over the review period. Both trends had reversed by FY2023.
- With the impact of inflation removed, there was an average annual decrease in the cost per passenger of 1.5 percent.

* * * * *

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

- Cost efficiency showed a decrease, with an average annual increase in the operating cost per hour of 1.4 percent. This amounted to an average annual decrease of 2.2 percent in inflation adjusted dollars.

- Cost effectiveness was similar, with the operating cost per passenger increasing an average of 2.1 percent per year, or 1.5 percent annual decrease when expressed as normalized FY2018 dollars.
- Passenger productivity declined slightly, with only minor changes in passengers per hour, decreasing 0.7 percent per year on average, and passengers per mile decreasing 2.4 percent annually.

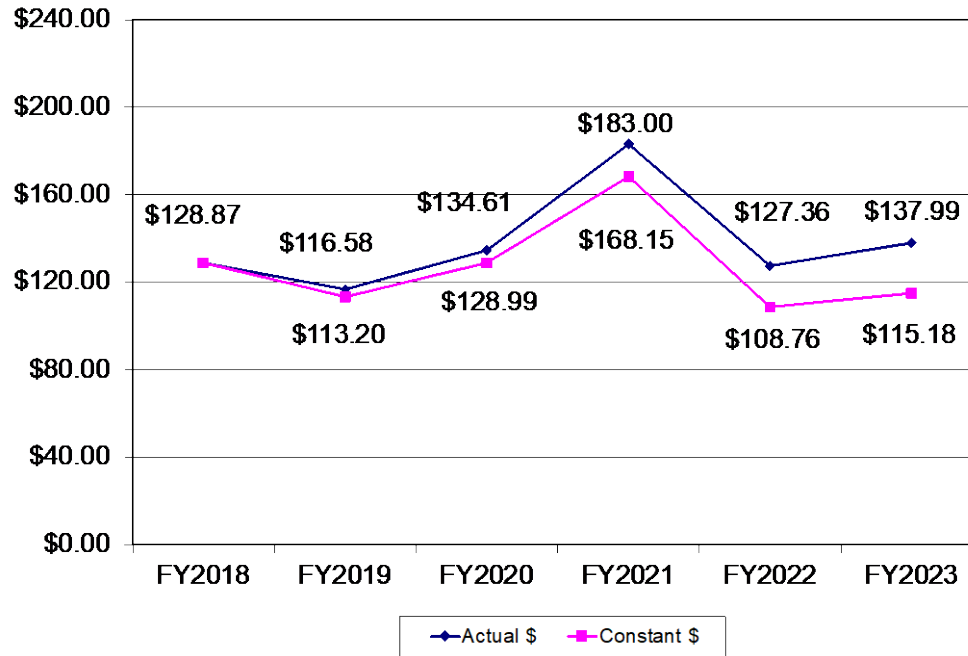
Exhibit 5: TDA Indicator Performance – Paratransit

| | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 | Av. Ann. Chg. |
|--|-------------|-------------|-------------|-------------|-------------|-------------|---------------|
| Performance Indicators | | | | | | | |
| Op. Cost per Vehicle Svc. Hour (Actual \$) | \$128.87 | \$116.58 | \$134.61 | \$183.00 | \$127.36 | \$137.99 | - - |
| <i>Annual Change</i> | - - | -9.5% | 15.5% | 35.9% | -30.4% | 8.3% | 1.4% |
| Op. Cost per Vehicle Svc. Hour (Constant \$) | \$128.87 | \$113.20 | \$128.99 | \$168.15 | \$108.76 | \$115.18 | - - |
| <i>Annual Change</i> | - - | -12.2% | 13.9% | 30.4% | -35.3% | 5.9% | -2.2% |
| Passengers per Vehicle Service Hour | 2.1 | 2.2 | 2.1 | 1.5 | 1.7 | 2.0 | - - |
| <i>Annual Change</i> | - - | 4.3% | -6.4% | -25.6% | 10.0% | 20.5% | -0.7% |
| Passengers per Vehicle Service Mile | 0.21 | 0.24 | 0.24 | 0.18 | 0.17 | 0.18 | - - |
| <i>Annual Change</i> | - - | 15.1% | 0.3% | -23.5% | -9.0% | 10.4% | -2.4% |
| Op. Cost per Passenger (Actual \$) | \$60.61 | \$52.55 | \$64.83 | \$118.41 | \$74.91 | \$67.34 | - - |
| <i>Annual Change</i> | - - | -13.3% | 23.4% | 82.6% | -36.7% | -10.1% | 2.1% |
| Op. Cost per Passenger (Constant \$) | \$60.61 | \$51.02 | \$62.12 | \$108.80 | \$63.97 | \$56.21 | - - |
| <i>Annual Change</i> | - - | -15.8% | 21.8% | 75.1% | -41.2% | -12.1% | -1.5% |
| Vehicle Service Hours per FTE | (a) | (a) | (a) | (a) | (a) | (a) | - - |
| <i>Annual Change</i> | - - | - - | - - | - - | - - | - - | - - |
| Input Data | | | | | | | |
| Operating Cost (Actual \$) | \$1,789,663 | \$1,837,575 | \$1,639,703 | \$1,220,996 | \$1,156,307 | \$1,303,180 | - - |
| <i>Annual Change</i> | - - | 2.7% | -10.8% | -25.5% | -5.3% | 12.7% | -6.1% |
| Operating Cost (Constant \$) | \$1,789,663 | \$1,784,329 | \$1,571,288 | \$1,121,898 | \$987,451 | \$1,087,723 | - - |
| <i>Annual Change</i> | - - | -0.3% | -11.9% | -28.6% | -12.0% | 10.2% | -9.5% |
| Vehicle Service Hours | 13,887 | 15,762 | 12,181 | 6,672 | 9,079 | 9,444 | - - |
| <i>Annual Change</i> | - - | 13.5% | -22.7% | -45.2% | 36.1% | 4.0% | -7.4% |
| Vehicle Service Miles | 142,768 | 146,845 | 105,890 | 56,444 | 92,887 | 105,465 | - - |
| <i>Annual Change</i> | - - | 2.9% | -27.9% | -46.7% | 64.6% | 13.5% | -5.9% |
| Unlinked Passengers | 29,527 | 34,971 | 25,293 | 10,312 | 15,435 | 19,352 | - - |
| <i>Annual Change</i> | - - | 18.4% | -27.7% | -59.2% | 49.7% | 25.4% | -8.1% |
| Employee Full-Time Equivalents | (a) | (a) | (a) | (a) | (a) | (a) | - - |
| <i>Annual Change</i> | - - | - - | - - | - - | - - | - - | - - |
| Bay Area CPI - Annual Change | - - | 3.0% | 1.3% | 4.3% | 7.6% | 2.3% | - - |
| - Cumulative Change | - - | 3.0% | 4.4% | 8.8% | 17.1% | 19.8% | 3.7% |

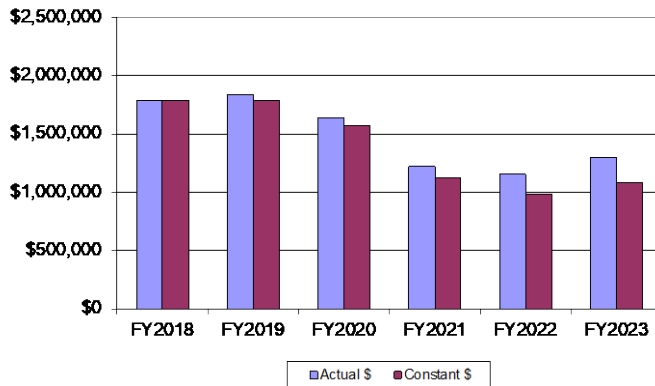
Sources: FY2018 through FY2020 - Prior Performance Audit Report
FY2021 through FY2023 - NTD Reports
CPI Data - U.S. Department of Labor, Bureau of Labor Statistics

Notes: (a) Contracted service - FTEs not applicable

Exhibit 5.1: Operating Cost per Vehicle Service Hour – Paratransit



Operating Cost



Vehicle Service Hours

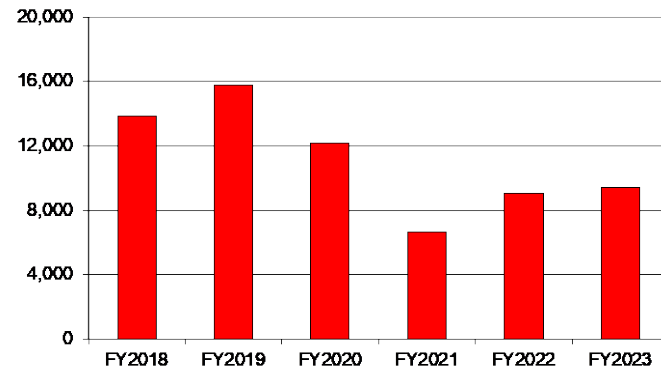
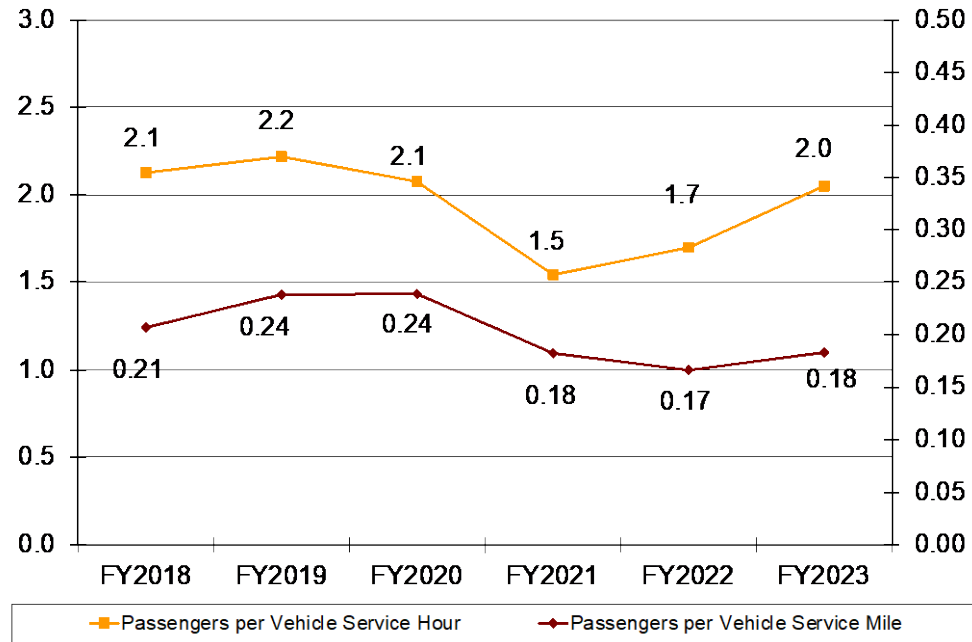
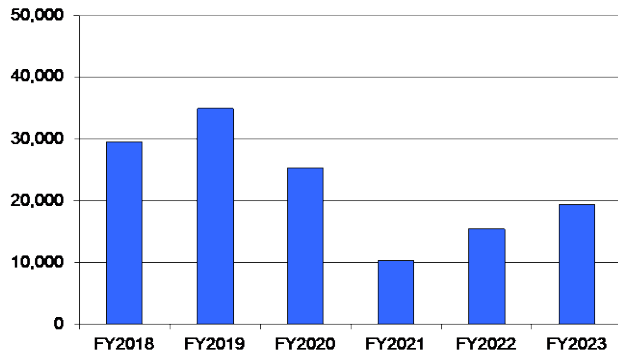


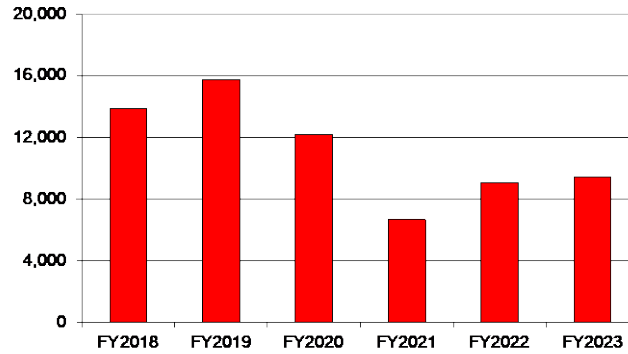
Exhibit 5.2: Passengers per Hour and per Mile – Paratransit



Unlinked Passengers



Vehicle Service Hours



Vehicle Service Miles

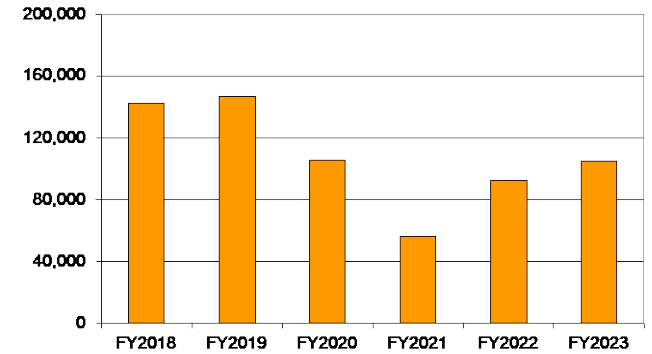
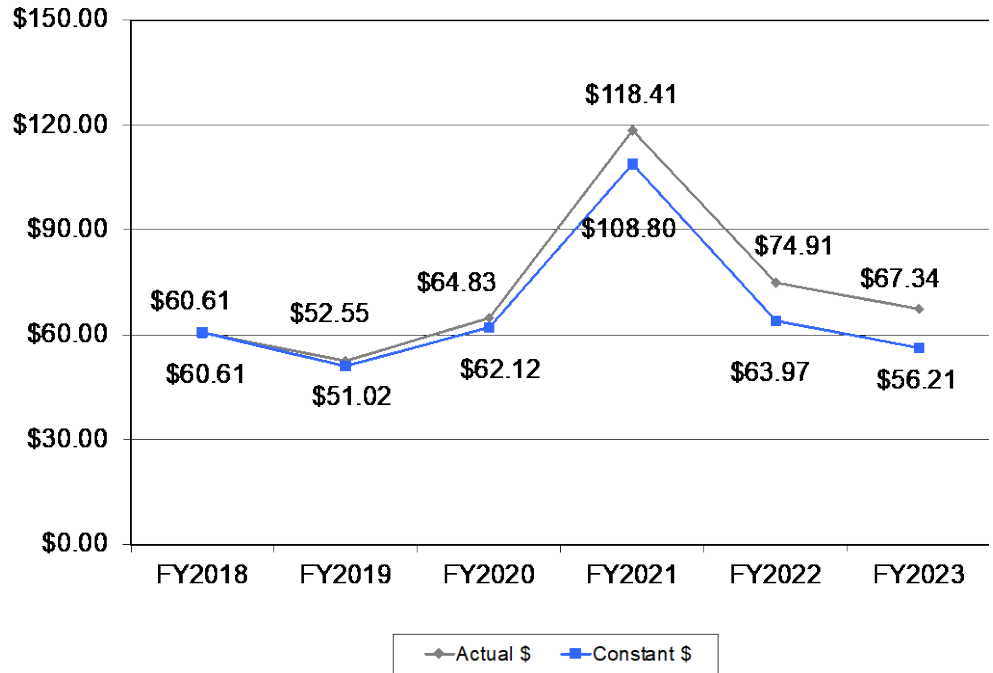
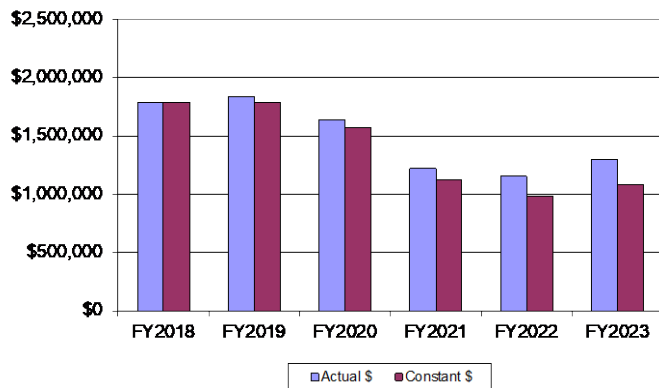


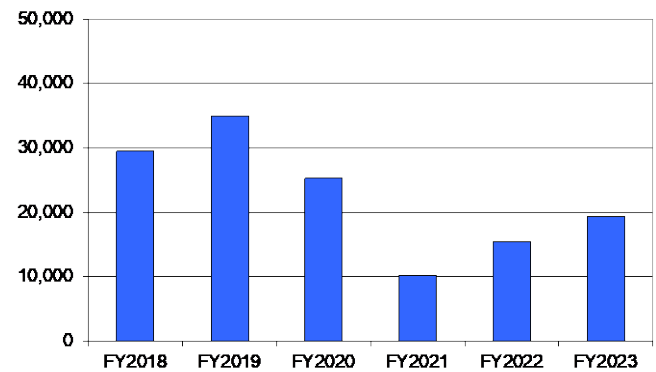
Exhibit 5.3: Operating Cost per Passenger – Paratransit



Operating Cost



Unlinked Passengers



Paratransit Component Costs

The year-to-year changes in selected operating cost categories are presented in Exhibit 5.5, along with the concurrent changes in vehicle service hours. The portions of the cost per vehicle service hour that can be attributed to each included cost component are shown in Exhibit 5.6.

- In-house labor costs decreased an annual average of 3.2 percent over the six-year period and comprised less than 10.0 percent of overall costs in each year of the period.
- Fringe benefits costs increased an annual average of 1.3 percent. Overall, fringe benefits increased from 3.8 percent of total costs in FY2018 to 6.3 percent of costs in FY2023.
- Costs for services decreased an average of 3.6 percent annually, with a decrease of 33.9 percent in FY2019 countered by an increase of 36.8 in FY2023.
- Purchased transportation costs declined, decreasing by 7.7 percent per year on average. The category also decreased from 75.3 percent of total costs in FY2018 to 69.2 percent of the total in FY2023 and saw declines in three consecutive years from FY2020 through FY2022 before increasing by 18.1 percent in FY2023.
- Costs for materials/supplies decreased by 5.1 percent per year while other expenses increased by 4.2 percent per year. These two categories share of total paratransit operating costs increased from 7.6 percent in FY2018 to 12.2 percent in FY2022 before subsiding to 8.9 percent of costs in FY2023.
- There was a 16.9 percent average annual increase in the casualty/liability area, but the component category comprises only one percent of total operating costs.

* * * * *

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

- Purchased transportation costs represented the largest portion of total paratransit operating costs, yet decreased from 75.3 to 69.2 percent during the period. Purchased transportation costs also decreased by 7.7 percent per year on average.
- An average annual decrease of 3.2 percent was seen in labor, while fringe benefits increased by 1.3 percent on average annually. The two categories increased from 11.3 percent of total costs in FY2018 to 15.1 percent in FY2023.
- Cost decreases occurred in the services (3.6 percent), and materials/supplies (5.1 percent) categories, while other expenses (4.2 percent) increased during the review period. Together, these categories combined represented 17.0 percent or less of total operating costs in every year of the period.
- An average annual increase of 16.9 percent was seen in the casualty/liability category, but this area comprises only one percent of total expenses.

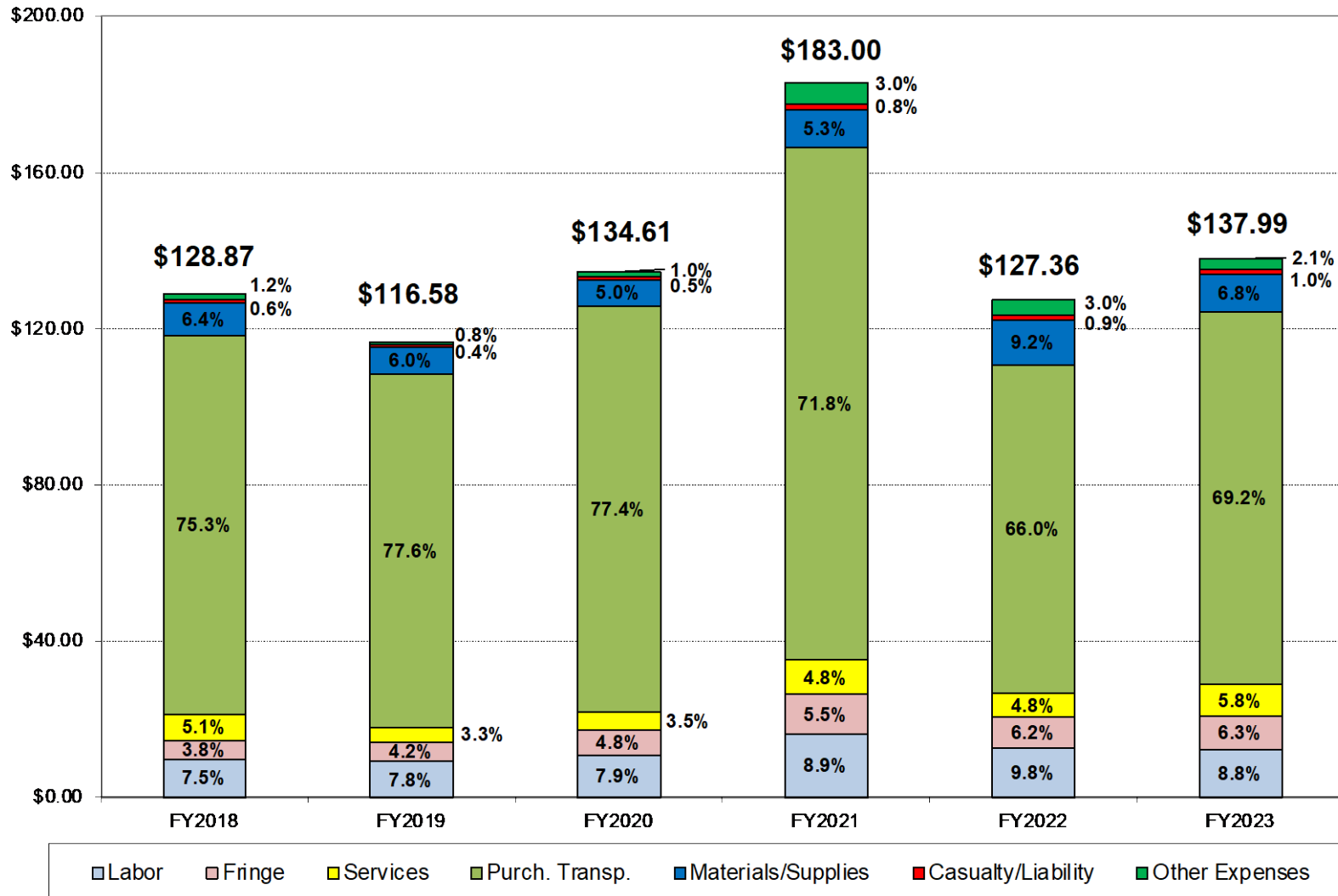
Exhibit 5.4: Component Costs Trends – Paratransit

| | FY2018 | FY2019 | FY2020 | FY2021 | FY2022 | FY2023 | Av. Ann. Chg. |
|-----------------------------|--------------------|--------------------|--------------------|--------------------|--------------------|--------------------|---------------|
| COST CATEGORIES | | | | | | | |
| Labor - (Salaries, Wages) | \$135,038 | \$143,127 | \$129,780 | \$108,236 | \$113,225 | \$114,672 | -- |
| <i>Annual Change</i> | -- | 6.0% | -9.3% | -16.6% | 4.6% | 1.3% | -3.2% |
| Fringe Benefits (a) | \$68,813 | \$77,721 | \$78,508 | \$67,079 | \$72,136 | \$81,709 | -- |
| <i>Annual Change</i> | -- | -- | 1.0% | -14.6% | 7.5% | 13.3% | 1.3% |
| Services | \$91,090 | \$60,165 | \$57,085 | \$58,355 | \$55,572 | \$76,024 | -- |
| <i>Annual Change</i> | -- | -33.9% | -5.1% | 2.2% | -4.8% | 36.8% | -3.6% |
| Purchased Transportation | \$1,347,087 | \$1,425,637 | \$1,268,787 | \$876,129 | \$763,380 | \$901,273 | -- |
| <i>Annual Change</i> | -- | 5.8% | -11.0% | -30.9% | -12.9% | 18.1% | -7.7% |
| Materials/Supplies (b) | \$115,219 | \$109,724 | \$81,286 | \$64,741 | \$105,891 | \$88,904 | -- |
| <i>Annual Change</i> | -- | -4.8% | -25.9% | -20.4% | 63.6% | -16.0% | -5.1% |
| Casualty/Liability | \$10,454 | \$7,315 | \$8,076 | \$10,121 | \$10,934 | \$13,665 | -- |
| <i>Annual Change</i> | -- | -- | 10.4% | 25.3% | 8.0% | 25.0% | 16.9% |
| Other Expenses (c) | \$21,962 | \$13,886 | \$16,181 | \$36,335 | \$35,169 | \$26,933 | -- |
| <i>Annual Change</i> | -- | -36.8% | 16.5% | 124.6% | -3.2% | -23.4% | 4.2% |
| Total | \$1,789,663 | \$1,837,575 | \$1,639,703 | \$1,220,996 | \$1,156,307 | \$1,303,180 | -- |
| <i>Annual Change</i> | -- | 2.7% | -10.8% | -25.5% | -5.3% | 12.7% | -6.1% |
| OPERATING STATISTICS | | | | | | | |
| Vehicle Service Hours | 13,887 | 15,762 | 12,181 | 6,672 | 9,079 | 9,444 | -- |
| <i>Annual Change</i> | -- | 13.5% | -22.7% | -45.2% | 36.1% | 4.0% | -7.4% |

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

Notes: (a) Includes Fringe Benefits and Paid Absences
(b) Includes Fuel and Lubricants, Tires and Tubes, and Other Materials and Supplies
(c) Includes Taxes, Utilities, and Miscellaneous Expenses

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



IV. COMPLIANCE WITH PUC REQUIREMENTS

An assessment of SolTrans' 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 SolTrans' TDA-STA claim application.

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

Exhibit 6: Compliance with State PUC Requirements

| Code Reference | Operator Compliance Requirements | Compliance Finding | Verification Information |
|----------------------|---|--------------------|--|
| PUC99251 | <u>CHP Certification</u> - The CHP has, within the 13 months prior to each TDA claim submitted by an operator, certified the operator's compliance with Vehicle Code Section 1808 following a CHP inspection of the operator's terminal | In Compliance | Satisfactory Inspections: <ul style="list-style-type: none"> • 9/23/2021 • 10/13/2022 • 10/25/2023 |
| PUC99264 | <u>Operator-to-Vehicle Staffing</u> - The operator does not routinely staff with two or more persons public transportation vehicles designed to be operated by one person | In Compliance | <ul style="list-style-type: none"> • No provision for excess staffing in prior Transit Operations Service Contract with National Express Corp., effective 7/01/13 (current fifth amendment dated 6/30/20 – expired 6/30/21). • No provision for excess staffing in current Transit Operations Service Contract with Transdev, effective 7/1/2021- 6/30/2026 or second amendment effective 7/1/23. |
| PUC99314.5 (e)(1)(2) | <u>Part Time Drivers and Contracting</u> - Operators receiving STA funds are not precluded by contract from employing part-time drivers or from contracting with common carriers | In Compliance | <ul style="list-style-type: none"> • <u>Part Time Drivers</u> – Provisions for Part-Time Employees included in Staffing Plan in Transit Operations Service Contract with National Express Corp., effective 07/01/13 through 06/30/21. • Current Transdev pricing form includes line items for part-time drivers, but does not include headcounts or salary amounts for current part-time positions. Does not preclude part-time drivers. • <u>Contracting</u> - SolTrans contracted with National Express Corp. to provide its transit services through |

| Code Reference | Operator Compliance Requirements | Compliance Finding | Verification Information |
|----------------|---|--------------------|--|
| | | | <p>6/30/21.</p> <ul style="list-style-type: none"> • SolTrans currently contracts with Transdev to provide its transit services, contract valid through 6/30/2026. |
| PUC99155 | <p><u>Reduced Fare Eligibility</u> - For any operator who received TDA Article 4 funds, if the operator offers reduced fares to senior citizens and disabled persons, applicant will honor the federal Medicare identification card, the California Department of Motor Vehicles disability ID card, the Regional Transit Connection Discount Card, or any other current identification card issued by another transit operator that is valid for the type of transportation service or discount requested; and if the operator offers reduced fares to senior citizens, it also offers the same reduced fare to disabled patrons</p> | In Compliance | <p>Fare information in public information materials:</p> <ul style="list-style-type: none"> • Available on SolTrans website: https://soltrans.org/fares/fare-table/ • Reduced fare eligibility for seniors 65 and over, disabled, and Medicare recipients. • Seniors 80 and over ride free, two children five and under ride free, additional children pay discounted youth (age 6-18) fare. • SolTrans accepts: Photo ID with birthdate indicating 65+, Medicare card with photo ID, Regional Transit Connection (RTC) Discount Card, DMV Disabled License Plate registration paperwork, or DMV Disabled Parking placard paperwork |

| Code Reference | Operator Compliance Requirements | Compliance Finding | Verification Information |
|---|---|--------------------|--|
| PUC99155.1 (a)(1)(2) | <u>Welfare to Work Coordination</u> - Operators must coordinate with county welfare departments in order to ensure that transportation moneys available for purposes of assisting recipients of aid are expended efficiently for the benefit of that population; if a recipient of CalWORKs program funds by the county, the operator shall give priority to the enhancement of public transportation services for welfare-to-work purposes and to the enhancement of transportation alternatives, such as, but not limited to, subsidies or vouchers, van pools, and contract paratransit operations, in order to promote welfare-to-work purposes | In Compliance | <ul style="list-style-type: none"> SolTrans participates in the regional MTC Coordinated Human Service Transportation plan (updated 2/28/18). SolTrans services are included in the plan's inventory. The next update is expected in 2024. https://mtc.ca.gov/sites/default/files/MTC_Coordinated_Plan.pdf SolTrans is a member of the Solano Express Intercity Transit Consortium and Solano Senior and People with Disabilities Transportation Advisory Committee. https://www.solanomobility.org/program/solanoexpress/ |
| PUC99314.7, Govt Code 66516, MTC Res. Nos. 3837, 4073 | <u>Joint Revenue Sharing Agreement</u> - The operator has current joint fare revenue sharing agreements in place with transit operators in the MTC region with which its service connects, and submitted copies of agreements to MTC | In Compliance | <ul style="list-style-type: none"> Signatory participant in Amended and Restated Clipper® Memorandum of Understanding (October 2020 and October 2022). Agreement also includes MTC and the other transit operators participating in the Clipper® program. http://clipper.mtc.ca.gov/pdf/2022_Amended_and_Restated_Clipper_MoU-Final_Signed.pdf Other valid transfer/revenue sharing agreements with connecting operators: CCCTA, FAST, Golden Gate Transit, NVTA, SFMTA, and WCCTA (per Rider's Guide). |

| Code Reference | Operator Compliance Requirements | Compliance Finding | Verification Information |
|----------------|--|----------------------|---|
| PUC99246(d) | <p><u>Process for Evaluation of Passenger Needs</u> - The operator has an established process in place for evaluating the needs and types of passengers being served</p> | <p>In Compliance</p> | <ul style="list-style-type: none"> • SolTrans updated Title VI Program updated 4/1/2022: https://api.soltransride.com/wp-content/uploads/2022/08/Attachment-A-2022-Title-VI-Program.pdf • SolTrans Public Involvement Policy, 09/21/17; Title VI Policy 03/21/19. • SolTrans Public Advisory Committee (PAC) quarterly meetings • SolTrans Technical Advisory Committee (TAC) semi-annual meetings • Short Range Transit Plan (SRTP) 2021-2030 includes evaluations of existing service conditions, service area characteristics, system trends and performance, and operating and capital budgets. |

V. STATUS OF PRIOR AUDIT RECOMMENDATIONS

SolTrans' 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 SolTrans' responses to the recommendation made in the prior performance audit, and whether SolTrans made reasonable progress toward the implementation. There was one recommendation made in SolTrans' prior audit. A summary of the recommendation and the actions taken by SolTrans 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.

SolTrans has implemented the corrective action for the recommendation from the prior audit to examine the causes of the decline in miles between mechanical failures on the paratransit services.

- The recommendation was for SolTrans to examine the causes of its decline in miles between mechanical failures on paratransit services. The prior audit found maintenance results for paratransit services showed a substantial decrease in the mean distance between major failures, which declined overall by 61 percent, from 25,544 miles to 9,900 miles.
- SolTrans staff responded that after examination of the decline experienced during the prior audit period, the trend was due in large part to maintenance issues with aging 2011 cutaway vehicles that had exceeded their useful lives and were the cause of many of the paratransit mechanical failures. The 2011 cutaways have been retired and the need for road calls has dropped substantially in the current review period.
- SolTrans has implemented the corrective action for the recommendation from the prior audit, listed in Exhibit 7. The current audit found a much improved mean distance between failures for all three years, ranging from 35,928 to 68,378 from FY2021 through FY2023. The actual number of major failures for paratransit were one, zero, and three, respectively, from FY2021 through FY2023.

Exhibit 7: Status of Prior Audit Recommendations

| Recommendation | Actions Taken | Evaluation |
|---|---|--------------------|
| <p>1. Examine the causes of the decline in miles between mechanical failures on the paratransit services.</p> | <ul style="list-style-type: none"> • SolTrans retired several 2011 cutaway vehicles that had exceeded their useful lives, which were also a primary cause of the rise in major mechanical failures in the prior audit period. Subsequent to the change in fleet composition, mean distance between failure has recovered, rising substantially, and there were very few major paratransit failures in this audit period. | <p>Implemented</p> |

VI. FUNCTIONAL PERFORMANCE INDICATOR TRENDS

To further assess SolTrans' 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 SolTrans, or for which input data were maintained by SolTrans on an ongoing basis, such as performance reports, contractor 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 (All Modes)

For the purposes of this review, SolTrans' functional indicators relating to Management, Administration and Marketing have been included on a systemwide basis. Systemwide audit period performance is discussed below and presented in Exhibit 8.

- Administrative cost decreased from 46.4 percent of total operating cost in FY2021 to 37.1 percent in FY2023. Administrative costs also decreased from \$83.19 to \$69.42 per vehicle service hour during the same period.
- The portion of administrative costs attributed to marketing activities increased overall, from 1.0 percent in FY2021 to 1.4 percent in FY2023. In terms of passenger trips, marketing costs decreased from \$0.14 to \$0.10 over the same period.
- The systemwide farebox recovery ratio increased from 8.4 to 10.2 percent from FY2021 to FY2023.

* * * * *

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

- Administrative cost as percentage of total operating cost decreased in each year of the period and by 20.0 percent overall from FY2021 to FY2023. Administrative cost per service hour was also down each year and decreased by 16.6 percent in the same period.
- Marketing cost as a percentage of total administrative cost increased overall by 40.9 percent in the period, but accounted for between just 1.0 and 1.5 percent of total administrative cost. Marketing cost decreased from \$0.14 to \$0.10 per passenger trip during the same period.

- Systemwide farebox recovery ratio increased in each year, from 8.4 percent in FY2021 to 10.2 percent in FY2023, up 21.1 percent overall in the period.

Exhibit 8: Functional Performance Trends – Systemwide (All Modes)

| FUNCTION/Indicator | Actual Performance | | |
|---|--------------------|---------|---------|
| | FY2021 | FY2022 | FY2023 |
| MANAGEMENT, ADMINISTRATION & MARKETING | | | |
| Administrative Cost/Total Operating Cost | 46.4% | 41.3% | 37.1% |
| <i>Annual Percent Change</i> | -- | -11.1% | -10.1% |
| <i>Three Year Percent Change</i> | -- | -- | -20.0% |
| Administrative Cost/Vehicle Service Hour | \$83.19 | \$74.23 | \$69.42 |
| <i>Annual Percent Change</i> | -- | -10.8% | -6.5% |
| <i>Three Year Percent Change</i> | -- | -- | -16.6% |
| Marketing Cost/Total Administrative Cost | 1.0% | 1.5% | 1.4% |
| <i>Annual Percent Change</i> | -- | 57.1% | -10.3% |
| <i>Three Year Percent Change</i> | -- | -- | 40.9% |
| Marketing Cost/Unlinked Passenger Trip | \$0.14 | \$0.16 | \$0.10 |
| <i>Annual Percent Change</i> | -- | 19.6% | -41.1% |
| <i>Three Year Percent Change</i> | -- | -- | -29.6% |
| Farebox Revenue/Operating Cost | 8.4% | 9.6% | 10.2% |
| <i>Annual Percent Change</i> | -- | 14.3% | 6.0% |
| <i>Three Year Percent Change</i> | -- | -- | 21.1% |

Bus Service

SolTrans' 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
 - Operating cost per passenger mile decreased from \$3.66 in FY2021 to \$1.59 in FY2023.
 - Vehicle service miles decreased slightly from 95.2 percent to 92.2 percent of total miles from FY2021 to FY2023 and vehicle service hours decreased at an even smaller rate as percentage of total hours, from 94.5 percent to 93.1 percent in the period.
 - Passengers per vehicle service mile increased from 0.35 to 0.51 from FY2021 to FY2023 while passengers per service hour increased from 6.30 to 10.59 over the same period.

- Operations
 - Vehicle operations costs increased from 38.1 percent in FY2021 to 47.9 percent in FY2023.
 - Vehicle operations costs per service hour increased overall, from \$68.10 in FY2021 to \$92.09 in FY2023.
 - The bus service farebox recovery ratio increased from 9.0 percent in FY2021 to 10.6 percent in FY2023.
 - The TDA recovery ratio, reflecting farebox revenue plus local support less operating cost exclusions also increased, from 9.6 percent to 11.5 percent over the period.
 - Schedule adherence improved from 62.2 percent in FY2021 to 65.6 percent in FY2023.

- The number of complaints per 100,000 vehicle service miles increased from 9.2 in FY2021 to 12.0 in FY2023. The actual number of complaints increased from 107 in FY2021 to 224 in FY2023, due to SolTrans taking over the Blue and Green Line services from Fairfield.
 - The rate of missed trips increased from 0.88 percent in FY2021 to 2.23 percent in FY2022, before declining to 1.06 percent in FY2023.
- Maintenance
 - Total maintenance cost (vehicle plus non-vehicle) was relatively consistent, accounting for 15.2 percent of total operating cost in FY2021 and 15.4 percent of total cost in FY2023.
 - Vehicle maintenance cost per service mile decreased from \$1.29 to \$0.88 in the first two years of the audit period, before rising to \$1.06 in FY2023.
 - The vehicle spare ratio decreased in each year, from 52.4 percent in FY2021 to 39.2 percent in FY2023.
 - The mean distance between major failures increased from 25,568 to 57,992 miles overall or by 126.8 percent in the period, while mean distance between all failures increased by 116.7 percent, from 16,148 miles in FY2021 to 34,995 in FY2023.
 - Safety
 - The rate of preventable accidents fluctuated, but remained at two or fewer accidents per 100,000 vehicles miles throughout the period, and decreased from 1.5 to 0.8 overall.

* * * * *

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

- Service Planning results showed operating cost per passenger mile decreasing 56.6 percent overall, with the largest decrease occurring in FY2023. Vehicle miles in service and vehicle hours in service both remained above 92 percent overall in each year, and passengers per vehicle service mile and hour increased 43.8 and 68.2 percent respectively, with the largest increases again occurring in FY2023.
- In Operations, vehicle operations cost increased as a percentage of total operating cost overall (25.8 percent), as did operations cost per service hour (35.2 percent) during the audit period. Farebox recovery increased by 18.4 percent in the period and stood at 10.6 percent in FY2023. The TDA recovery ratio was slightly higher and increased by 19.3 percent overall. Schedule adherence improved from 62.2 percent to about 65.6 percent over the three years, but the number of complaints increased by 30.8 percent overall, due to the addition of the Blue and Green Line services that were taken over from Fairfield. The percentage of missed trips increased by 21.0 percent in the period yet stood at just 1.06 percent of total trips in FY2023.
- Maintenance results were mixed, with maintenance cost increasing just 1.4 percent overall relative to total operating cost, but decreasing by 17.7 percent overall on a service mile basis. The vehicle spare ratio decreased by 25.1 percent over three years.
- Vehicle reliability showed improvement with mean distance between major failures increasing by 126.8 percent from FY2021 to FY2023 and distance between all failures increasing by 116.7 percent in the same period.
- Safety results demonstrated fluctuations in the rate of preventable accidents per 100,000 vehicle miles, but remained at fewer than two in each year, with an overall decrease of 42.9 percent in the period and a low of 0.8 in FY2023.

Exhibit 9: Functional Performance Trends – Bus Service

| FUNCTION/Indicator | Actual Performance | | |
|--|--------------------|---------|---------|
| | FY2021 | FY2022 | FY2023 |
| SERVICE PLANNING | | | |
| Total Operating Cost/Passenger Mile | \$3.66 | \$3.18 | \$1.59 |
| <i>Annual Percent Change</i> | -- | -13.2% | -50.0% |
| <i>Three Year Percent Change</i> | -- | -- | -56.6% |
| Vehicle Service Miles/Total Miles | 95.2% | 93.2% | 92.2% |
| <i>Annual Percent Change</i> | -- | -2.2% | -1.1% |
| <i>Three Year Percent Change</i> | -- | -- | -3.2% |
| Vehicle Service Hours/Total Hours | 94.5% | 92.0% | 93.1% |
| <i>Annual Percent Change</i> | -- | -2.6% | 1.2% |
| <i>Three Year Percent Change</i> | -- | -- | -1.5% |
| Passengers/Vehicle Service Mile | 0.35 | 0.41 | 0.51 |
| <i>Annual Percent Change</i> | -- | 15.8% | 24.2% |
| <i>Three Year Percent Change</i> | -- | -- | 43.8% |
| Passengers/Vehicle Service Hour | 6.30 | 7.49 | 10.59 |
| <i>Annual Percent Change</i> | -- | 19.0% | 41.3% |
| <i>Three Year Percent Change</i> | -- | -- | 68.2% |
| OPERATIONS | | | |
| Vehicle Operations Cost/Total Operating Cost | 38.1% | 45.3% | 47.9% |
| <i>Annual Percent Change</i> | -- | 18.9% | 5.8% |
| <i>Three Year Percent Change</i> | -- | -- | 25.8% |
| Vehicle Operations Cost/Vehicle Service Hour | \$68.10 | \$84.35 | \$92.09 |
| <i>Annual Percent Change</i> | -- | 23.9% | 9.2% |
| <i>Three Year Percent Change</i> | -- | -- | 35.2% |
| Farebox Revenue/Operating Cost | 9.0% | 10.1% | 10.6% |
| <i>Annual Percent Change</i> | -- | 12.2% | 5.5% |
| <i>Three Year Percent Change</i> | -- | -- | 18.4% |
| TDA Recovery Ratio (a) | 9.6% | 11.0% | 11.5% |
| <i>Annual Percent Change</i> | -- | 13.6% | 5.0% |
| <i>Three Year Percent Change</i> | -- | -- | 19.3% |
| Percentage of Trips On-Time | 62.2% | 67.5% | 65.6% |
| <i>Annual Percent Change</i> | -- | 8.5% | -2.8% |
| <i>Three Year Percent Change</i> | -- | -- | 5.5% |
| Complaints/100,000 Vehicle Service Miles | 9.2 | 12.9 | 12.0 |
| <i>Annual Percent Change</i> | -- | 40.8% | -7.1% |
| <i>Three Year Percent Change</i> | -- | -- | 30.8% |
| Missed Trips/Total Trips | 0.88% | 2.23% | 1.06% |
| <i>Annual Percent Change</i> | -- | 153.9% | -52.3% |
| <i>Three Year Percent Change</i> | -- | -- | 21.0% |

| FUNCTION/Indicator | Actual Performance | | |
|---|--------------------|--------|--------|
| | FY2021 | FY2022 | FY2023 |
| MAINTENANCE | | | |
| Vehicle + Non-Veh. Maint. Cost/Total Operating Cost | 15.2% | 13.8% | 15.4% |
| <i>Annual Percent Change</i> | -- | -9.4% | 11.9% |
| <i>Three Year Percent Change</i> | -- | -- | 1.4% |
| Vehicle Maintenance Cost/Vehicle Service Mile | \$1.29 | \$0.88 | \$1.06 |
| <i>Annual Percent Change</i> | -- | -32.0% | 21.0% |
| <i>Three Year Percent Change</i> | -- | -- | -17.7% |
| Spare Vehicles/Total Vehicles | 52.4% | 40.5% | 39.2% |
| <i>Annual Percent Change</i> | -- | -22.7% | -3.1% |
| <i>Three Year Percent Change</i> | -- | -- | -25.1% |
| Mean Distance between Major Failures (Miles) | 25,568 | 97,676 | 57,992 |
| <i>Annual Percent Change</i> | -- | 282.0% | -40.6% |
| <i>Three Year Percent Change</i> | -- | -- | 126.8% |
| Mean Distance between All Failures (Miles) | 16,148 | 26,163 | 34,995 |
| <i>Annual Percent Change</i> | -- | 62.0% | 33.8% |
| <i>Three Year Percent Change</i> | -- | -- | 116.7% |
| SAFETY | | | |
| Preventable Accidents/100,000 Vehicle Miles | 1.5 | 2.0 | 0.8 |
| <i>Annual Percent Change</i> | -- | 39.6% | -59.1% |
| <i>Three Year Percent Change</i> | -- | -- | -42.9% |

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

Paratransit

SolTrans' 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 \$32.95 in the first year to \$14.27 in FY2023, for a 56.7 percent overall decrease in the period.
 - The percentage of vehicle miles traveled in service increased from 82.5 percent to 97.8 percent, while vehicle hours traveled in service increased from 74.9 percent to 97.4 percent over the three year period.
 - Passenger productivity was up, with passengers per vehicle service mile increasing by 0.4 percent from FY2021 to FY2023 and passengers per vehicle service hour increasing by 32.6 percent during the audit period.

- Operations
 - Vehicle operations costs declined from 44.0 percent to 41.7 percent of total operating costs from FY2021 to FY2023.
 - Vehicle operations costs per service hour also decreased overall, from \$80.47 in the first year to \$57.51 in FY2023.
 - The paratransit farebox recovery ratio increased over the three years from 3.1 percent in FY2021 to 4.6 percent in FY2023. The TDA recovery ratio matched the overall farebox recovery ratio.
 - Schedule adherence increased from 87.9 percent in FY2021 to 89.9 percent in FY2022 before decreasing to 77.6 percent in FY2023.
 - Complaints per 10,000 passenger trips increased from 12.3 in FY2022 to 18.6 in FY2023. Data was unavailable for FY2021 due to a change in vendors.

- The incidence of missed trips was so small it was almost unmeasurable and decreased in each year of the audit period.
 - There were no ADA trip denials. The rate of trip cancellations increased from 10.5 percent in FY2021 to 19.6 percent in FY2023, late cancellations increased from 9.3 percent to 10.2 percent, and no-shows increased from 1.2 to 1.9 percent overall in the period.
- Maintenance
 - Total maintenance costs (vehicle plus non-vehicle) increased from 11.8 percent to 14.3 percent over the three year period.
 - Vehicle maintenance costs per service mile decreased from \$2.39 in FY2021 to \$1.15 in FY2022 before increasing again to \$1.70 in FY2023.
 - The vehicle spare ratio decreased from 63.6 percent in FY2021 and FY2022 to 50.0 percent in the last year of the period.
 - The mean distance between major failures and all failures showed decreases in performance over the audit period, declining from 68,378 miles to 35,928 miles and from 22,793 miles to 17,964 miles respectively. However, the actual number of failures was very small, with one major failure in FY2021, none in FY2022, and three in FY2023.
 - Safety
 - The rate of preventable accidents decreased from 1.9 to 0.9 per 100,000 miles during the last two years of the period. The rate for FY2021 was unavailable due to a change in vendor.

* * * * *

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

- Service Planning saw the cost per passenger mile decrease by 56.7 percent from FY2021 to FY2023, and percent of vehicle miles and vehicle hours in service increased by 18.5 percent and 30.0 percent, respectively. The latter two measures each surpassed 97 percent by FY2023.
- Passenger productivity increased as well, with passengers per vehicle service mile increasing 0.4 percent in the period. Passengers per vehicle service hour increased from 1.55 to 2.05, an overall increase of 32.6 percent from FY2021 to FY2023.
- Operations results included a 5.2 percent decrease in vehicle operations cost as a portion of total operating cost, and a 28.5 percent decrease in vehicle operations cost per service hour. Farebox recovery mirrored TDA recovery ratio and increased by 47.2 percent during the three-year period, increasing from 3.1 to 4.6 percent.
- Schedule adherence fluctuated, but decreased by 11.7 percent overall, while complaints increased by 51.1 percent from FY2022 through FY2023. Complaint data was unavailable for FY2021 due to a vendor change.
- There were almost no missed trips and there were no ADA trip denials during the audit period. The rate of trip cancellations increased from 10.5 percent to 19.6 percent from FY2021 to FY2023. Late cancellations increased from 9.3 percent to 10.2 percent and passenger no-show rates increased slightly but remained below 1.9 percent in all three years.
- Vehicle maintenance cost increased 21.3 percent as a proportion of total operating cost in the period, from 11.8 percent to 14.3 percent. Vehicle maintenance costs per service mile decreased 28.9 percent. Spare ratio decreased by 21.4 percent overall.
- Miles between mechanical failures declined by 47.5 percent for major failures, and 21.2 percent for all failures. However, the actual number of failures was small, with total failures numbering one, zero and three in the three years of the period.
- Safety results saw a decrease in the number of preventable accidents per 100,000 miles over the audit period, from 1.9 in FY2022 to 0.9 in FY2023. Data for FY2021 was unavailable due to a vendor change.

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Exhibit 10: Functional Performance Trends – Paratransit

| FUNCTION/Indicator | Actual Performance | | |
|--|--------------------|---------|---------|
| | FY2021 | FY2022 | FY2023 |
| SERVICE PLANNING | | | |
| Total Operating Cost/Passenger Mile | \$32.95 | \$17.49 | \$14.27 |
| <i>Annual Percent Change</i> | -- | -46.9% | -18.4% |
| <i>Three Year Percent Change</i> | -- | -- | -56.7% |
| Vehicle Service Miles/Total Miles | 82.5% | 90.0% | 97.8% |
| <i>Annual Percent Change</i> | -- | 9.0% | 8.8% |
| <i>Three Year Percent Change</i> | -- | -- | 18.5% |
| Vehicle Service Hours/Total Hours | 74.9% | 84.9% | 97.4% |
| <i>Annual Percent Change</i> | -- | 13.2% | 14.8% |
| <i>Three Year Percent Change</i> | -- | -- | 30.0% |
| Passengers/Vehicle Service Mile | 0.18 | 0.17 | 0.18 |
| <i>Annual Percent Change</i> | -- | -9.0% | 10.4% |
| <i>Three Year Percent Change</i> | -- | -- | 0.4% |
| Passengers/Vehicle Service Hour | 1.55 | 1.70 | 2.05 |
| <i>Annual Percent Change</i> | -- | 10.0% | 20.5% |
| <i>Three Year Percent Change</i> | -- | -- | 32.6% |
| OPERATIONS | | | |
| Vehicle Operations Cost/Total Operating Cost | 44.0% | 43.6% | 41.7% |
| <i>Annual Percent Change</i> | -- | -0.9% | -4.3% |
| <i>Three Year Percent Change</i> | -- | -- | -5.2% |
| Vehicle Operations Cost/Vehicle Service Hour | \$80.47 | \$55.47 | \$57.51 |
| <i>Annual Percent Change</i> | -- | -31.1% | 3.7% |
| <i>Three Year Percent Change</i> | -- | -- | -28.5% |
| Farebox Revenue/Operating Cost | 3.1% | 4.2% | 4.6% |
| <i>Annual Percent Change</i> | -- | 35.3% | 8.8% |
| <i>Three Year Percent Change</i> | -- | -- | 47.2% |
| TDA Recovery Ratio (a) | 3.1% | 4.2% | 4.6% |
| <i>Annual Percent Change</i> | -- | 35.3% | 8.8% |
| <i>Three Year Percent Change</i> | -- | -- | 47.2% |
| Percentage of Trips On-Time | 87.9% | 89.9% | 77.6% |
| <i>Annual Percent Change</i> | -- | 2.3% | -13.7% |
| <i>Three Year Percent Change</i> | -- | -- | -11.7% |
| Complaints/10,000 Passenger Trips | (b) | 12.3 | 18.6 |
| <i>Annual Percent Change</i> | -- | -- | 51.1% |
| <i>Three Year Percent Change</i> | -- | -- | -- |
| Missed Trips/Total Trips | 0.011% | 0.008% | 0.000% |
| <i>Annual Percent Change</i> | -- | -28.2% | -100.0% |
| <i>Three Year Percent Change</i> | -- | -- | -100.0% |

| FUNCTION/Indicator | Actual Performance | | |
|---|--------------------|--------|--------|
| | FY2021 | FY2022 | FY2023 |
| OPERATIONS (Continued) | | | |
| ADA Trip Denials/Total ADA Trips | 0.00% | 0.00% | 0.00% |
| <i>Annual Percent Change</i> | -- | -- | -- |
| <i>Three Year Percent Change</i> | -- | -- | -- |
| Trip Cancellations/Total ADA Trips | 10.5% | 12.9% | 19.6% |
| <i>Annual Percent Change</i> | -- | 22.1% | 52.2% |
| <i>Three Year Percent Change</i> | -- | -- | 85.9% |
| Late Cancellations/Total ADA Trips | 9.3% | 7.6% | 10.2% |
| <i>Annual Percent Change</i> | -- | -17.8% | 33.0% |
| <i>Three Year Percent Change</i> | -- | -- | 9.3% |
| No-Shows/Total ADA Trips | 1.2% | 1.3% | 1.9% |
| <i>Annual Percent Change</i> | -- | 5.3% | 46.8% |
| <i>Three Year Percent Change</i> | -- | -- | 54.6% |
| MAINTENANCE | | | |
| Vehicle + Non-Veh. Maint. Cost/Total Operating Cost | 11.8% | 10.3% | 14.3% |
| <i>Annual Percent Change</i> | -- | -12.8% | 39.2% |
| <i>Three Year Percent Change</i> | -- | -- | 21.3% |
| Vehicle Maintenance Cost/Vehicle Service Mile | \$2.39 | \$1.15 | \$1.70 |
| <i>Annual Percent Change</i> | -- | -51.6% | 47.0% |
| <i>Three Year Percent Change</i> | -- | -- | -28.9% |
| Spare Vehicles/Total Vehicles | 63.6% | 63.6% | 50.0% |
| <i>Annual Percent Change</i> | -- | 0.0% | -21.4% |
| <i>Three Year Percent Change</i> | -- | -- | -21.4% |
| Mean Distance between Major Failures (Miles) | 68,378 | (c) | 35,928 |
| <i>Annual Percent Change</i> | -- | -- | -- |
| <i>Three Year Percent Change</i> | -- | -- | -47.5% |
| Mean Distance between All Failures (Miles) | 22,793 | 51,621 | 17,964 |
| <i>Annual Percent Change</i> | -- | 126.5% | -65.2% |
| <i>Three Year Percent Change</i> | -- | -- | -21.2% |
| SAFETY | | | |
| Preventable Accidents/100,000 Vehicle Miles | (b) | 1.9 | 0.9 |
| <i>Annual Percent Change</i> | -- | -- | -52.1% |
| <i>Three Year Percent Change</i> | -- | -- | -- |

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

(b) Not available due to change in vendor

(c) No major failures reported this year

VII. CONCLUSIONS AND RECOMMENDATIONS

The preceding sections presented a review of SolTrans's transit service performance during the three-year period of FY2021 through FY2023 (July 1, 2020 through June 30, 2023). They focused on TDA compliance issues including trends in TDA-mandated performance indicators and compliance with selected sections of the state Public Utilities Code (PUC). They also provided the findings from an overview of SolTrans's data collection activities to support the TDA indicators, actions taken to implement recommendations from the prior performance audit, and a review of selected key functional performance results.

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

- Data Collection – To support this review, SolTrans staff confirmed that data collection and reporting procedures have at times changed from those described in the prior performance audit. In FY2021 SolTrans used Avail in order to collect statistics, utilizing a contractor, Solutions for Transit, for reporting. For FY2022 and FY2023 SolTrans transitioned to a new vendor, Connexionz (CNX), to collect and report statistics. Based on the information provided as shown in Exhibit 3.1, SolTrans appears to be in compliance with the data collection and reporting requirements for the five TDA statistics.
- The statistics collected over the period appear to be consistent with the TDA definitions. Further, statistics generally indicate consistency in terms of the direction and magnitude of the year-to-year changes across the statistics, that is, increases or decreases in annual operating costs are relatively proportional to increases or decreases in annual vehicle service hours.
- However, in some years there are inconsistencies in terms of the direction and magnitude of the year-to-year changes across the statistics. In FY2019, fixed-route operating costs and unlinked passengers increased

as hours and miles decreased. Then in FY2020 fixed-route statistics began moving in the same direction, although costs were not always commensurate with the other statistics. On the paratransit side, statistics generally trended in the same direction during most years, although costs decreased in FY2022, while the other statistics increased substantially

- TDA Performance Trends

SolTrans' 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 summary of the TDA performance trend highlights over the six-year period of FY2018 through FY2023:

- There was an average annual increase in the operating cost per hour of 10.1 percent, which amounted to a 6.1 percent increase in inflation adjusted dollars.
- The cost per passenger increased on average by 15.5 percent per year, resulting in an average annual increase of 11.4 percent in constant FY2018 dollars.
- Passenger productivity declined, with passengers per vehicle service hour decreasing by 4.7 percent per year overall, and passengers per vehicle service mile decreasing by 9.9 percent annually.

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

- Purchased transportation costs increased by an average of 7.3 percent per year, and remained the largest component cost area at about 63.5 percent of total costs on average each year. The largest increase was 30.3 percent in FY2023.
- In-house labor and fringe benefit costs increased overall on average, by 5.3 percent and 12.9 percent, respectively. The two categories combined

comprised from 10.4 to 12.9 percent of total operating costs in any year of the period.

- Services costs increased by 1.8 percent on average per year, and comprised about 11.5 percent of total operating costs in each year of the period. However, the category decreased from 13.1 percent of total costs in FY2018 to 9.9 percent of the total in FY2023.
- Costs increased annually over the review period for both materials/supplies (13.6 percent on average) and other expenses (12.6 percent on average). The share of these costs combined averaged between 10 to 16 percent of the total operating costs over the review period.
- There was an average annual increase of 15.3 percent in casualty/liability, which comprised less than 0.7 percent of total costs in each year.

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

- Cost efficiency showed a decrease, with an average annual increase in the operating cost per hour of 1.4 percent. This amounted to an average annual decrease of 2.2 percent in inflation adjusted dollars.
- Cost effectiveness was similar, with the operating cost per passenger increasing an average of 2.1 percent per year, or 1.5 percent annual decrease when expressed as normalized FY2018 dollars.
- Passenger productivity declined slightly, with only minor changes in passengers per hour, decreasing 0.7 percent per year on average, and passengers per mile decreasing 2.4 percent annually.

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

- Purchased transportation costs represented the largest portion of total paratransit operating costs, yet decreased from 75.3 to 69.2 percent during the period. Purchased transportation costs also decreased by 7.7 percent per year on average.

- An average annual decrease of 3.2 percent was seen in labor, while fringe benefits increased by 1.3 percent on average annually. The two categories increased from 11.3 percent of total costs in FY2018 to 15.1 percent in FY2023.
 - Cost decreases occurred in the services (3.6 percent), and materials/supplies (5.1 percent) categories, while other expenses (4.2 percent) increased during the review period. Together, these categories combined represented 17.0 percent or less of total operating costs in every year of the period.
 - An average annual increase of 16.9 percent was seen in the casualty/liability category, but this area comprises only one percent of total expenses.
- Compliance with Statutory Requirements – SolTrans 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.
 - Status of Prior Audit Recommendations – There was one recommendation made in SolTrans’ prior performance audit. SolTrans has implemented the corrective action for the recommendation from the prior audit to examine the causes of the decline in miles between mechanical failures on the paratransit services.
 - The recommendation was for SolTrans to examine the causes of its decline in miles between mechanical failures on paratransit services. The prior audit found maintenance results for paratransit services showed a substantial decrease in the mean distance between major failures, which declined overall by 61 percent, from 25,544 miles to 9,900 miles.
 - SolTrans staff responded that after examination of the decline experienced during the prior audit period, the trend was due in large part to maintenance issues with aging 2011 cutaway vehicles that had exceeded their useful lives and were the cause of many of the paratransit

mechanical failures. The 2011 cutaways have been retired and the need for road calls has dropped substantially in the current review period.

- SolTrans has implemented the corrective actions for the recommendation from the prior audit, listed in Exhibit 7. The current audit found a much improved mean distance between failures for all three years, ranging from 35,928 to 68,378 from FY2021 through FY2023. The actual number of major failures for paratransit were one, zero, and three, respectively, from FY2021 through FY2023.

- Functional Performance Indicator Trends

To further assess SolTrans' 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 summary of the systemwide functional trend highlights between FY2021 and FY2023:

- Administrative cost as percentage of total operating cost decreased in each year of the period and by 20.0 percent overall from FY2021 to FY2023. Administrative cost per service hour was also down each year and decreased by 16.6 percent in the same period.
- Marketing cost as a percentage of total administrative cost increased overall by 40.9 percent in the period, but accounted for between just 1.0 and 1.5 percent of total administrative cost. Marketing cost decreased from \$0.14 to \$0.10 per passenger trip during the same period.
- Systemwide farebox recovery ratio increased in each year, from 8.4 percent in FY2021 to 10.2 percent in FY2023, up 21.1 percent overall in the period.

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

- Service Planning results showed operating cost per passenger mile decreasing 56.6 percent overall, with the largest decrease occurring in FY2023. Vehicle miles in service and vehicle hours in service both remained above 92 percent overall in each year, and passengers per vehicle service mile and hour increased 43.8 and 68.2 percent respectively, with the largest increases again occurring in FY2023.
- In Operations, vehicle operations cost increased as a percentage of total operating cost overall (25.8 percent), as did operations cost per service hour (35.2 percent) during the audit period. Farebox recovery increased by 18.4 percent in the period and stood at 10.6 percent in FY2023. The TDA recovery ratio was slightly higher and increased by 19.3 percent overall. Schedule adherence improved from 62.2 percent to about 65.6 percent over the three years, but the number of complaints increased by 30.8 percent overall due to the additional Blue and Green Line services that were taken over from Fairfield. The percentage of missed trips increased by 21.0 percent in the period yet stood at just 1.06 percent of total trips in FY2023.
- Maintenance results were mixed, with maintenance cost increasing just 1.4 percent overall relative to total operating cost, but decreasing by 17.7 percent overall on a service mile basis. The vehicle spare ratio decreased by 25.1 percent over three years.
- Vehicle reliability showed improvement with mean distance between major failures increasing by 126.8 percent from FY2021 to FY2023 and distance between all failures increasing by 116.7 percent in the same period.
- Safety results demonstrated fluctuations in the rate of preventable accidents per 100,000 vehicle miles, but remained at fewer than two in each year, with an overall decrease of 42.9 percent in the period and a low of 0.8 in FY2023.

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

- Service Planning saw the cost per passenger mile decrease by 56.7 percent from FY2021 to FY2023, and percent of vehicle miles and vehicle hours in service increased by 18.5 percent and 30.0 percent, respectively. The latter two measures each surpassed 97 percent by FY2023.
- Passenger productivity increased as well, with passengers per vehicle service mile increasing 0.4 percent in the period. Passengers per vehicle service hour increased from 1.55 to 2.05, an overall increase of 32.6 percent from FY2021 to FY2023.
- Operations results included a 5.2 percent decrease in vehicle operations cost as a portion of total operating cost, and a 28.5 percent decrease in vehicle operations cost per service hour. Farebox recovery mirrored TDA recovery ratio and increased by 47.2 percent during the three-year period, increasing from 3.1 to 4.6 percent.
- Schedule adherence fluctuated, but decreased by 11.7 percent overall, while complaints increased by 51.1 percent from FY2022 through FY2023. Complaint data was unavailable for FY2021 due to a vendor change.
- There were almost no missed trips and there were no ADA trip denials during the audit period. The rate of trip cancellations increased from 10.5 percent to 19.6 percent from FY2021 to FY2023. Late cancellations increased from 9.3 percent to 10.2 percent and passenger no-show rates increased slightly but remained below 1.9 percent in all three years.
- Vehicle maintenance cost increased 21.3 percent as a proportion of total operating cost in the period, from 11.8 percent to 14.3 percent. Vehicle maintenance costs per service mile decreased 28.9 percent. Spare ratio decreased by 21.4 percent overall.
- Miles between mechanical failures declined by 47.5 percent for major failures, and 21.2 percent for all failures. However, the actual number of failures was small, with total failures numbering one, zero and three in the three years of the period.

- Safety results saw a decrease in the number of preventable accidents per 100,000 miles over the audit period, from 1.9 in FY2022 to 0.9 in FY2023. Data for FY2021 was unavailable due to a vendor change.

Recommendations

No recommendations are suggested for SolTrans at this time based on the results of this triennial performance audit

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

Functional Performance Inputs - Systemwide (All Modes)

| Data Item | FY2021 | FY2022 | FY2023 | Source |
|-----------------------------|--------------|--------------|--------------|--|
| Total Operating Costs | \$12,918,855 | \$14,998,117 | \$18,505,608 | NTD F-40 (FY2021/FY2022), NTD F-30 MB+CB+DR (FY2023) |
| Administrative Costs | \$5,999,930 | \$6,193,731 | \$6,873,160 | NTD F-40 (FY2021/FY2022), NTD F-30 MB+CB+DR (FY2023) |
| Vehicle Service Hours | 72,122 | 83,439 | 99,013 | NTD S-10 MB+CB+DR |
| Marketing Costs | \$57,806 | \$93,734 | \$93,307 | SolTrans Financial System |
| Unlinked Passenger Trips | 422,380 | 572,740 | 967,814 | NTD S-10 MB+CB+DR |
| Farebox Revenue (All Modes) | \$1,088,121 | \$1,443,280 | \$1,887,565 | NTD F-10 |

Functional Performance Inputs – Bus Service

| Data Item | FY2021 | FY2022 | FY2023 | Source |
|--|--------------|--------------|--------------|-------------------------|
| Vehicle Service Miles | 1,168,484 | 1,364,847 | 1,870,754 | NTD S-10 MB+CB |
| Total Vehicle Miles | 1,227,242 | 1,465,133 | 2,029,717 | NTD S-10 MB+CB |
| Vehicle Service Hours | 65,450 | 74,360 | 89,569 | NTD S-10 MB+CB |
| Total Vehicle Hours | 69,280 | 80,820 | 96,214 | NTD S-10 MB+CB |
| Unlinked Passenger Trips | 412,068 | 557,305 | 948,468 | NTD S-10 MB+CB |
| Farebox Revenue | \$1,049,761 | \$1,394,145 | \$1,827,301 | NTD F-10 |
| Total Operating Costs | \$11,697,859 | \$13,841,810 | \$17,202,428 | NTD F-30 MB+CB |
| Passenger Miles | 3,197,530 | 4,356,659 | 10,828,602 | NTD S-10 MB+CB |
| Vehicle Operations Costs | \$4,457,108 | \$6,272,207 | \$8,248,086 | NTD F-30 MB+CB |
| Local Support (a) | \$78,788 | \$122,886 | \$152,132 | NTD F-10 |
| TDA Oper. Cost Exclusions - PUC 99247 (b) | \$0 | \$0 | \$0 | SolTrans Staff |
| TDA Oper. Cost Exclusions - PUC 99268.17 (c) | \$0 | \$0 | \$0 | SolTrans Staff |
| Trips On-Time | 62.2% | 67.5% | 65.6% | TransTrack |
| Total Trips | 103,684 | 119,494 | 123,876 | Monthly Invoices |
| Complaints | 107 | 176 | 224 | TransTrack |
| Missed Trips | 911 | 2666 | 1317 | Monthly Invoices |
| Vehicle Maintenance Costs | \$1,507,734 | \$1,197,940 | \$1,987,616 | NTD F-30 MB+CB |
| Non-Vehicle/Facility Maintenance Costs | \$273,068 | \$711,653 | \$666,916 | NTD F-30 MB+CB |
| Spare Vehicles (Total less Maximum Service) | 22 | 17 | 20 | NTD S-10 MB+CB |
| Total Vehicles | 42 | 42 | 51 | NTD S-10 MB+CB |
| Revenue Vehicle Mechanical System Failures - Total | 76 | 56 | 58 | NTD R-20 MB+CB |
| Revenue Vehicle Mechanical System Failures - Major | 48 | 15 | 35 | NTD R-20 MB+CB |
| Preventable Accidents | 18 | 30 | 17 | Transdev Webrisk Portal |

(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 | 56,444 | 92,887 | 105,465 | NTD S-10 DR |
| Total Vehicle Miles | 68,378 | 103,241 | 107,785 | NTD S-10 DR |
| Vehicle Service Hours | 6,672 | 9,079 | 9,444 | NTD S-10 DR |
| Total Vehicle Hours | 8,902 | 10,697 | 9,696 | NTD S-10 DR |
| Unlinked Passenger Trips | 10,312 | 15,435 | 19,352 | NTD S-10 DR |
| Farebox Revenue | \$38,360 | \$49,135 | \$60,264 | NTD F-10 |
| Total Operating Costs | \$1,220,996 | \$1,156,307 | \$1,303,180 | NTD F-30 DR |
| Passenger Miles | 37,058 | 66,118 | 91,355 | NTD S-10 DR |
| Vehicle Operations Costs | \$536,863 | \$503,607 | \$543,161 | NTD F-30 DR |
| Local Support (a) | \$0 | \$0 | \$0 | SolTrans Staff |
| TDA Oper. Cost Exclusions - PUC 99247 (b) | \$0 | \$0 | \$0 | SolTrans Staff |
| TDA Oper. Cost Exclusions - PUC 99268.17 (c) | \$0 | \$0 | \$0 | SolTrans Staff |
| Trips On-Time | 87.9% | 89.9% | 77.6% | Trapeze On Time Compliance Report |
| Total Trips (Booked) | 9,383 | 13,069 | 15,807 | Trapeze On Time Compliance Report |
| Complaints | (d) | 19 | 36 | TransTrack |
| Missed Trips | 1 | 1 | 0 | Trapeze Trip Hours Productivity Report |
| Total ADA Trips (Completed) | 9,673 | 13,077 | 15,747 | NTD S-10 DR |
| ADA Trip Denials | 0 | 0 | 0 | Vendor records |
| Trip Cancellations | 1,019 | 1,682 | 3,083 | Trapeze Trip Hours Productivity Report |
| Late Trip Cancellations | 900 | 1,000 | 1,602 | Trapeze Trip Hours Productivity Report |
| No Shows | 118 | 168 | 297 | Trapeze Trip Hours Productivity Report |
| Vehicle Maintenance Costs | \$134,681 | \$107,200 | \$178,877 | NTD F-30 DR |
| Non-Vehicle/Facility Maintenance Costs | \$9,471 | \$11,799 | \$7,792 | NTD F-30 DR |
| Spare Vehicles (Total less Maximum Service) | 7 | 7 | 4 | NTD S-10 DR |
| Total Vehicles | 11 | 11 | 8 | NTD S-10 DR |
| Revenue Vehicle Mechanical System Failures - Total | 3 | 2 | 6 | NTDR-20 |
| Revenue Vehicle Mechanical System Failures - Major | 1 | 0 | 3 | NTDR-20 |
| Preventable Accidents | (d) | 2 | 1 | Vendor Safety Department |

(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 due to change in vendor