



San Joaquin Council of Governments

Triennial Performance Audit of
the San Joaquin Regional Transit
District (RTD) for the period
FY 2021/22 - FY 2023/24



SAN JOAQUIN
COUNCIL OF GOVERNMENTS
CALIFORNIA

Final Report | June 2025



Table of Contents

Chapter 1 Executive Summary	1
Chapter 2 Audit Scope and Methodology	3
Chapter 3 Program Compliance	7
Chapter 4 Prior Recommendations	13
Chapter 5 Data Reporting Analysis	15
Chapter 6 Performance Analysis	17
Chapter 7 Functional Review	35
Chapter 8 Findings and Recommendations	49



This page intentionally blank.



Table of Exhibits

Exhibit 1.1 Summary of Audit Recommendations	2
Exhibit 3.1 Transit Development Act Compliance Requirements	9
Exhibit 5.1 Data Reporting Comparison.....	16
Exhibit 6.1 System Performance Indicators	20
Exhibit 6.2 System Ridership	21
Exhibit 6.3 System Operating Cost/VSH	21
Exhibit 6.4 System Operating Cost/VSM.....	21
Exhibit 6.5 System VSM/VSH.....	21
Exhibit 6.6 System Operating Cost/Passenger	22
Exhibit 6.7 System Passengers/VSH	22
Exhibit 6.8 System Passengers/VSM.....	22
Exhibit 6.9 System VSH/FTE	22
Exhibit 6.10 System Farebox Recovery	23
Exhibit 6.11 System Fare/Passenger.....	23
Exhibit 6.12 Fixed-Route Performance Indicators.....	25
Exhibit 6.13 Fixed-Route Ridership.....	26
Exhibit 6.14 Fixed-Route Operating Cost/VSH	26
Exhibit 6.15 Fixed-Route Operating Cost/VSM	26
Exhibit 6.16 Fixed-Route VSM/VSH	26
Exhibit 6.17 Fixed-Route Operating Cost/Passenger.....	27
Exhibit 6.18 Fixed-Route Passengers/VSH	27
Exhibit 6.19 Fixed-Route Passengers/VSM	27
Exhibit 6.20 Fixed-Route VSH/FTE.....	27
Exhibit 6.21 Fixed-Route Farebox Recovery.....	28
Exhibit 6.22 Fixed-Route Fare/Passenger	28
Exhibit 6.23 Demand-Response Performance Indicators	30
Exhibit 6.24 Demand-Response Ridership	31
Exhibit 6.25 Demand-Response Operating Cost/VSH.....	31
Exhibit 6.26 Demand-Response Operating Cost/VSM.....	31
Exhibit 6.27 Demand-Response VSM/VSH.....	31
Exhibit 6.28 Demand-Response Operating Cost/Passenger	32
Exhibit 6.29 Demand-Response Passengers/VSH.....	32
Exhibit 6.30 Demand-Response Passengers/VSM.....	32
Exhibit 6.31 Demand-Response VSH/FTE	32
Exhibit 6.32 Demand-Response Farebox Recovery	33
Exhibit 6.33 Demand-Response Fare/Passenger.....	33



Exhibit 7.1 Fixed-Route Fare Structure 36
Exhibit 7.2 Commuter Fare Structure 36
Exhibit 7.3 Demand-Response Fare Structure 36
Exhibit 7.4 Organizational Chart..... 38
Exhibit 7.5 RTD Transit Fleet 48
Exhibit 8.1 Audit Recommendations 51



Chapter 1 | Executive Summary

In 2024, the San Joaquin Council of Governments (SJCOC) selected Moore & Associates, Inc., to prepare Triennial Performance Audits of itself as the RTPA and the seven transit operators to which it allocates TDA funding.

The California Public Utilities Code requires all recipients of Transit Development Act (TDA) Article 4 funding to undergo an independent performance audit on a three-year cycle in order to maintain funding eligibility. Audits of Article 8 recipients are encouraged.

The Triennial Performance Audit is designed to be an independent and objective evaluation of San Joaquin Regional Transit District (RTD) as a public transit operator, providing operator management with information on the economy, efficiency, and effectiveness of its programs across the prior three fiscal years. In addition to assuring legislative and governing bodies (as well as the public) that resources are being economically and efficiently utilized, the Triennial Performance Audit fulfills the requirement of PUC Section 99246(a) that the RTPA designate an entity other than itself to conduct a performance audit of the activities of each operator to whom it allocates funds.

This chapter summarizes key findings and recommendations developed during the Triennial Performance Audit (TPA) of the RTD's public transit program for the period:

- Fiscal Year 2021/22,
- Fiscal Year 2022/23, and
- Fiscal Year 2023/24.

The San Joaquin Regional Transit District provides bus and paratransit services within the Stockton metropolitan area, as well as between Stockton and surrounding communities and Sacramento. The RTD's service includes 27 local Metro routes, five Metro BRT Express routes, seven Metro Hopper routes, two Commuter routes, and five County Hopper routes. Metro and County Hopper routes operate as deviated fixed routes, providing deviations of up to one mile from the route to accommodate ADA-certified customers. County Hopper routes do not provide deviations in Lodi and Tracy, yet provide connections to local transit services in those communities.

The RTD provides a variety of mobility services, including an ADA Complementary Paratransit service. The Paratransit Service is a curb-to-curb service available to ADA-certified individuals seven days per week, generally mirroring the Metro local and BRT Express hours. In addition, RTD Van Go! Service is an on-demand rideshare service serving the entire county (though service wholly within Stockton was eliminated in September 2024).

This performance audit was conducted in accordance with generally accepted government auditing standards. Those standards require that the audit team plans and performs the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for its findings and conclusions based on the audit objectives. Moore & Associates believes the evidence obtained provides a reasonable basis for our findings and conclusions.



This audit was also conducted in accordance with the processes established by the California Department of Transportation (Caltrans), as outlined in the *Performance Audit Guidebook for Transit Operators and Regional Transportation Planning Entities*.

The Triennial Performance Audit includes five elements:

- Compliance requirements,
- Prior recommendations,
- Analysis of program data reporting,
- Performance Audit, and
- Functional review.

Test of Compliance

Based on discussions with RTD staff, analysis of program performance, and an audit of program compliance and function, the audit team presents no findings outside of the cyberattack which occurred during FY 2023/24.

Status of Prior Recommendations

The prior audit – completed in March 2022 by Moore & Associates, Inc. for the three fiscal years ending June 30, 2021 – included no recommendations.

Recommendations

Based on discussions with RTD staff, analysis of program performance, and an audit of program compliance and function, the audit team presents one issue for further discussion as part of this audit:

1. RTD experienced a cyberattack in March 2024 that impacted its ability to comply with some elements of the TDA during the current and subsequent audit period.

Multiple recommendations were identified to address this issue.

Exhibit 1.1 Summary of Audit Recommendations

Recommendations		Importance	Timeline
1	Clearly document all communication with external agencies and any extensions granted.	High	FY 2024/25
2	Complete the FY 2023/24 fiscal audit, State Controller reports, and NTD reports in a timely manner once the database reconstruction is completed.	High	FY 2024/25
3	Work with SJCOG to ensure RTD receives its TDA allocation for FY 2025/26 even if completion of the audit is delayed.	High	FY 2024/25
4	Ensure the FY 2023/24 audit includes a robust analysis of RTD’s eligibility to receive TDA funds for that year so that any funds it was not eligible to claim (as the result of allocating funds before the audit was complete) can be reimbursed.	High	FY 2024/25



Chapter 2 | Audit Scope and Methodology

The Triennial Performance Audit of the San Joaquin Regional Transit District public transit program covers the three-year period ending June 30, 2024. The California Public Utilities Code requires all recipients of Transit Development Act (TDA) funding to complete an independent review on a three-year cycle in order to maintain funding eligibility.

In 2024, the San Joaquin Council of Governments selected Moore & Associates, Inc., to prepare Triennial Performance Audits of itself as the RTPA and the seven transit operators to which it allocates TDA funding. Moore & Associates is a consulting firm specializing in public transportation, including audits of non-TDA Article 4 recipients. Selection of Moore & Associates followed a competitive procurement process.

The Triennial Performance Audit is designed to be an independent and objective evaluation of the RTD as a public transit operator. Direct benefits of a Triennial Performance Audit include providing operator management with information on the economy, efficiency, and effectiveness of its programs across the prior three years; helpful insight for use in future planning; and assuring legislative and governing bodies (as well as the public) that resources are being economically and efficiently utilized. Finally, the Triennial Performance Audit fulfills the requirement of PUC Section 99246(a) that the RTPA designate an entity other than itself to conduct a performance audit of the activities of each operator to whom it allocates funds.

This performance audit was conducted in accordance with generally accepted government auditing standards. Those standards require that the audit team plans and performs the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for its findings and conclusions based on the audit objectives. The auditors believe the evidence obtained provides a reasonable basis for our findings and conclusions.

The audit was also conducted in accordance with the processes established by the California Department of Transportation (Caltrans), as outlined in the *Performance Audit Guidebook for Transit Operators and Regional Transportation Planning Entities*, as well as *Government Auditing Standards* published by the U.S. Comptroller General.

Objectives

A Triennial Performance Audit (TPA) has four primary objectives:

1. Assess compliance with TDA regulations;
2. Review improvements subsequently implemented as well as progress toward adopted goals;
3. Evaluate the efficiency and effectiveness of the transit operator; and
4. Provide sound, constructive recommendations for improving the efficiency and functionality of the transit operator.



Scope

The TPA is a systematic review of performance evaluating the efficiency, economy, and effectiveness of the transit operator. The audit of the RTD included five tasks:

1. A review of compliance with TDA requirements and regulations.
2. A review of the status of recommendations included in the prior Triennial Performance Audit.
3. A verification of the methodology for calculating performance indicators including the following activities:
 - Assessment of internal controls,
 - Test of data collection methods,
 - Calculation of performance indicators, and
 - Evaluation of performance.
4. Comparison of data reporting practices:
 - Internal reports,
 - State Controller Reports, and
 - National Transit Database.
5. Examination of the following functions:
 - General management and organization;
 - Service planning;
 - Administration;
 - Marketing and public information;
 - Scheduling, dispatching, and operations;
 - Personnel management and training; and
 - Maintenance.
6. Conclusions and recommendations to address opportunities for improvement based upon analysis of the information collected and the audit of the transit operator's major functions.

Methodology

The methodology for the Triennial Performance Audit of the RTD included thorough review of documents relevant to the scope of the audit, as well as information contained on the RTD's website. The documents reviewed included the following (spanning the full three-year period):

- Monthly performance reports;
- State Controller Reports;
- Annual budgets;
- TDA fiscal audits;
- Transit marketing collateral;
- TDA claims;
- Fleet inventory;
- Preventive maintenance schedules and forms;
- California Highway Patrol Terminal Inspection reports;
- National Transit Database reports;



- Accident/road call logs; and
- Organizational chart.

The methodology for this review included a site visit to the San Joaquin Regional Transit District's Administration Office (421 E Weber Ave., Stockton) on September 24, 2024. The audit team met with Robert Kyle, Chief Financial Officer; Ravi Sharma, Finance Manager; Syed Bukhani, Finance Administrator; Maximilian Cao, Marketing and Customer Engagement Supervisor; Sunny Pannu, HR Administrator; Erika Franco, HR Administrator; John Hodson, Chief Information Officer; Dámaris Galvan, Director of Planning and Service Development; LaShonda Nelson, Transportation Superintendent; and John Van Camp, Maintenance Superintendent. The site visit also include a tour of RTD's operations and maintenance facility (2849 E. Myrtle St., Stockton) as well as a review of materials germane to the triennial audit.

This report is comprised of eight chapters divided into three sections:

1. Executive Summary: A summary of the key findings and recommendations developed during the Triennial Performance Audit process.
2. TPA Scope and Methodology: Methodology of the review and pertinent background information.
3. TPA Results: In-depth discussion of findings surrounding each of the subsequent elements of the audit:
 - Compliance with statutory and regulatory requirements,
 - Status of prior recommendations,
 - Consistency among reported data,
 - Performance measures and trends,
 - Functional audit, and
 - Findings and recommendations.



This page intentionally blank.



Chapter 3 | Program Compliance

This section examines RTD’s compliance with the Transportation Development Act as well as relevant sections of the California Code of Regulations. An annual certified fiscal audit confirms TDA funds were apportioned in conformance with applicable laws, rules, and regulations. RTD considers full use of funds under California Code of Regulations (CCR) 6754(a) as referring to operating funds but not capital funds. The TPA findings and related comments are delineated in Exhibit 3.1.

Status of compliance items was determined through discussions with RTD staff as well as an inspection of relevant documents including the fiscal audits for each year of the triennium, State Controller annual filings, California Highway Patrol terminal inspections, National Transit Database reports, year-end performance reports, and other compliance-related documentation.

RTD experienced a cyberattack in March 2024 that impacted its ability to comply with some elements of the TDA during the current and subsequent audit period. While we are not including this issue as a compliance finding due to its system-wide impact, compliance areas impacted by the cyberattack are noted in Exhibit 3.1 and discussed in the recommendations of Chapter 8.

Specific Circumstances Impacting this Audit

In March 2024, RTD suffered a cyberattack that destroyed its financial database (see Chapter 7 for additional discussion). While RTD is addressing the vulnerabilities that led to both the cyberattack and the loss of its data, this event has impacted its ability to remain in compliance with the TDA during the recovery. While the database is being rebuilt, RTD cannot undergo its annual audits, which under the TDA are required before funding allocations can be paid, as well as file its annual reports to the State Controller. Given this extenuating circumstance, the audit team believes that in this case the RTPA should continue payment of RTD’s TDA claims even in the absence of the fiscal audits, with the caveat that once RTD has fully rebuilt its financial database and completed its fiscal audits to-date it should undergo a comprehensive review of funding eligibility under the TDA. At that time, the claims would be reconciled with the eligible amounts to ensure RTD did not claim more than it should have during the time in which its financial database was unavailable. If an overpayment was made, RTD would need to return the funds at that time. These recommendations are discussed further in Chapter 8.

Other Developments Occurring During the Audit Period

For many operators, the FY 2021/22 – FY 2023/24 audit period reflected both the acute impacts of and recovery from the COVID-19 pandemic. By the end of the audit period – even earlier in some cases – most operators had exhausted federal relief funds, even though penalties for non-compliance with farebox recovery ratios continued to be waived. Many operators, even more than four years after the onset of the pandemic, still struggle with ridership that has yet to recover to pre-pandemic levels.

Given this is not the first Triennial Performance Audit to be conducted since the COVID-19 pandemic, this report will not focus on actions taken as a result of the health crisis. Instead, the compliance review, functional review, and resulting recommendations will focus on ensuring program sustainability once penalty waivers and other emergency legislation have ended.



Assembly Bill 90, signed into law on June 29, 2020, provided temporary regulatory relief for transit operators required to conform with Transportation Development Act (TDA) farebox recovery ratio thresholds in FY 2019/20 and FY 2020/21. Assembly Bill 149, signed into law on July 16, 2021, provided additional regulatory relief by extending the provisions of AB 90 through FY 2022/23 and adjusting definitions of eligible revenues and operating costs. Most recently, Senate Bill 125, signed into law on July 10, 2023, extended protections provided via earlier legislation through FY 2025/26. While this means the audit period covered by this audit is fully exempt from penalties for non-compliance with the farebox recovery ratio, for example, it also means that transit operators will likely need to be in compliance by the last year of the next audit period.

While the ability to maintain state mandates and performance measures is important, these measures enable transit operators to adjust to the impacts of COVID while continuing to receive their full allocations of funding under the TDA.

Together, these three pieces of legislation include the following provisions specific to transit operator TDA funding under Article 4 and Article 8:

1. Prohibits the imposition of the TDA revenue penalty on an operator that did not maintain the required ratio of fare revenues to operating cost from FY 2019/20 through FY 2025/26.
2. Expands the definition of “local funds” to enable the use of federal funding to supplement fare revenues and allows operators to calculate free and reduced fares at their actual value.
3. Adjusts the definition of operating cost to exclude the cost of ADA paratransit services, demand-response and microtransit services designed to extend access to service, ticketing/payment systems, security, some pension costs, and some planning costs.
4. Allows operators to use STA funds as needed to keep transit service levels from being reduced or eliminated through FY 2025/26.

SB 125 calls for the establishment of the Transit Transformation Task Force to develop policy recommendations to grow transit ridership and improve the transit experience for all users. In the 50-plus years since introduction of the Transportation Development Act, there have been many changes to public transportation in California. Many operators have faced significant challenges in meeting the farebox recovery ratio requirement, calling into question whether it remains the best measure for TDA compliance. In 2018, the chairs of California’s state legislative transportation committees requested the California Transit Association spearhead a policy task force to examine the TDA, which resulted in a draft framework for TDA reform released in early 2020. The Transit Transformation Task Force is required to submit a report of its findings and policy recommendations to the State Legislature by October 31, 2025. This report is expected to include recommendations for TDA reform, which may impact the next Triennial Performance Audit period.



Exhibit 3.1 Transit Development Act Compliance Requirements

Compliance Element	Reference	Compliance	Comments
State Controller Reports submitted on time.	PUC 99243	Impacted by cyberattack	FY 2021/22: January 30, 2023 FY 2022/23: January 30, 2024 FY 2023/24: March 21, 2025 <i>While RTD is technically out of compliance, this is due to circumstances outside of RTD's control. Detailed discussion is provided in Chapter 8.</i>
Fiscal and compliance audits submitted within 180 days following the end of the fiscal year (or with up to 90-day extension).	PUC 99245	Impacted by cyberattack	FY 2021/22: March 31, 2023 FY 2022/23: March 26, 2024 FY 2023/24: Delayed <i>While RTD is technically out of compliance, this is due to circumstances outside of RTD's control. Detailed discussion is provided in Chapter 8.</i>
Operator's terminal rated as satisfactory by CHP within the 13 months prior to each TDA claim.	PUC 99251 B	In compliance	May 24, 2021 May 19, 2022 May 24, 2023 June 11, 2024
Operator's claim for TDA funds submitted in compliance with rules and regulations adopted by the RTPA.	PUC 99261	In compliance	TDA claims submitted by RTD are complete and in compliance with SJCOC's rules and regulations.
If operator serves urbanized and non-urbanized areas, it has maintained a ratio of fare revenues to operating costs at least equal to the ratio determined by the rules and regulations adopted by the RTPA.	PUC 99270.1	In compliance	FY 2021/22: 20.30% FY 2022/23: 4.68% FY 2023/24: Pending RTD is also required to meet a ratio of 32% for fare revenue and local support. FY 2021/22: 32.00% FY 2022/23: 27.75% FY 2023/24: Pending <i>Penalties for not meeting farebox recovery ratios were waived for all three years under AB 90, AB 149, and SB 125.</i>
Except as otherwise provided, the allocation for any purpose specified under Article 8 may in no year exceed 50% of the amount required to meet the total planning expenditures for that purpose.	PUC 99405	Not applicable	



Compliance Element	Reference	Compliance	Comments
An operator receiving allocations under Article 8(c) may be subject to regional, countywide, or subarea performance criteria, local match requirements, or fare recovery ratios adopted by resolution of the RTPA.	PUC 99405	Not applicable	
The operator's definitions of performance measures are consistent with the Public Utilities Code Section 99247.	PUC 99247	In compliance	
The operator does not routinely staff with two or more persons a vehicle for public transportation purposes designed to be operated by one person.	PUC 99264	In compliance	
The operator's operating budget has not increased by more than 15% over the preceding year, nor is there a substantial increase or decrease in the scope of operations or capital budget provisions for major new fixed facilities unless the operator has reasonably supported and substantiated the change(s).	PUC 99266	In compliance	FY 2021/22: +5.02% FY 2022/23: +40.97% FY 2023/24: +24.10% <i>Source: TDA Claims, FY 2022 – FY 2024. Significant increases in FY 2023 and FY 2024 were due increases in staffing for planned service restoration/expansion as well as filling a number of staff vacancies.</i>
If the operator serves an urbanized area, it has maintained a ratio of fare revenues to operating cost at least equal to one-fifth (20 percent).	PUC 99268.2, 99268.4, 99268.1	Not applicable	
If the operator serves a rural area, it has maintained a ratio of fare revenues to operating cost at least equal to one-tenth (10 percent).	PUC 99268.2, 99268.4, 99268.5	Not applicable	
For a claimant that provides only services to elderly and handicapped persons, the ratio of fare revenues to operating cost shall be at least 10 percent.	PUC 99268.5, CCR 6633.5	In compliance	FY 2021/22: 10.00% FY 2022/23: 10.00% FY 2023/24: Pending <i>Penalties for not meeting farebox recovery ratios were waived for all three years under AB 90, AB 149, and SB 125.</i>
The current cost of the operator's retirement system is fully funded with respect to the officers and employees of its public transportation system, or the operator is implementing a plan approved by the RTPA, which will fully fund the retirement system for 40 years.	PUC 99271	In compliance	The District's private retirement plan is expected to be fully funded over the next 30 years, including ancillary benefits, which is within the 40-year limit.
If the operator receives State Transit Assistance funds, the operator makes full use of funds available to it under the Urban Mass Transportation Act of 1964 before TDA claims are granted.	CCR 6754 (a) (3)	In compliance	



Compliance Element	Reference	Compliance	Comments
In order to use State Transit Assistance funds for operating assistance, the operator’s total operating cost per revenue hour does not exceed the sum of the preceding year’s total plus an amount equal to the product of the percentage change in the CPI for the same period multiplied by the preceding year’s total operating cost per revenue hour. An operator may qualify based on the preceding year’s operating cost per revenue hour or the average of the three prior years. If an operator does not meet these qualifying tests, the operator may only use STA funds for operating purposes according to a sliding scale.	PUC 99314.6	Not applicable	This requirement was waived through FY 2025/26 under AB 90, AB 149, and SB 125. However, it should be noted that the District met the efficiency requirement in FY 2024 due to increased service hours in FY 2022.
For an operator qualifying under PUC 99268.1, the funds received from the local transportation fund under Article 4 shall not exceed 50 percent of the amount that is the sum of the operator’s operating cost, capital requirements, and debt service requirements less the sum of the operator’s revenues from federal grants and the state transit assistance fund. The operator may receive from the local transportation fund up to 100 percent, rather than 50 percent, of the amount representing the operating cost of an extension of its public transportation system if the extension is within the definition of Section 6619.1 and if all the conditions of Section 6633.8 are met.	6633.1	In compliance	In FY 2022 and FY 2023, the amount of LTF revenues claimed by the District under Article 4 exceeded the amount it was eligible to receive under CCR Section 6633.1. However, the District can be allocated additional funds if it maintains for the fiscal year, the ratio of fare revenues to operating costs, which it did.
A transit claimant is precluded from receiving monies from the Local Transportation Fund and the State Transit Assistance Fund in an amount which exceeds the claimant’s operating costs less the actual amount of fares received, the amount of local support required to meet the fare ratio, the amount of federal operating assistance, and the amount received during the year from a city or county to which the operator has provided services beyond its boundaries.	CCR 6634	In compliance	



This page intentionally blank.



Chapter 4 | Prior Recommendations

This section reviews and evaluates the implementation of prior Triennial Performance Audit recommendations. This objective assessment provides assurance the RTD has made quantifiable progress toward improving both the efficiency and effectiveness of its public transit program.

The prior audit – completed in March 2022 by Moore & Associates, Inc. for the three fiscal years ending June 30, 2021 – included no recommendations.



This page intentionally blank.



Chapter 5 | Data Reporting Analysis

An important aspect of the Triennial Performance Audit process is assessing how effectively and consistently the transit operator reports performance statistics to local, state, and federal agencies. Often as a condition of receipt of funding, an operator must collect, manage, and report data to different entities. Ensuring such data are consistent can be challenging given the differing definitions employed by different agencies as well as the varying reporting timeframes. This chapter examines the consistency of performance data reported by the RTD both internally as well as to outside entities during the audit period.

[Note: The FY 2023/24 TDA fiscal audit was unavailable at the time the report was prepared due to recovery from the cyberattack. As such, it is not included in this analysis.]

- **Operating cost:** There were modest variances in the reporting of operating cost. In FY 2021/22, the greatest variance was between the State Controller Report and the TDA fiscal audit (13 percent). In FY 2022/23, the greatest variance was between the NTD report and the TDA fiscal audit (2.0 percent). In FY 2023/24, audited data was not available, but the greatest variance between the figures reported was 3.5 percent.
- **Vehicle Service Hours (VSH):** This metric was generally reported consistently between monthly performance reports and State Controller reports. However, these figures were higher by 1.2 percent and 1.7 percent (FY 2021/22 and FY 2022/23, respectively) than those reported to the NTD.
- **Vehicle Service Miles (VSM):** This metric was generally reported consistently between monthly performance reports and State Controller reports. However, these figures were higher by approximately one percent than those reported to the NTD.
- **Passengers:** This metric was generally reported consistently between monthly performance reports and State Controller reports. However, these figures were higher by approximately one percent than those reported to the NTD.



Exhibit 5.1 Data Reporting Comparison

Performance Measure	System-Wide		
	FY 2021/22	FY 2022/23	FY 2023/24
Operating Cost (Actual \$)			
<i>TDA fiscal audit</i>	\$34,378,894	\$43,189,547	
<i>Monthly Performance Reports</i>	\$34,363,209	\$43,108,261	\$46,107,860
<i>National Transit Database</i>	\$33,188,887	\$42,349,184	\$45,214,645
<i>State Controller Report</i>	\$30,413,622	\$42,991,032	\$46,804,193
Fare Revenue (Actual \$)			
<i>TDA fiscal audit</i>	\$1,545,334	\$2,215,923	
<i>Monthly Performance Reports</i>	\$1,545,333	\$2,215,943	\$2,746,479
<i>National Transit Database</i>	\$1,545,334	\$2,215,924	\$2,746,575
<i>State Controller Report</i>	\$1,545,334	\$2,215,925	\$2,746,575
Vehicle Service Hours (VSH)			
<i>Monthly Performance Reports</i>	167,118	201,016	236,859
<i>National Transit Database</i>	165,088	197,664	233,670
<i>State Controller Report</i>	167,116	201,016	237,864
Vehicle Service Miles (VSM)			
<i>Monthly Performance Reports</i>	2,187,929	2,643,504	3,191,684
<i>National Transit Database</i>	2,168,013	2,612,286	3,202,340
<i>State Controller Report</i>	2,187,528	2,643,505	3,210,550
Passengers			
<i>Monthly Performance Reports</i>	1,855,213	2,323,438	2,579,472
<i>National Transit Database</i>	1,839,753	2,301,789	2,556,358
<i>State Controller Report</i>	1,855,213	2,323,438	2,583,486
Full-Time Equivalent Employees			
<i>State Controller Report</i>	229	291	280



Chapter 6 | Performance Analysis

Performance indicators are typically employed to quantify and assess the efficiency of a transit operator's activities. Such indicators provide insight into current operations as well as trend analysis of operator performance. Through a review of indicators, relative performance as well as possible inter-relationships between major functions is revealed.

The Transportation Development Act (TDA) requires recipients of TDA funding to track and report five performance indicators:

- Operating Cost/Passenger,
- Operating Cost/Vehicle Service Hour,
- Passengers/Vehicle Service Hour,
- Passengers/Vehicle Service Mile, and
- Vehicle Service Hours/Employee.

To assess the validity and use of performance indicators, the audit team performed the following activities:

- Assessed internal controls in place for the collection of performance-related information,
- Validated collection methods of key data,
- Calculated performance indicators, and
- Evaluated performance indicators.

The procedures used to calculate TDA-required performance measures for the current triennium were verified and compared with indicators included in similar reports to external entities (i.e., State Controller and Federal Transit Administration).

Operating Cost

The Transportation Development Act requires an operator to track and report transit-related costs reflective of the Uniform System of Accounts and Records developed by the State Controller and the California Department of Transportation. The most common method for ensuring this occurs is through a compliance audit report prepared by an independent auditor in accordance with California Code of Regulations Section 6667¹. The annual independent financial audit should confirm the use of the Uniform System of Accounts and Records. *Operating cost* – as defined by PUC Section 99247(a) – excluded the following during the audit period²:

¹ CCR Section 6667 outlines the minimum tasks which must be performed by an independent auditor in conducting the annual fiscal and compliance audit of the transit operator.

² Given the passage of AB 149, the list of excluded costs will be expanded beginning with FY 2021/22.



- Cost in the depreciation and amortization expense object class adopted by the State Controller pursuant to PUC Section 99243,
- Subsidies for commuter rail services operated under the jurisdiction of the Interstate Commerce Commission,
- Direct costs of providing charter service, and
- Vehicle lease costs.

Vehicle Service Hours and Miles

Vehicle Service Hours (VSH) and *Miles (VSM)* are defined as the time/distance during which a revenue vehicle is available to carry fare-paying passengers, and which includes only those times/miles between the time or scheduled time of the first passenger pickup and the time or scheduled time of the last passenger drop-off during a period of the vehicle's continuous availability.³ For example, demand-response service hours include those hours when a vehicle has dropped off a passenger and is traveling to pick up another passenger, but not those hours when the vehicle is unavailable for service due to driver breaks or lunch. For both demand-response and fixed-route services, service hours will exclude hours of "deadhead" travel to the first scheduled pick-up, and will also exclude hours of "deadhead" travel from the last scheduled drop-off back to the terminal. For fixed-route service, a vehicle is in service from first scheduled stop to last scheduled stop, whether or not passengers board or exit at those points (i.e., subtracting driver lunch and breaks but including scheduled layovers).

Passenger Counts

According to the Transportation Development Act, *total passengers* is equal to the total number of unlinked trips (i.e., those trips that are made by a passenger that involve a single boarding and departure), whether revenue-producing or not.

Employees

Employee hours is defined as the total number of hours (regular or overtime) which all employees have worked, and for which they have been paid a wage or salary. The hours must include transportation system-related hours worked by persons employed in connection with the system (whether or not the person is employed directly by the operator). Full-Time Equivalent (FTE) is calculated by dividing the number of person-hours by 2,000.

Fare Revenue

Fare revenue is defined by California Code of Regulations Section 6611.2 as revenue collected from the farebox plus sales of fare media.

³ A vehicle is considered to be in revenue service despite a no-show or late cancellation if the vehicle remains available for passenger use.



TDA Required Indicators

To calculate the TDA indicators for RTD, the following sources were employed:

- Operating Cost was not independently calculated as part of this audit. Operating Cost data were obtained via State Controller Reports for each fiscal year covered by this audit. Operating Cost from the reports was compared against that reported in the RTD's audited financial reports and appeared to be consistent with TDA guidelines. In accordance with PUC Section 99247(a), the reported costs excluded depreciation and other allowable expenses.
- Fare Revenue was not independently calculated as part of this audit. Fare revenue data were obtained via State Controller Reports for each fiscal year covered by this audit. This appears to be consistent with TDA guidelines as well as the uniform system of accounts.
- Vehicle Service Hours (VSH) data were obtained via NTD reports submitted to the FTA for each fiscal year covered by this audit. RTD calculates VSH based on scheduled service, subtracting missed trips and any other missed service hours. Demand-response VSH is calculated on times in and out of service. RTD's calculation methodology is consistent with PUC guidelines.
- Vehicle Service Miles (VSM) data were obtained via NTD reports submitted to the FTA for each fiscal year covered by this audit. RTD calculates VSM based on scheduled service, subtracting missed trips and any other missed service miles. Demand-response VSM is calculated from odometer mileage. This methodology is consistent with PUC guidelines.
- Unlinked trip data were obtained via NTD reports submitted to the FTA for each fiscal year covered by this audit. RTD's calculation methodology is consistent with PUC guidelines.
- Full-Time Equivalent (FTE) data were obtained from State Controller Reports for each fiscal year covered by this review. Use of the TDA definition regarding FTE calculation was confirmed.

System Performance Trends

Systemwide, operating cost rose during the first two years of the current audit period after experiencing steady decreases during the prior audit period. Between FY 2018/19 and FY 2023/24, there was a net 13.5 percent increase in operating cost. The most significant increase occurred in FY 2022/23, which experienced a 25.4 percent increase. Fare revenues were heavily impacted by the COVID-19 pandemic, resulting in a 29.6 percent net decrease between FY 2018/19 and FY 2023/24. However, the audit period saw a 77.7 percent increase.

Vehicle service hours (VSH) fluctuated during the prior audit period, resulting in a net 9.1 percent increase between FY 2018/19 and FY 2023/24 and a 41.7 percent net increase during the audit period. Vehicle service miles (VSM) increased every year of the audit period, after decreasing every year of the prior audit period. This resulted in a net 0.4 percent decrease across the six-year period and a net 45.9 percent increase during the current audit period. Increases in VSH and VSM during FY 2022/23 were consistent with increases in operating cost.

Ridership declined significantly during the prior audit period due to the COVID-19 pandemic but increased every year of the current audit period. Overall, ridership increased by a net 39 percent during the audit period, but decreased by a net 29.6 percent across the six-year period.



Cost-related metrics typically provide an indicator of a system’s efficiency, while passenger-related metrics offer insight into its productivity. Improvements are characterized by increases in passenger-related metrics and decreases in cost-related metrics. Cost-related metrics decreased (improved) during the audit period. Passenger-related metrics saw modest declines, with passengers per VSH and passengers per VSM decreasing by 1.9 percent and 4.7 percent, respectively, across the audit period.

Exhibit 6.1 System Performance Indicators

Performance Measure	System-wide					
	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
Operating Cost (Actual \$)	\$40,626,771	\$38,894,734	\$34,874,705	\$34,363,209	\$43,108,261	\$46,107,860
<i>Annual Change</i>		-4.3%	-10.3%	-1.5%	25.4%	7.0%
Fare Revenue (Actual \$)	\$3,114,144	\$2,999,104	\$1,255,397	\$1,545,333	\$2,215,943	\$2,746,479
<i>Annual Change</i>		-3.7%	-58.1%	23.1%	43.4%	23.9%
Vehicle Service Hours (VSH)	217,057	210,033	151,795	167,118	201,016	236,859
<i>Annual Change</i>		-3.2%	-27.7%	10.1%	20.3%	17.8%
Vehicle Service Miles (VSM)	3,204,807	3,156,294	2,151,196	2,187,929	2,643,504	3,191,684
<i>Annual Change</i>		-1.5%	-31.8%	1.7%	20.8%	20.7%
Passengers	3,664,728	2,997,202	1,402,927	1,855,213	2,323,438	2,578,472
<i>Annual Change</i>		-18.2%	-53.2%	32.2%	25.2%	11.0%
Employees	369	301	207	229	291	280
<i>Annual Change</i>		-18.4%	-31.2%	10.6%	27.1%	-3.8%
Performance Indicators						
Operating Cost/VSH (Actual \$)	\$187.17	\$185.18	\$229.75	\$205.62	\$214.45	\$194.66
<i>Annual Change</i>		-1.1%	24.1%	-10.5%	4.3%	-9.2%
Operating Cost/Passenger (Actual \$)	\$11.09	\$12.98	\$24.86	\$18.52	\$18.55	\$17.88
<i>Annual Change</i>		17.1%	91.6%	-25.5%	0.2%	-3.6%
Passengers/VSH	16.88	14.27	9.24	11.10	11.56	10.89
<i>Annual Change</i>		-15.5%	-35.2%	20.1%	4.1%	-5.8%
Passengers/VSM	1.14	0.95	0.65	0.85	0.88	0.81
<i>Annual Change</i>		-17.0%	-31.3%	30.0%	3.7%	-8.1%
Farebox Recovery	7.7%	7.7%	3.6%	4.5%	5.1%	6.0%
<i>Annual Change</i>		0.6%	-53.3%	24.9%	14.3%	15.9%
Hours/Employee	588.2	697.8	733.3	729.8	690.8	845.9
<i>Annual Change</i>		18.6%	5.1%	-0.5%	-5.3%	22.5%
TDA Non-Required Indicators						
Operating Cost/VSM	\$12.68	\$12.32	\$16.21	\$15.71	\$16.31	\$14.45
<i>Annual Change</i>		-2.8%	31.6%	-3.1%	3.8%	-11.4%
VSM/VSH	14.76	15.03	14.17	13.09	13.15	13.48
<i>Annual Change</i>		1.8%	-5.7%	-7.6%	0.4%	2.5%
Fare/Passenger	\$0.85	\$1.00	\$0.89	\$0.83	\$0.95	\$1.07
<i>Annual Change</i>		17.8%	-10.6%	-6.9%	14.5%	11.7%

Sources: FY 2018/19 – FY 2020/21 data from prior Triennial Performance Audits. FY 2021/22 – FY 2023/24 data from monthly performance reports. FY 2021/22 – FY 2023/24 FTE data from State Controller Reports.

Exhibit 6.2 System Ridership

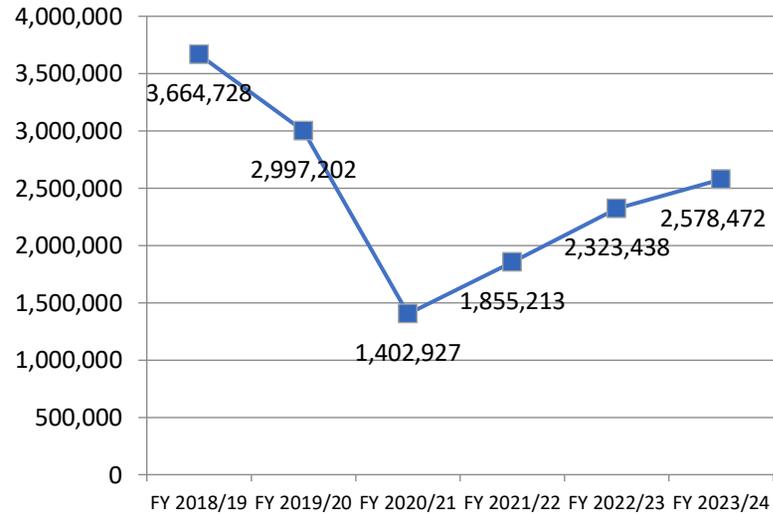


Exhibit 6.3 System Operating Cost/VSH

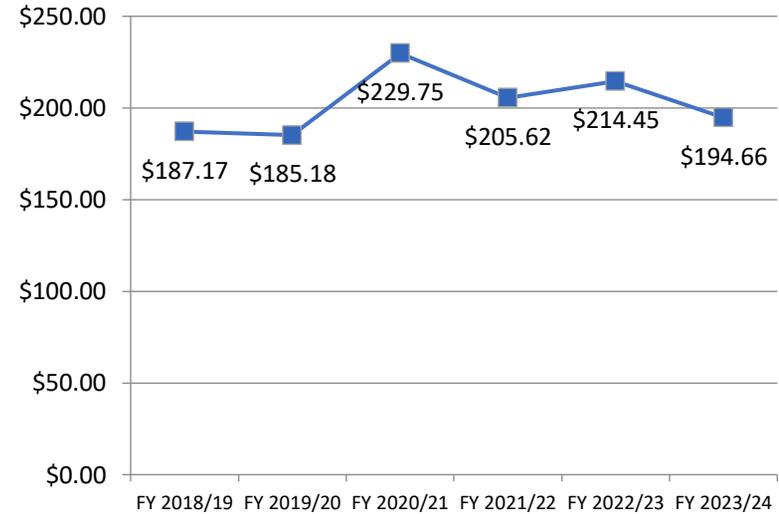


Exhibit 6.4 System Operating Cost/VSM

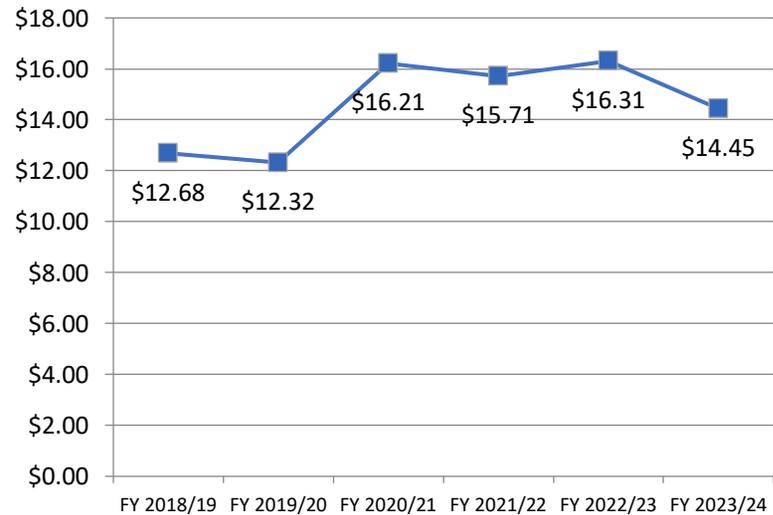


Exhibit 6.5 System VSM/VSH

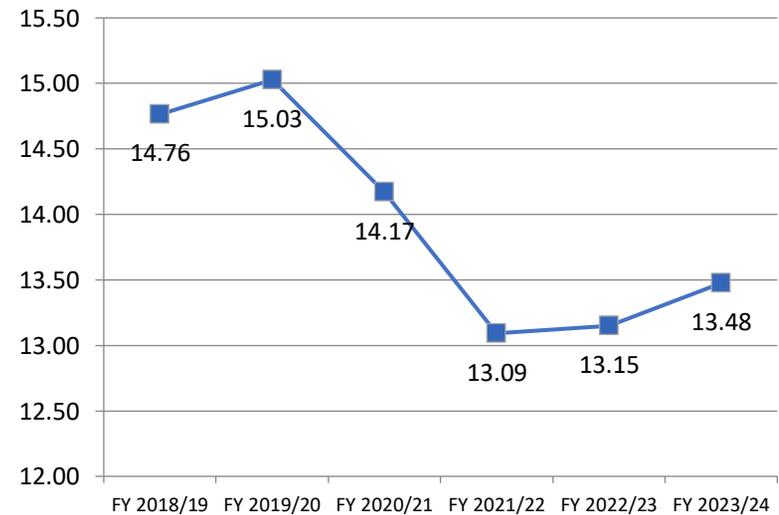




Exhibit 6.6 System Operating Cost/Passenger

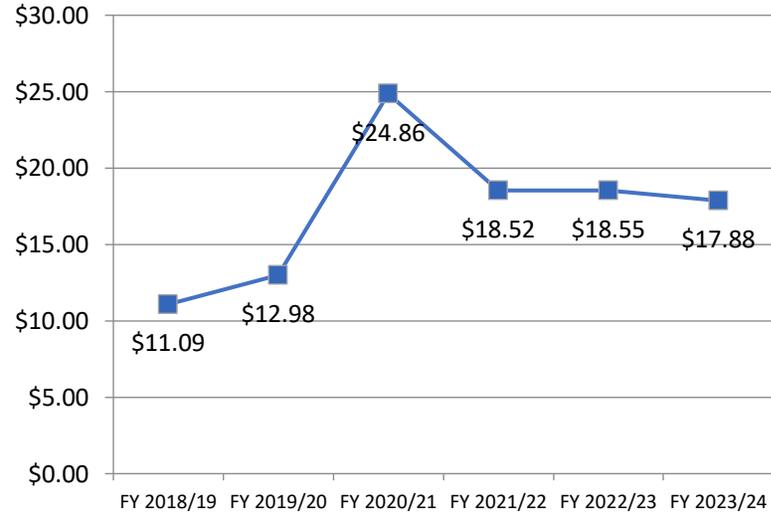


Exhibit 6.7 System Passengers/VSH

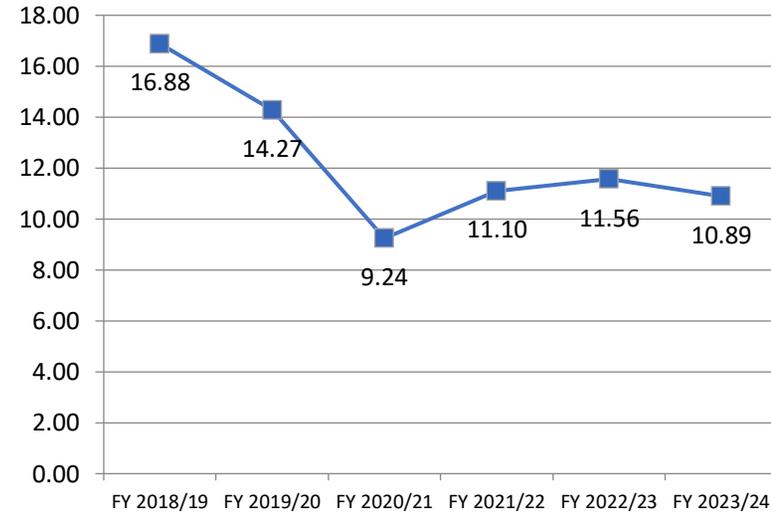


Exhibit 6.8 System Passengers/VSM

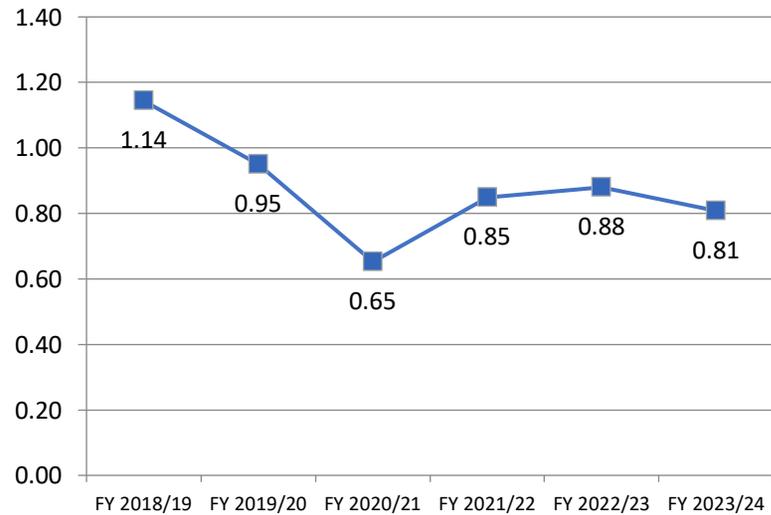


Exhibit 6.9 System VSH/FTE

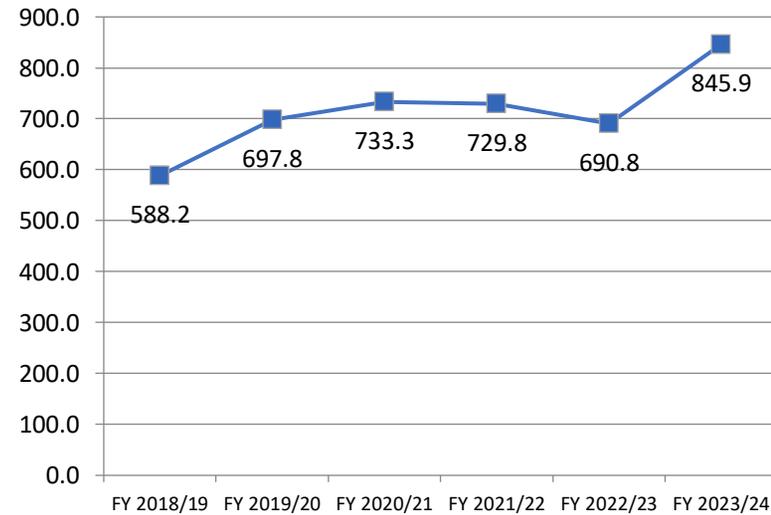




Exhibit 6.10 System Farebox Recovery

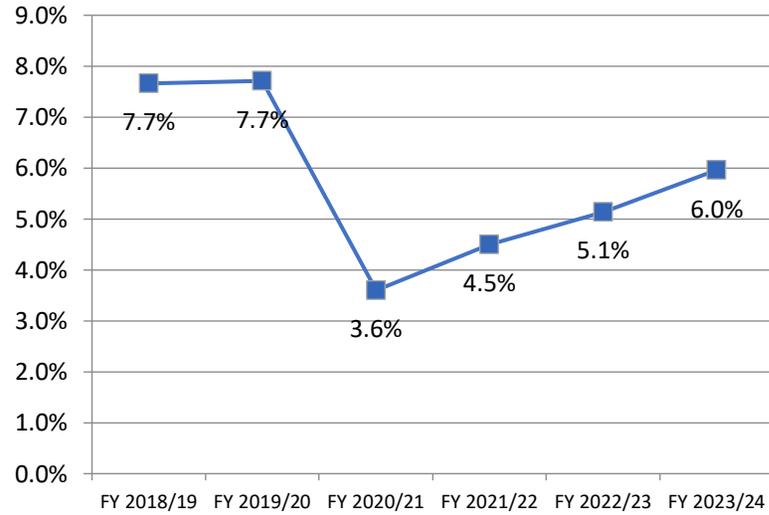
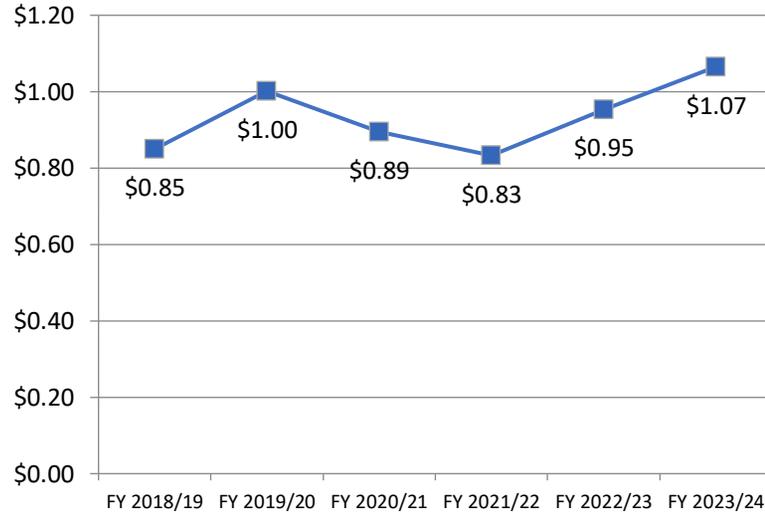


Exhibit 6.11 System Fare/Passenger





Fixed-Route Performance Trends

Fixed-route operating cost rose during the first two years of the current audit period after experiencing steady decreases during the prior audit period. Between FY 2018/19 and FY 2023/24, there was a net 16.9 percent increase in operating cost. The most significant increase occurred in FY 2022/23, which experienced a 24.5 percent increase. Fare revenues were heavily impacted by the COVID-19 pandemic, resulting in a 13.2 percent net decrease between FY 2018/19 and FY 2023/24. However, the audit period saw a 93.3 percent increase.

Vehicle service hours (VSH) fluctuated during the prior audit period, resulting in a net 5.7 percent increase between FY 2018/19 and FY 2023/24 and a 52.9 percent net increase during the audit period. Vehicle service miles (VSM) increased every year of the audit period, after decreasing every year of the prior audit period. This resulted in a net 2.6 percent decrease across the six-year period and a 52.9 percent increase during the current audit period. Increases in VSH and VSM during FY 2022/23 were consistent with increases in operating cost.

Ridership declined significantly during the prior audit period due to the COVID-19 pandemic but increased every year of the current audit period. Overall, ridership increased by a net 39.1 percent during the audit period, but decreased by a net 31.1 percent across the six-year period.

Cost-related metrics decreased (improved) during the audit period. Passenger-related metrics saw modest declines, with passengers per VSH and passengers per VSM decreasing by 3.9 percent and 9.1 percent, respectively, across the audit period.



Exhibit 6.12 Fixed-Route Performance Indicators

Performance Measure	Fixed-Route					
	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
Operating Cost (Actual \$)	\$33,596,843	\$31,189,656	\$30,950,753	\$28,889,462	\$35,975,897	\$39,264,650
<i>Annual Change</i>		-7.2%	-0.8%	-6.7%	24.5%	9.1%
Fare Revenue (Actual \$)	\$2,856,281	\$2,615,810	\$1,038,497	\$1,282,670	\$1,934,503	\$2,479,304
<i>Annual Change</i>		-8.4%	-60.3%	23.5%	50.8%	28.2%
Vehicle Service Hours (VSH)	184,599	157,470	136,309	134,900	155,990	195,208
<i>Annual Change</i>		-14.7%	-13.4%	-1.0%	15.6%	25.1%
Vehicle Service Miles (VSM)	2,601,253	2,217,766	1,835,359	1,657,711	1,963,604	2,534,762
<i>Annual Change</i>		-14.7%	-17.2%	-9.7%	18.5%	29.1%
Passengers	3,583,078	2,879,437	1,362,788	1,776,314	2,220,361	2,470,186
<i>Annual Change</i>		-19.6%	-52.7%	30.3%	25.0%	11.3%
Employees	314	256	188	208	262	254
<i>Annual Change</i>		-18.5%	-26.6%	10.6%	26.0%	-3.1%
Performance Indicators						
Operating Cost/VSH (Actual \$)	\$182.00	\$198.07	\$227.06	\$214.15	\$230.63	\$201.14
<i>Annual Change</i>		8.8%	14.6%	-5.7%	7.7%	-12.8%
Operating Cost/Passenger (Actual \$)	\$9.38	\$10.83	\$22.71	\$16.26	\$16.20	\$15.90
<i>Annual Change</i>		15.5%	109.7%	-28.4%	-0.4%	-1.9%
Passengers/VSH	19.41	18.29	10.00	13.17	14.23	12.65
<i>Annual Change</i>		-5.8%	-45.3%	31.7%	8.1%	-11.1%
Passengers/VSM	1.38	1.30	0.74	1.07	1.13	0.97
<i>Annual Change</i>		-5.7%	-42.8%	44.3%	5.5%	-13.8%
Farebox Recovery	8.5%	8.4%	3.4%	4.4%	5.4%	6.3%
<i>Annual Change</i>		-1.4%	-60.0%	32.3%	21.1%	17.4%
Hours/Employee	587.9	615.1	725.0	648.6	595.4	768.5
<i>Annual Change</i>		4.6%	17.9%	-10.5%	-8.2%	29.1%
TDA Non-Required Indicators						
Operating Cost/VSM	\$12.92	\$14.06	\$16.86	\$17.43	\$18.32	\$15.49
<i>Annual Change</i>		8.9%	19.9%	3.3%	5.1%	-15.5%
VSM/VSH	14.09	14.08	13.46	12.29	12.59	12.98
<i>Annual Change</i>		-0.1%	-4.4%	-8.7%	2.4%	3.2%
Fare/Passenger	\$0.80	\$0.91	\$0.76	\$0.72	\$0.87	\$1.00
<i>Annual Change</i>		14.0%	-16.1%	-5.2%	20.7%	15.2%

Sources: FY 2018/19 – FY 2020/21 data from prior Triennial Performance Audits. FY 2021/22 – FY 2023/24 data from monthly performance reports. FY 2021/22 – FY 2023/24 FTE data from State Controller Reports.

Exhibit 6.13 Fixed-Route Ridership

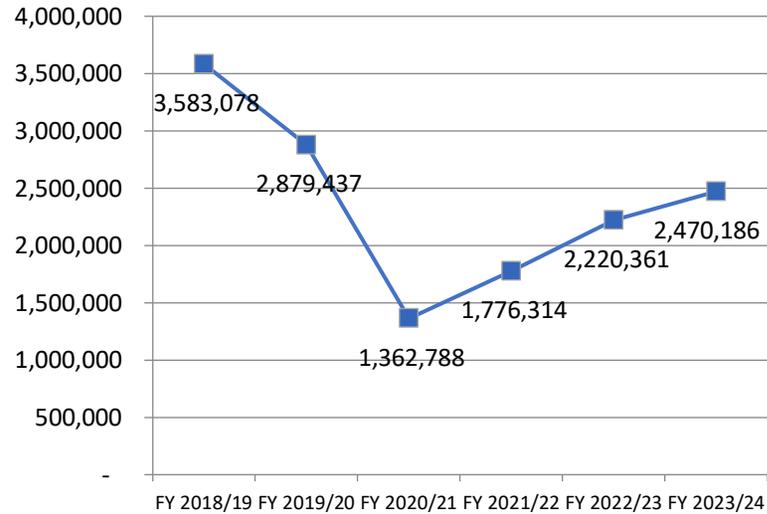


Exhibit 6.14 Fixed-Route Operating Cost/VSH

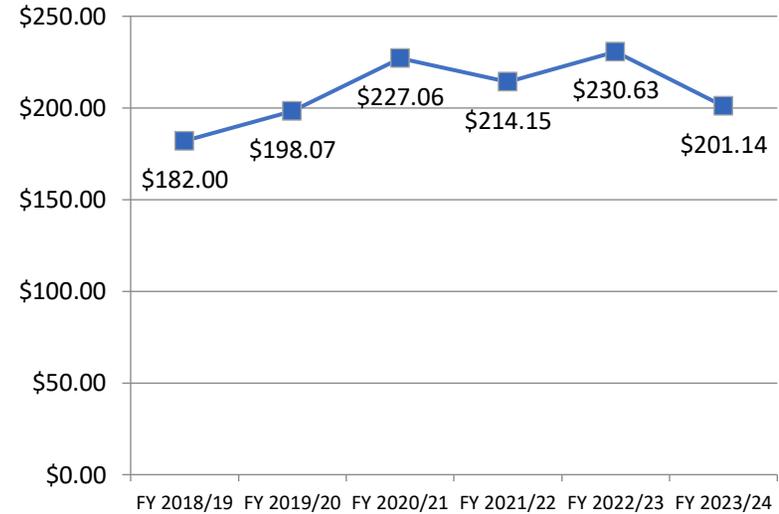


Exhibit 6.15 Fixed-Route Operating Cost/VSM

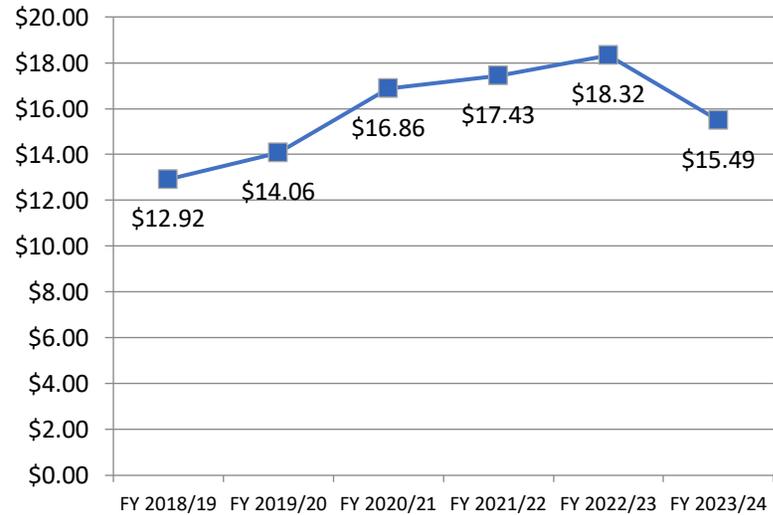


Exhibit 6.16 Fixed-Route VSM/VSH

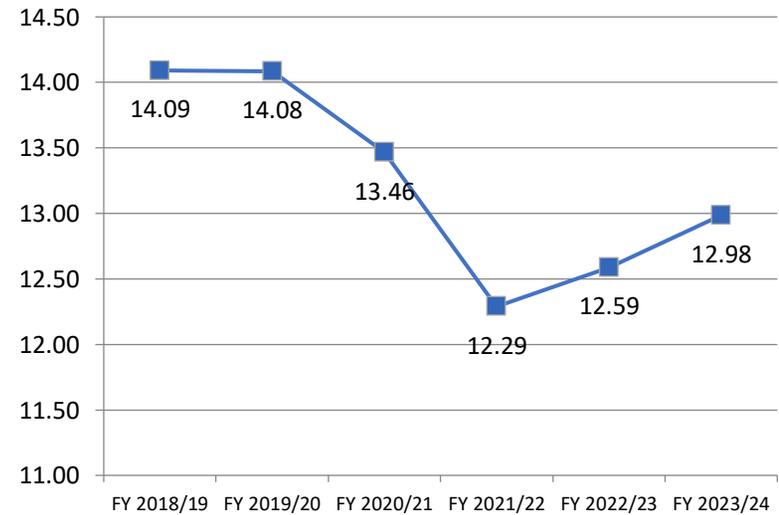




Exhibit 6.17 Fixed-Route Operating Cost/Passenger

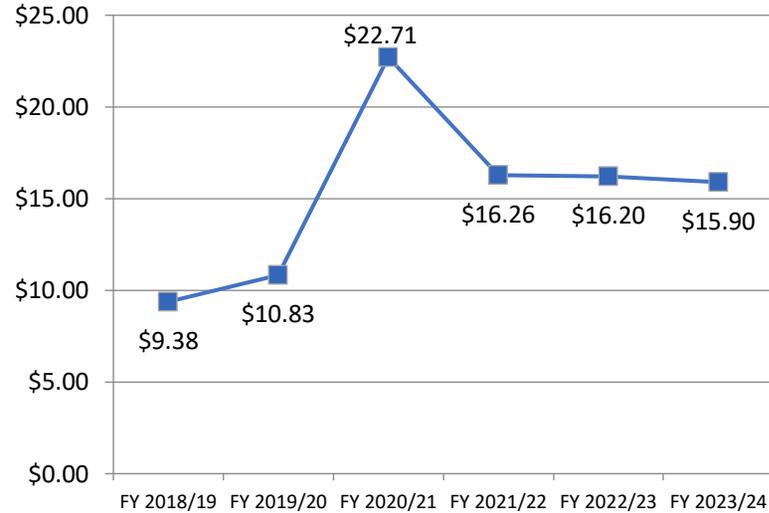


Exhibit 6.18 Fixed-Route Passengers/VSH

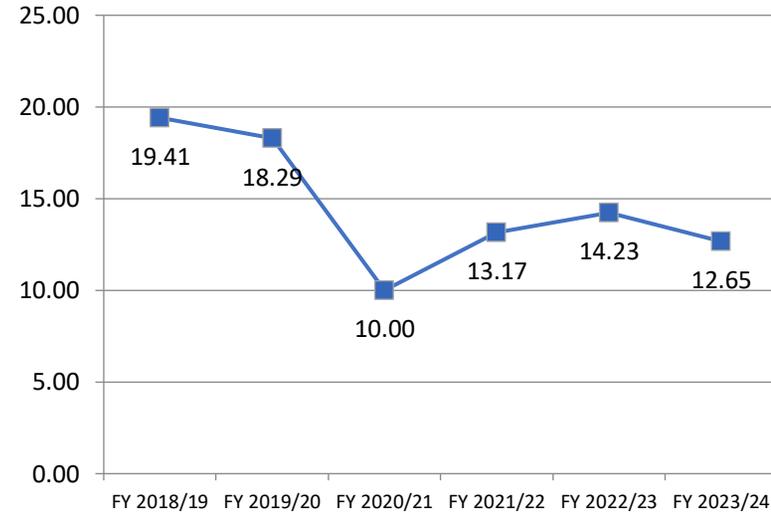


Exhibit 6.19 Fixed-Route Passengers/VSM

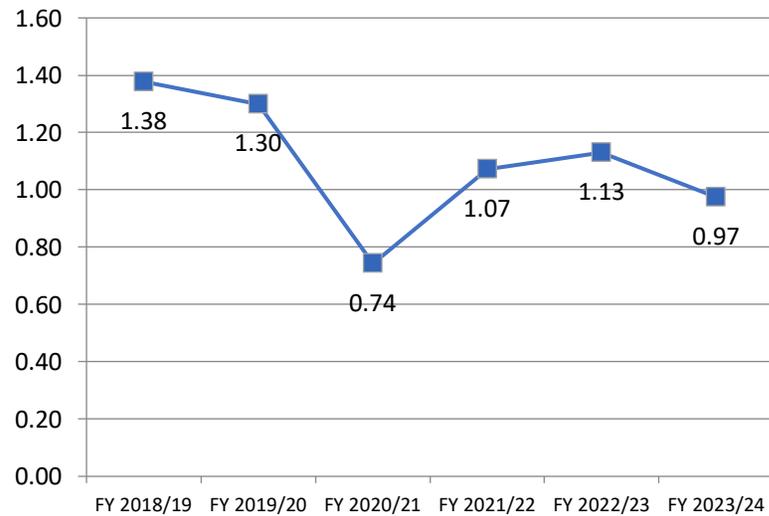


Exhibit 6.20 Fixed-Route VSH/FTE

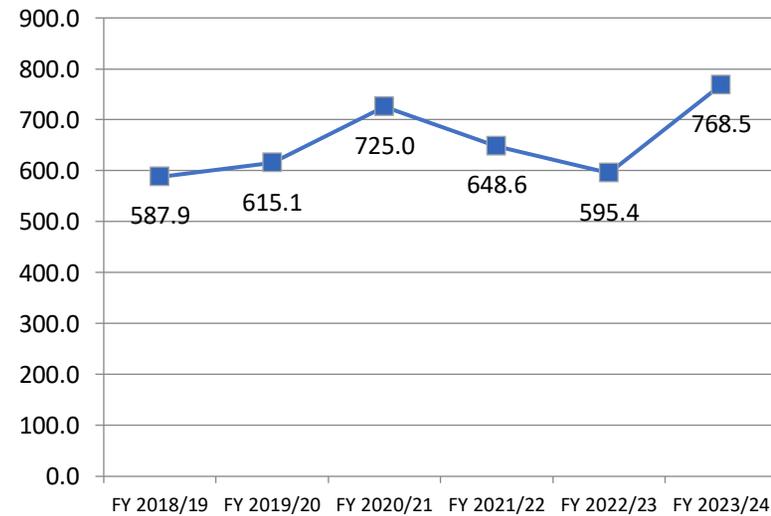




Exhibit 6.21 Fixed-Route Farebox Recovery

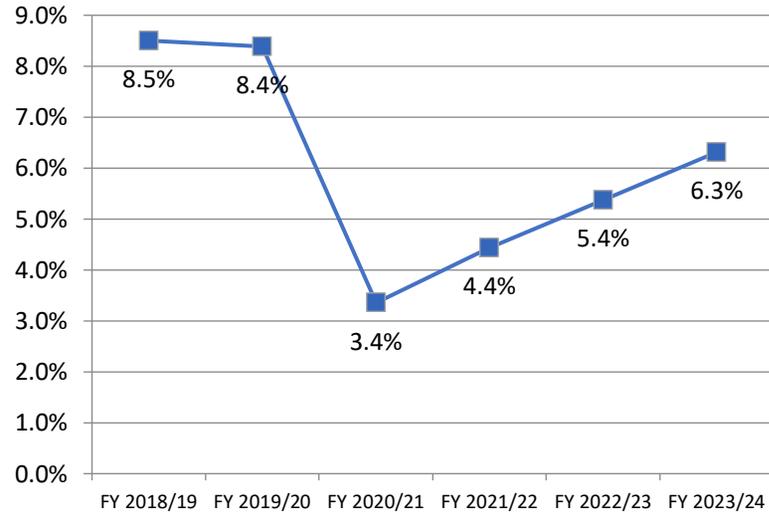
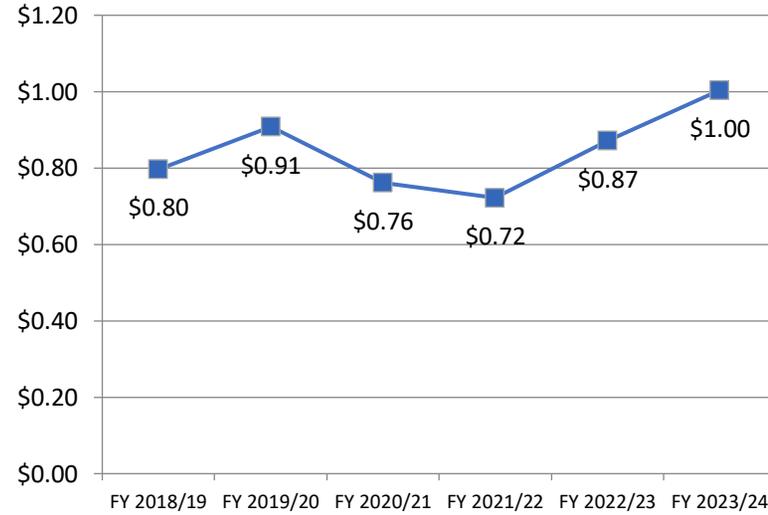


Exhibit 6.22 Fixed-Route Fare/Passenger





Demand-Response Performance Trends

Demand-response operating cost rose during the first two years of the current audit period after experiencing a significant decrease in FY 2020/21. Between FY 2018/19 and FY 2023/24, there was a net 84.9 percent increase in operating cost. The most significant increase occurred in FY 2021/22, which experienced a 130.4 percent increase, due primarily to a 57 percent decrease the prior year. Fare revenues saw less significant changes, increasing just 1.7 percent during the audit period and a net 3.6 percent since FY 2018/19.

Vehicle service hours (VSH) fluctuated during the prior audit period, resulting in a net 28.3 percent increase between FY 2018/19 and FY 2023/24 and a 29.3 percent net increase during the audit period. Vehicle service miles (VSM) followed a similar pattern. This resulted in a net 8.8 percent increase across the six-year period and a 23.9 percent increase during the current audit period. Increases in VSH and VSM during FY 2022/23 were consistent with increases in operating cost.

Ridership declined significantly in FY 2020/21 period due to the COVID-19 pandemic but increased every year of the current audit period. Overall, ridership increased by a net 37.2 percent during the audit period, and increased by a net 32.6 percent across the six-year period.

Cost-related metrics saw modest decreases in operating cost per vehicle service hour and passenger during the audit period, though operating cost per vehicle service mile increased slightly (0.9 percent). Passenger-related metrics increased, with passengers per VSH and passengers per VSM grew by 6.2 percent and 10.8 percent, respectively, across the audit period.



Exhibit 6.23 Demand-Response Performance Indicators

Performance Measure	Demand-Response					
	FY 2018/19	FY 2019/20	FY 2020/21	FY 2021/22	FY 2022/23	FY 2023/24
Operating Cost (Actual \$)	\$3,700,483	\$5,519,552	\$2,375,357	\$5,473,747	\$7,132,364	\$6,843,210
<i>Annual Change</i>		49.2%	-57.0%	130.4%	30.3%	-4.1%
Fare Revenue (Actual \$)	\$257,863	\$383,294	\$216,900	\$262,663	\$281,440	\$267,175
<i>Annual Change</i>		48.6%	-43.4%	21.1%	7.1%	-5.1%
Vehicle Service Hours (VSH)	32,458	52,563	15,486	32,218	45,026	41,651
<i>Annual Change</i>		61.9%	-70.5%	108.0%	39.8%	-7.5%
Vehicle Service Miles (VSM)	603,554	937,528	315,837	530,218	679,900	656,922
<i>Annual Change</i>		55.3%	-66.3%	67.9%	28.2%	-3.4%
Passengers	81,650	117,765	40,139	78,899	103,077	108,286
<i>Annual Change</i>		44.2%	-65.9%	96.6%	30.6%	5.1%
Employees	55	45	19	21	29	26
<i>Annual Change</i>		-18.2%	-57.8%	10.5%	38.1%	-10.3%
Performance Indicators						
Operating Cost/VSH (Actual \$)	\$114.01	\$105.01	\$153.39	\$169.90	\$158.41	\$164.30
<i>Annual Change</i>		-7.9%	46.1%	10.8%	-6.8%	3.7%
Operating Cost/Passenger (Actual \$)	\$45.32	\$46.87	\$59.18	\$69.38	\$69.19	\$63.20
<i>Annual Change</i>		3.4%	26.3%	17.2%	-0.3%	-8.7%
Passengers/VSH	2.52	2.24	2.59	2.45	2.29	2.60
<i>Annual Change</i>		-10.9%	15.7%	-5.5%	-6.5%	13.6%
Passengers/VSM	0.14	0.13	0.13	0.15	0.15	0.16
<i>Annual Change</i>		-7.1%	1.2%	17.1%	1.9%	8.7%
Farebox Recovery	7.0%	6.9%	9.1%	4.8%	3.9%	3.9%
<i>Annual Change</i>		-0.3%	31.5%	-47.4%	-17.8%	-1.1%
Hours/Employee	590.1	1168.1	815.1	1534.2	1552.6	1602.0
<i>Annual Change</i>		97.9%	-30.2%	88.2%	1.2%	3.2%
TDA Non-Required Indicators						
Operating Cost/VSM	\$6.13	\$5.89	\$7.52	\$10.32	\$10.49	\$10.42
<i>Annual Change</i>		-4.0%	27.7%	37.3%	1.6%	-0.7%
VSM/VSH	18.59	17.84	20.40	16.46	15.10	15.77
<i>Annual Change</i>		-4.1%	14.3%	-19.3%	-8.2%	4.4%
Fare/Passenger	\$3.16	\$3.25	\$5.40	\$3.33	\$2.73	\$2.47
<i>Annual Change</i>		3.1%	66.0%	-38.4%	-18.0%	-9.6%

Sources: FY 2018/19 – FY 2020/21 data from prior Triennial Performance Audits. FY 2021/22 – FY 2023/24 data from monthly performance reports. FY 2021/22 – FY 2023/24 FTE data from State Controller Reports.



Exhibit 6.24 Demand-Response Ridership

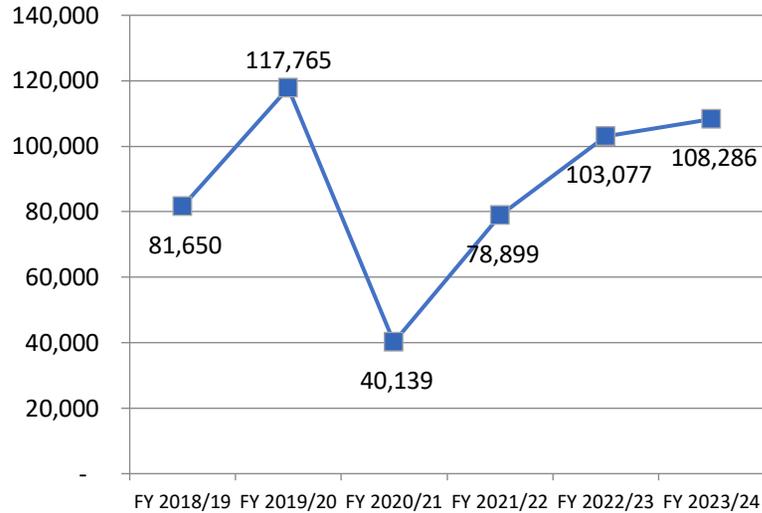


Exhibit 6.25 Demand-Response Operating Cost/VSH

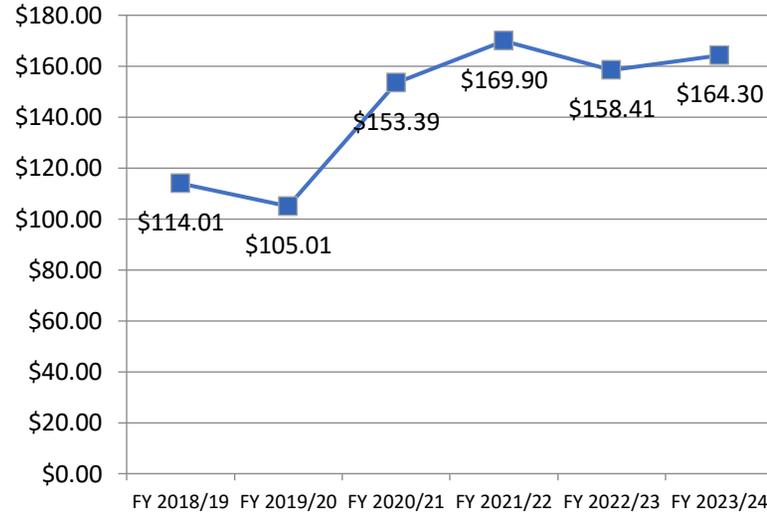


Exhibit 6.26 Demand-Response Operating Cost/VSM

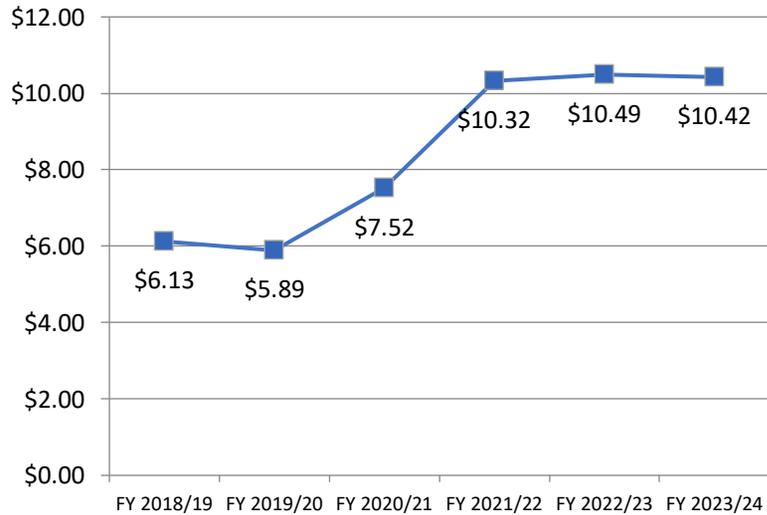


Exhibit 6.27 Demand-Response VSM/VSH

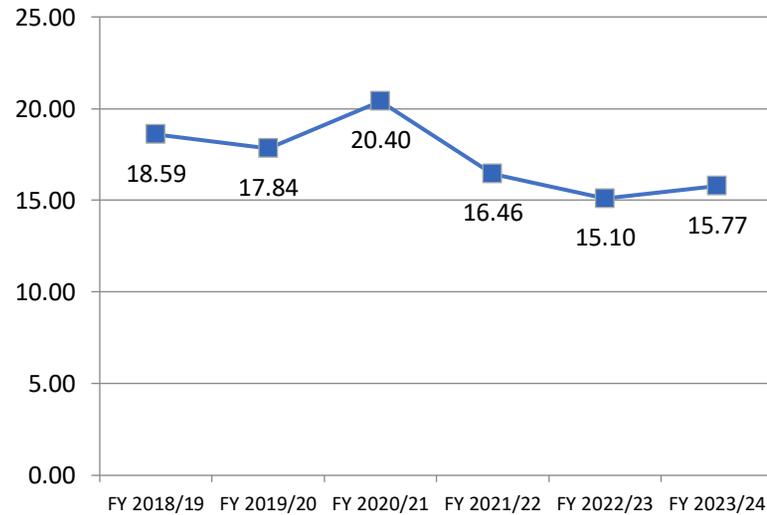




Exhibit 6.28 Demand-Response Operating Cost/Passenger

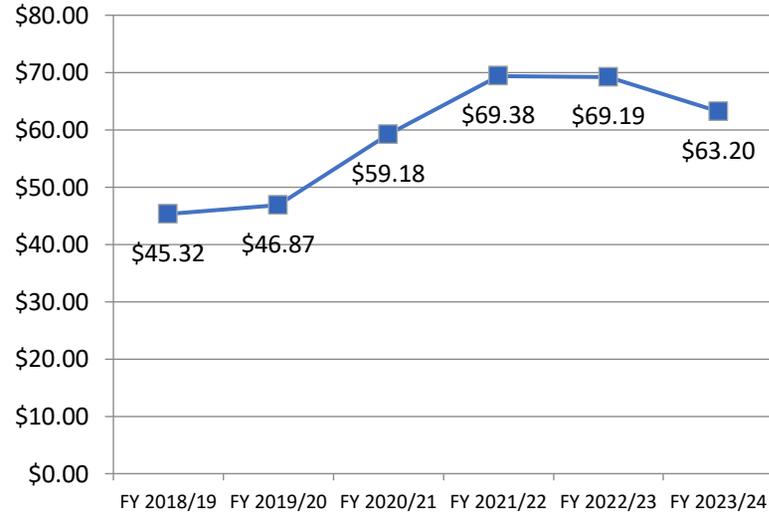


Exhibit 6.29 Demand-Response Passengers/VSH

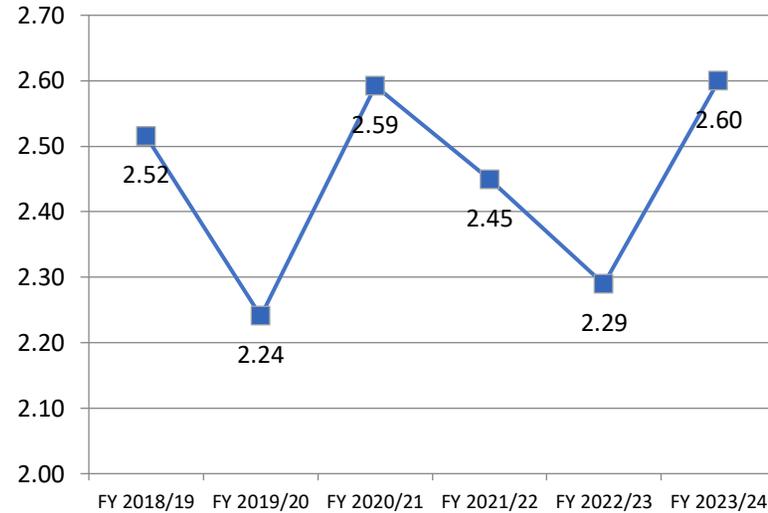


Exhibit 6.30 Demand-Response Passengers/VSM

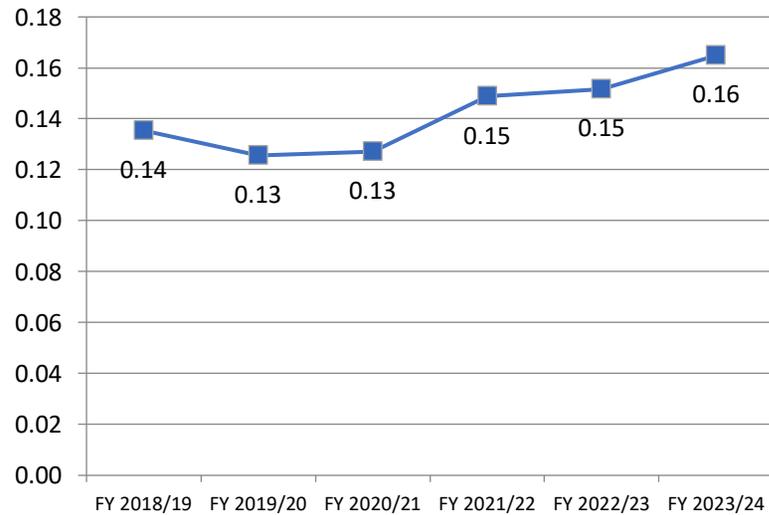


Exhibit 6.31 Demand-Response VSH/FTE

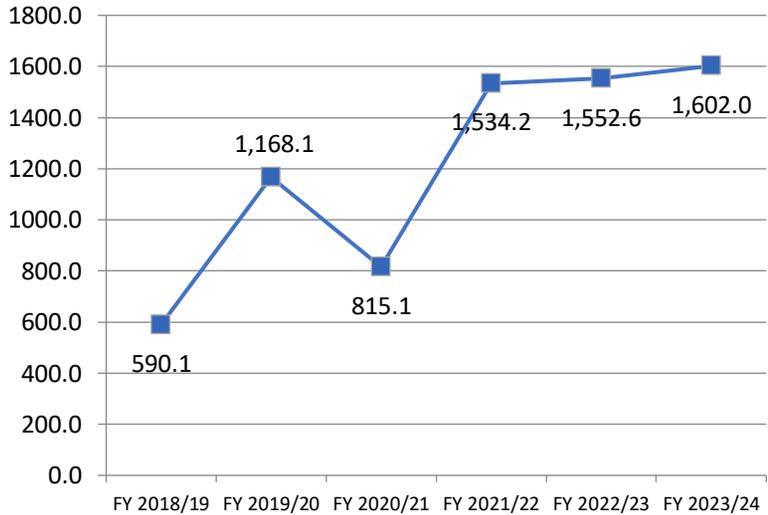




Exhibit 6.32 Demand-Response Farebox Recovery

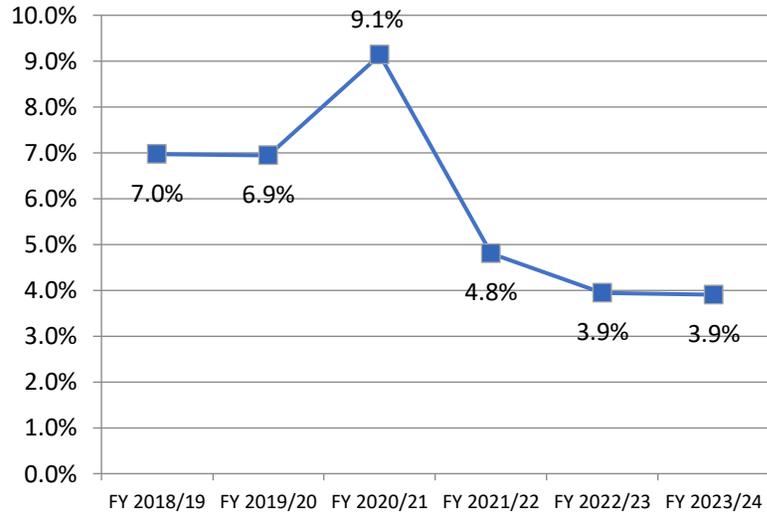
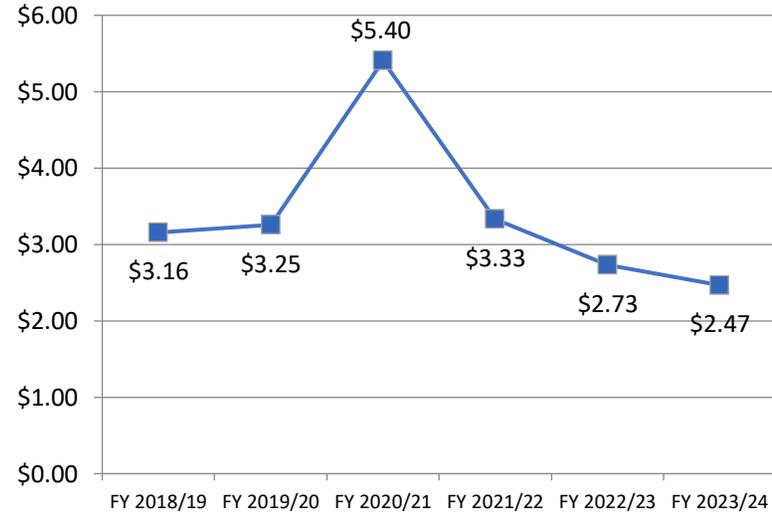


Exhibit 6.33 Demand-Response Fare/Passenger





This page intentionally blank.



Chapter 7 | Functional Review

A functional review of RTD’s public transit program is intended to assess the effectiveness and efficiency of the operator. Following a general summary of the RTD’s transit services, this chapter addresses seven functional areas. The list, taken from Section III of the *Performance Audit Guidebook* published by Caltrans, reflects those transit services provided by RTD:

- General management and organization;
- Service planning;
- Scheduling, dispatch, and operations;
- Personnel management and training;
- Administration;
- Marketing and public information; and
- Fleet maintenance.

Service Overview

The San Joaquin Regional Transit District (RTD) provides bus and paratransit services within the Stockton metropolitan area, as well as between Stockton and surrounding communities and Sacramento. The RTD’s service includes 27 local Metro routes, five Metro BRT Express routes, seven Metro Hopper routes, two Commuter routes, and five County Hopper routes. Metro and County Hopper routes operate as deviated fixed routes, providing deviations of up to one mile from the route to accommodate ADA-certified customers. County Hopper routes do not provide deviations in Lodi and Tracy, yet provide connections to local transit services in those communities.



Metro service (local and BRT Express) operates from approximately 5:15 a.m. through 9:55 p.m. on weekdays and from approximately 8:00 a.m. through 7:00 p.m. on weekends. Commuter routes may have limited trips each weekday, departing as early as 4:00 a.m. and ending service as late as 8:20 p.m., while Saturday service may end as late at 10:30 p.m. Metro Hopper routes generally operate between 6:00 a.m. and 6:30 p.m. County Hopper routes start as early as 6:00 a.m. and run until 5:30 p.m.



The RTD provides a variety of mobility services, including an ADA Complementary Paratransit service. The Paratransit Service is a curb-to-curb service available to ADA-certified individuals seven days per week, generally mirroring the Metro local and BRT Express hours. Reservations can be made up to two days in advance.

Additionally, RTD Van Go! Service is an on-demand rideshare service. Passengers can travel anywhere within San Joaquin County, though rides occurring



completely within Stockton were eliminated in September 2024. Riders can still schedule trips between Stockton and rural areas within San Joaquin County. Trips can be booked up to two days in advance. Customers can pay online, through the Van Go! app, or with cash upon pick-up. Van Go! currently operates seven days a week from 8:00 a.m. to 5:00 p.m.

Exhibit 7.1 Fixed-Route Fare Structure

	1-Ride (Base Fare)	1-Day Pass	31-Day Pass
Regular (full) fare	\$1.50	\$4.00	\$65.00
Discounted fare*	\$0.75	\$2.00	\$30.00
Student fare**	\$1.50	\$4.00	\$40.00
Children age 4 and under***	Free	N/A	N/A

* Discounted fare valid for seniors age 60+, persons with disabilities, Medicare cardholders, and other eligible passengers with a valid Discount Fare Card (DFC).

** Student fare valid for students age 5 to 17 and college students with a valid student ID.

*** Up to three children under five ride free with a fare-paying adult. Full fare is required for each additional child.

Hopper deviations are free for ADA-certified passengers with Access Pass. Access Pass holders may also ride most fixed-route services in San Joaquin county free of charge. San Joaquin County of Education (SJCOE) students, and Stockton Unified School District 7th-12th grade students ride for free with a valid student ID.

Exhibit 7.2 Commuter Fare Structure

	One-way	Monthly Pass
Route 150 – Stockton	\$7.00	\$191.00
Route 150 – Lathrop	\$7.00	\$175.00
Route 150 – Tracy	\$7.00	\$158.00
Route 163 – Stockton	\$7.00	\$176.00
Route 163 – Lodi	\$7.00	\$167.00

Exhibit 7.3 Demand-Response Fare Structure

	Base fare	Discount Fare Card
Dial-A-Ride (ADA paratransit)		
One-way fare	\$3.00	N/A
Personal Care Attendant (PCA)	Free	N/A
Companion	\$3.00	N/A
Van Go! (General public)		
First five miles (one-way trip)	\$4.00 per person	\$3.00 per person
After five miles (per mile)	\$0.50 per person	\$0.50 per person

Passes may be purchased at GFI fare vending machines, VenTek fare vending machines, online, or via mobile device (Vamos Mobility and Van Go! apps). One-ride, one-day, 31-day, and commuter passes may be purchased via the Vamos Mobility app. Dial-A-Ride one-ride passes may be purchased online. Ten Dial-A-Ride one-ride passes may be purchased online and will be shipped to the buyer’s house. Van Go! fares may be purchased using the Van Go! mobile app.



General Management and Organization

All departments provide monthly and quarterly key performance indicator reports to monitor, analyze, and explain different areas throughout the agency. These reports are used to identify improvements and potential efficiencies as well as inform decision-making. Program performance is monitored using Transtrack Manager, which RTD has been utilizing for more than a decade. Transtrack integrates data from multiple sources throughout the agency including ridership, fares, AVL systems, dispatch, fleet and maintenance systems, financial systems, and customer service systems. Data is consolidated into reports that detail performance as well as compliance.

Service changes taking place during the audit period are noted below:

- FY 2022/23
 - Extended service hours on BRT Routes 43, 44, 47, and 49 to 10:00 p.m. to align with BRT Route 40 on weekdays.
 - Extended service hours on all local routes on weekdays to 7:30 p.m. and on weekends to 8:30 p.m.
- FY 2023/2024
 - Increased service frequency from every hour to every 30 minutes on local routes 510, 515, 520, and 525.

Ridership and reliability were monitored to evaluate the impact of the service changes. RTD experienced an increase in ridership and observed a shift from BRT routes to local routes due to the increase in frequency.

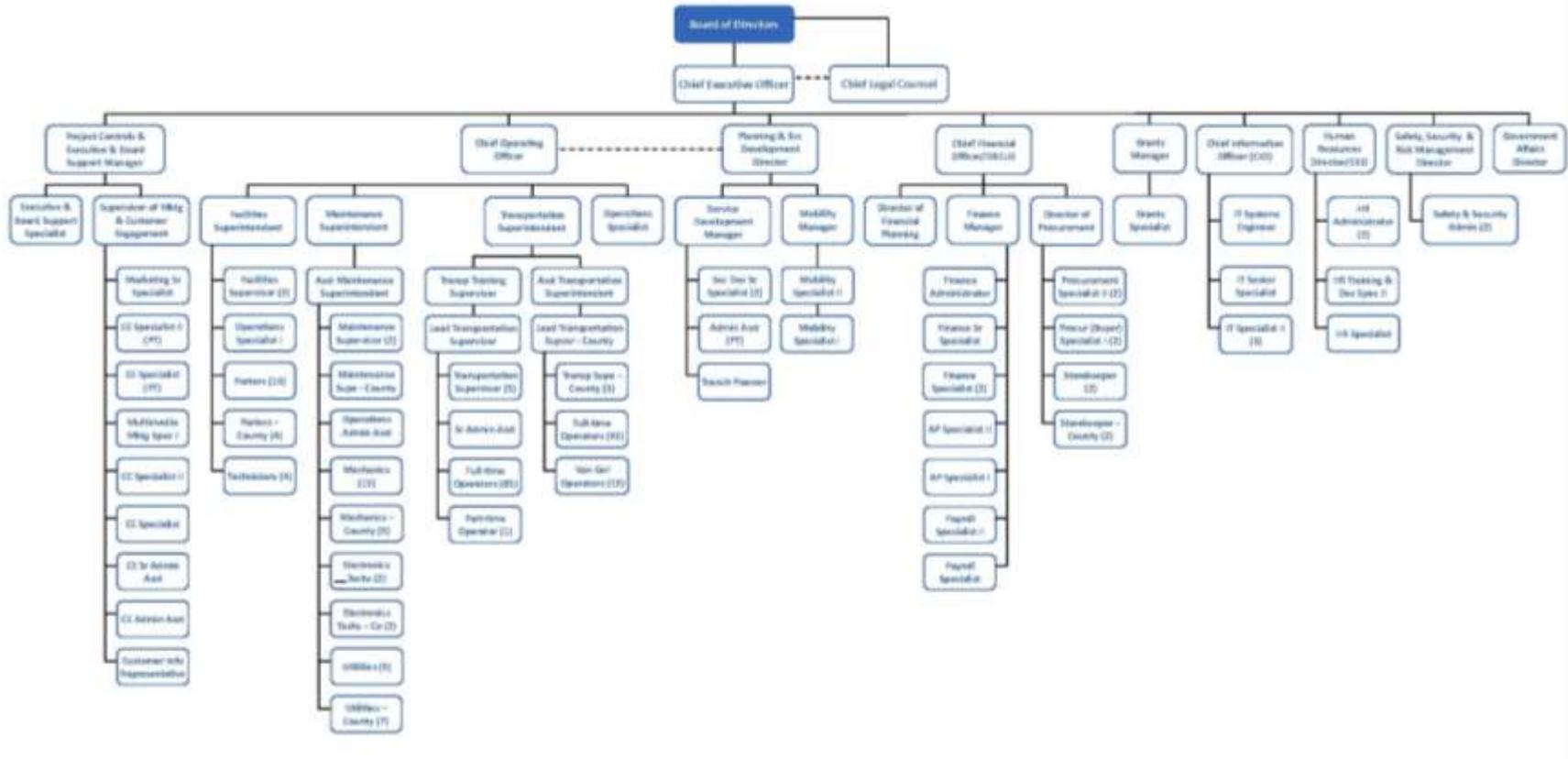
There was significant turnover in management during 2022, as RTD introduced a new Chief Executive Officer, Chief Operations Officer, Chief Financial Officer, Chief Information Officer, and a new Director of Procurement. Three of these positions were due to retirements, while the other two had been largely vacant for some time. Several other positions have been filled since the end of the audit period, with others in process at the time of the site visit (including Grants Manager and Human Resources Director). When fully staffed, the organization is staffed appropriately.

The San Joaquin RTD Board of Directors consists of five members. Two are appointed by the Stockton City Council, two are appointed by the San Joaquin County Board of Supervisors, and one is appointed jointly by the San Joaquin County Board of Supervisors and Stockton City Council. Each Director serves a four-year term. The Board meets on the third Friday of the month at 10 am at RTD's administrative offices, located at 421 E. Weber Avenue in Stockton. Given the administrative offices are co-located with the Downtown Transit Center, all meetings are accessible by public transit.

The Government Affairs Director serves as the primary inter-governmental liaison. RTD has an excellent working relationship with the San Joaquin Council of Governments (SJCOG) and works in close partnership with other jurisdictions in the county. Multiple RTD staff interact with the SJCOG on a regular basis and are members of SJCOG's Transit and Technical Advisory Committees as well as the Social Service Transportation Advisory Council (SSTAC). As the Consolidated Transportation Services Agency (CTSA) for the entire county, RTD has close partnerships with the jurisdictions providing services for seniors and individuals with disabilities. The RTD is a member of CalACT and APTA.



Exhibit 7.4 Organizational Chart





Service Planning

RTD's Planning and Service Development Department and the Government Affairs Department, working in concert with other departments, are primarily responsible for short-range planning for the agency. The most recent Short Range Transit Plan (SRTP), which had a planning horizon of FY 2019 – FY 2028, was developed within the context of the regional planning process, which will implement the San Joaquin Council of Governments' Regional Transportation Plan & Sustainable Communities Strategy (RTP/SCS) and the Regional Transit Systems Plan. The SRTP was prepared in-house with the assistance of a consultant and the plan is constantly monitored. Goals are stated and defined in the SRTP. While the Plan was prepared prior to the onset of the COVID-19 pandemic, core goals remain consistent: Increase ridership, improve efficiency, improve reliability, increase fare revenue, reduce operating costs, increase safety, and provide extraordinary customer service. During the audit period, steps taken toward those goals include the following:

- Solar energy project (constructed January 2022 – February 2023) – this resulted in an annual energy savings of approximately \$163,000.
- Transition to electric fleet – in August 2023, RTD decided to delay its goal of reaching a 100 percent zero-emission fleet by 2025 due to the unreliability of battery electric technology, the recent bankruptcy of electric bus manufacturers, and other factors. The new target is set for 2040, which is consistent with the Innovative Clean Transit (ICT) mandate. At present, approximately 20 percent of RTD's fleet is zero-emission, with an additional 60 percent being near-zero-emission or hybrid-electric. RTD will also be exploring the feasibility of hydrogen-powered vehicles.
- RTC expansion: Administration building – RTD has acquired the property located between existing properties housing the operations and maintenance facility. It is being considered for the potential development of a hydrogen fueling facility and expanded fleet and employee parking.
- Fleet replacement and expansion – RTD continues to replace existing fleet with zero-emission or hybrid vehicles as they reach the end of their useful life. It is looking to explore the feasibility of hydrogen fuel cell electric vehicles for future fleet development.
- Facility and maintenance equipment – RTD continues to maintain its capital assets in a state of good repair. It also acquired a new asset management software system.
- Safety and security – in the last two years, RTD purchased hand-held security radios and ID badging equipment; installed operator protective barriers; hired contracted security guards; and upgraded facility security cameras.
- Training programs – RTD is preparing to launch its online training hub to provide employees with a wide range of training courses.

In response to the impacts of the COVID-19 pandemic, RTD undertook a dynamic planning process to prepare and launch a plan for modified service in August 2020. It subsequently undertook a Comprehensive Operations Analysis (COA) of the entire RTD network in 2021. The COA was finalized in October 2022 and RTD has been phasing in service expansions and improvements. At the time of the site visit, RTD estimates it has experienced recovery of approximately 70 percent of its ridership as compared to pre-pandemic levels.

As of September 2024, the RTD was in the process of establishing new performance standards and targets to be consistent with new transit trends. An update of the SRTP is expected to be completed in June 2025.



To identify new development areas that may require transportation, the RTD works closely with the SJCOG as both the RTPA and the local MPO. RTD staff participate in meetings with San Joaquin County Public Works, City of Stockton, and social services agencies and ensures the participation of stakeholders throughout the county.

The RTD has a variety of services to support special transportation needs. The RTD offers the Access Pass, a free fare program allowing ADA-certified passengers to ride the fixed-route service for free. Discount fare cards, travel training, and complementary paratransit service are available. The RTD conducts public meetings with the Access Advisory Committee. Additionally, the RTD will be updating the county's Coordinated Public Transit Human Services Transportation Plan that looks to gather information from working groups including seniors, persons with disabilities, representatives of the public through community-based programs, public and private transportation providers, human service transportation providers, and other members of the public. The project was scheduled to begin in late 2024.

Public participation opportunities are provided each month at Board of Directors meetings. The RTD also participates in annual TDA Article 8 unmet transit needs public hearings conducted by the SJCOG. In addition, any major service change or fare change requires public participation under the RTD's Title VI policies. Customer comments are accepted 24/7 by email, phone, mail, Twitter, Facebook, and in-person at the Customer Service Center. Public outreach is conducted for all SRTP, Title VI, and Regional Transportation Plan updates or reports. The Access Advisory Committee, which includes representation by seniors, human services agencies, and individuals with disabilities, serves as a citizens advisory board for the agency.

The RTD conducted its most recent rider/community survey in 2023. It is preparing to conduct a comprehensive rider/community survey during FY 2024/25 as part of the SRTP update.

The RTD has a Zero-Emission Bus Rollout Plan in place. Progress has been made to transition the fleet to transition the fleet by 2025. However, as discussed above, the goal has been pushed back to 2040. The RTD is committed to continuing the introduction of new electric hybrid vehicles and to exploring the potential of hydrogen powered buses to reduce emissions.

Administration

The Director of Financial Planning is primarily responsible for the development of, control of, and monitoring of adherence to the budget. The budget is prepared and approved by the Board on an annual basis. Budgeted and actual expenses are reported to the RTD's Board monthly.

During the audit period, the RTD used the One Solution Financial System with a budget block setup wherein expenses over the budget are blocked at the object code and requisition level. However, the RTD was the target of a cyberattack in March 2024 (see discussion below). Since the cyberattack, the finance database was lost and as a result, the RTD will be upgrading to Finance Enterprise software to handle its financial data.

Grant application and compliance responsibility is clearly defined within the organization. Typically, the Grants Manager starts with the budget process, which defines what money is needed, and seeks to identify funding for unfunded projects as well as opportunities for projects not budgeted. Grant applications are prepared and submitted according to a notice of funding availability. Once awarded, the



Grants Manager holds a kickoff meeting with Finance and the project manager about the grant. This meeting covers the grant agreement, requirements, scope, schedule, cost, and reporting requirements. Finance handles post-award functions and sets up account codes in the One Solution system. The project manager works with procurement for bidding out the project. Information about the progress of grants is maintained using spreadsheets. At the time of the site visit, the Grants Manager and Grants Analyst positions were vacant and the RTD was working to fill them. Once these positions are filled, it anticipates having sufficient staffing capacity to effectively pursue competitive grants.

The RTD is part of the California Transit Indemnity Pool. Risk management is handled by the Safety, Security, and Risk Management department. Policies are in place for reviewing claims. The RTD also has an accident and incident investigation plan that encompasses all aspects of such claims. The RTD's Public Transit Agency Safety Plan (PTASP) is reviewed annually and coordinates with San Joaquin Office of Emergency Services to provide regional evacuation when needed.

Payroll is run in-house every other week using direct deposit. Bus operators' timekeeping is through Trapeze, while all other staff use KRONOS, which features Touch ID finger scan verification. All reporting is electronic. Employee hours are based on time clock punches. Operator hours are calculated in the Trapeze system based on their work hours bid, with exceptions entered by supervisors. Only the HR and payroll departments have access to payroll data. Approximately 90 percent of employees use direct deposit.

All contracts are managed through a centralized procurement department. Each Project Manager is responsible for ensuring the scope of services are delivered or performed as indicated in the contract. They are also responsible for the review and approval of invoices consistent with the contract compensation language as stated in the contract.

The Contracts Administrator develops and manages the terms and conditions of the contracts. They ensure all documents related to the contract comply with Federal, State, and local requirements and are on file and up to date. This includes assuring that contractor is not debarred from engaging in any government contracts, insurance certificates are up to date, contract has not expired, etc. The Board of Directors or the CEO, depending upon the amount of the contract, decides whether to award the contract to the selected vendor. Any contract that exceeds \$250,000 requires Board approval.

All solicitations and contracts are uploaded in the Procureware procurement system by the Contracts Administrator. This system ensures that all contracts and all required documentation to support the contract are available for all stakeholders to view.

The Contracts Administrator is responsible for contracts closeout and will coordinate with the contractor to make sure that all invoices are paid as well as with the Project Manager for confirmation that all goods and services were received to the RTD's satisfaction.

Procurements are processed through requisitions. The requisition workflow approval process includes executive approvals, funding approval, and procurement approval. The Procurement Department is responsible for processing contracts, issuing purchase orders, and administering contracts.



Materials procurement for bus parts and supplies is managed by a designated Contracts Administrator in the bus facility. This involves the use of an Enterprise Asset Management (EAM) system which tracks materials usage and determines parts replenishment based on demand from a specific work order or from the stock inventory meeting a specified minimum number of units to be kept in stock. EAM dictates the needed parts and supplies which allows the Contract Administrator to develop a Request for Quote to submit to prospective vendors. The EAM interacts with RTD's One Solution platform to produce purchase order for the vendor who provided the best value to the RTD. The RTD is currently in the process of updating its procurement handbook, which was expected to be completed by the end of calendar year 2024.

Cyberattack

On March 3, 2024, RTD was the victim of a cyberattack. The threat actor and attack vector were both subsequently identified. However, the finance database was double-encrypted and then deleted, so that even once it was recovered, it could not be used. As a result, the RTD faced two significant challenges: First, to rebuild its finance database and second, to prevent such a catastrophic loss should it be attacked in the future.

A third-party General Ledger reconstruction team began manually recovering historical transactions. Each month must be rebuilt individually before the next month can be reconstructed, which is time-consuming. This has impacted, among many other things, RTD's ability to comply with TDA requirements regarding fiscal audits during this audit period.

As a result of the cyberattack, RTD discovered that its firewalls were insufficient. In addition, the cybersecurity tools in use were not effective in remediating the attack, and the database backup was not immutable. The RTD has since significantly enhanced its cybersecurity. This includes reinforced security appliances and the use of a Security Operations Center that manages endpoint detection and response tools, among other strategies not cited herein to maintain security. In addition, the finance database backup is now physically separated from the main system, and tests have shown that it can be recovered quickly with minimal data loss (less than one day).

While the cyberattack was an unanticipated challenge during the audit period, the RTD has taken the actions necessary to work toward recovery of its digital assets and prevent another catastrophic loss in the future. RTD strategically rebuilt its IT team and utilized the Speed of Trust philosophy to enhance employee morale.

Marketing and Public Information

The RTD's marketing activities are extensive and encompass nearly every kind of media and agency-initiated outreach depending on the targeted demographics. Advertising media have included newspapers, flyers, posters, radio, billboards, social media, email, digital customer information monitors, and onboard bus announcements. RTD provides information at its transfer stations and leverages stakeholder resources to expand its reach. Social media has been a popular medium, which provides a high level of engagement for a minimal cost. RTD is active on Facebook, Instagram, X, LinkedIn, and YouTube. Additionally, promotions such as free bus passes on the mobility ticketing app, free rides to cooling or warming centers, and free rides for high school students have been effective. Rider data is used to track the effectiveness of marketing campaigns, understand customer needs and preferences, and improve future activities.



The RTD participates in community events, including those outside of Stockton, often partnering with community-based organizations. This also aids RTD in reaching underserved communities as well as engaging with different interests (such as environmental, sustainability, etc.). RTD may also sponsor larger events such as Cinco de Mayo.

Schedule and service information are available on the RTD website and printed schedules are available upon request at the Customer Service window. Service alerts, public hearing announcements, and other important updates are shared via social media. RTD is also committed to customer education, informing riders about new routes, schedules, fares, and service changes through various communication channels.

RTD maintains a marketing plan that is updated annually. The contents of the plan are informed by business decisions, current events, and market research data. RTD tracks ridership, customer demographics, and survey data to understand customer needs and current trends as well as identify areas for improvement. One of its most successful promotional campaigns during the audit period was getting customers to download and use the Vamos Mobility app. The impact of the campaign was tracked through monthly reviews of the app's user base.

The RTD employs the Sugar CRM customer management software program. All customer calls are logged, and the agency tracks average ring duration, average call duration, answered calls, abandoned calls, and total calls. Complaints used to be primarily submitted in person or by phone. Social media complaints are addressed on a daily basis through the Customer Engagement Department. All complaints get logged into Sugar CRM. The system develops tickets that the Customer Engagement Manager sends to the appropriate department. These tickets are followed up on to ensure issues are addressed. The CEO and managers have access to Sugar reports.

Overall, public perception of the RTD is positive. RTD regularly receives feedback from satisfied customers who appreciate the reliable and affordable transportation options.

Scheduling, Dispatch, and Operations

All operations, with the exception of ADA paratransit service, are operated in-house. County services, which were previously contracted out, were brought in-house effective July 18, 2021. RTD entered into a five-year contract with RydeTrans Inc. for its ADA paratransit service effective January 1, 2022.

Operators, facilities maintenance, and fleet maintenance employees are represented by Amalgamated Transit Union (ATU) Local 256. Drivers are assigned to routes based on seniority and as governed by a collective bargaining agreement (CBA) three times each year (January, June, and August). Drivers are only rotated between routes as based on the bid. All coach operators are trained to the same standard and must hold a Class B commercial license. Currently, the Metro Division employs 85 full-time drivers, though it budgets for 111. The County Division has 38 full-time drivers, though it budgets for 60. There are two part time drivers. Part-time positions are typically only offered on an as-needed basis to drivers who are retiring and request such consideration. They are used during peak service periods. RTD prefers to hire full-time drivers given the demand for service.

At the time of the site visit, the RTD was short staffed and in the process of hiring more drivers. A higher number of budgeted positions was due in part to planning for the January 2025 service expansion. A



similar expansion in January 2024 without sufficient drivers in place caused RTD to have to adjust its routes until it had enough operators available to provide the service.

Vacation time is scheduled in advance. The operators select their vacation week(s) during the first run bid conducted in January of each year. When an operator is on vacation, the open run is posted on the Wednesday of the week before, and extra board operators bid in seniority order. If no extra board operator is available, then it is assigned to an extra work volunteer operator. The CBA requires known absences or time-off requests to be submitted at least three days in advance. Sick leave/call-offs must be reported no less than one hour before an operator's report time. These absences are assigned to the next available extra board operator or an extra work volunteer.

Vehicles are assigned by the morning supervisor each day. There are routes at the Metro Division that are assigned the same specific series of battery electric buses that require opportunity charging. At the County Division, there are over-the-road and low floor suburban buses assigned specifically to commuter routes and those are assigned within their own specific route service requirements. Dispatch is provided with an electronic status update on all vehicles as well as a manual copy of the bus yard map on a daily basis.

Fares are collected using GFI Sensibile and FastFare fareboxes, Diamond drop fareboxes, and Ventech fare vending machines. The drop fareboxes are installed on the commuter buses, which do not typically collect a significant amount of cash fares. Maintenance staff collect fares in the revenue vault during the daily servicing and fueling of each bus. An electronic farebox probe is held against the electronic farebox, which unlocks the vault from the electronic farebox and downloads any transaction information recorded by the electronic farebox. Fareboxes are then emptied into the revenue vault. The revenue collection accountant has access to the cash fares. All counting is done by two finance staff members in the secure money room. Once counted, the cash is stored in the safe located in the same room. The deposits are picked up by Loomis armored car services and taken to the RTD's bank weekly. Bank deposits are reconciled with farebox reports by the cash receipts accountant. Revenues obtained through mobile ticketing platforms are deposited directly into the RTD's bank account.

RTD uses the Ecolane platform to schedule ADA paratransit and microtransit trips as well as track ridership, vehicle service hours, vehicle service miles, and on-time performance for those modes.

Personnel Management and Training

The RTD program is short staffed with respect to bus operators. The major barrier is retaining driver candidates through the training process. RTD receives a sufficient number of applications, but only a fraction of those that apply successfully complete training. In a recent class, only 60 percent of applicants showed up for an initial interview and pre-employment screening. Of those, only half passed the pre-employment screenings, and a third of those dropped out of the process prior to training. Only half of those remaining completed the training. For a class with 50 applicants, this resulted in only about five going on to complete driver training. This number also tends to dwindle during the first year.

At present, all applicants are required to have their Class B permit with passenger and air brakes endorsements. RTD then provides training for them to obtain their commercial Class B license. Requiring the permit as part of the application ensures the candidate is able to get a permit. RTD has found that bringing in applicants without a permit already can result in a variety of delays related to obtaining the permit, or even the inability of a candidate to obtain one.



Recruiting methods include advertising on the RTD careers website, job fairs, word of mouth, and employee referrals. The RTD website tends to be the most effective method. RTD is also considering the introduction of referral bonuses for existing employees.

RTD recognizes its employees with Employee of the Month and Employee of the Year awards. Eligible employees are nominated by the management team monthly and managers cast their votes to select an Employee of the Month. Towards the end of the year these individuals are put in a pool and one employee is selected by the management team as the Employee of the Year. All selected employees are recognized during the monthly Board meetings. Employees are presented with a certificate and a Visa gift card. Additionally, employees are recognized with safety awards and employee appreciation events.

RTD has experienced high turnover in bus operators. One of the main causes for turnover is the amount of the mandatory contribution to the defined benefit plan, which affects represented employees. The CFO has been working to reduce the contribution. Another cause of turnover is release of drivers during the probationary period.

RTD's Training Department and Transportation Training Supervisors provide comprehensive operator training and certification. Trainers hold the Instructors Course for Transit Trainers Certificate and Transit and Paratransit Manager Certificate. Operator training consists of classroom and behind-the-wheel training that meets all state and federal requirements. RTD's training program is registered through the U.S. Department of Transportation (USDOT) and the Federal Motor Carrier Safety Administration (FMCSA) Entry Level Driver Training Program. Commercial license testing is provided through the DMV. All operators complete at least eight hours of training annually. The Safety, Security, and Risk Management Department is responsible for reviewing safety curriculums and ensuring implementation of initial, refresher, and safety certification training.

Administrative employees are also provided with training opportunities, including the Training Competency Model and the University of the Pacific Paratransit Training Program. Training for all employees includes sexual harassment prevention training, human trafficking awareness training, and drug and alcohol-free workplace training. In addition, each department assigns department-based training as needed.

The collective bargaining agreement specifies progressive discipline and an attendance policy for represented employees. The Employee Attendance Protocol for administrative employees is communicated through the RTD Personnel Manual.

RTD administrative employees receive annual job performance evaluations. RTD employee benefits include medical, dental, vision, life, and accidental death and dismemberment insurance. Managers and above are eligible for Long-Term Disability. RTD also offers a defined benefit plan or a defined contribution plan for retirement, vacation hours, sick hours, floating hours, bereavement hours, AFLAC, flexible spending, and 457 (b) which are optional for all employees. Per the CBA, full-time represented employees are offered comprehensive benefits. Part-time represented employees are eligible for medical and life insurance benefits after one year of employment.

Maintenance

The RTD has an extensive scheduled preventive maintenance program, and vehicles are serviced and maintained by maintenance staff in accordance with the preventive maintenance inspection checklist.



Regular maintenance is performed to ensure that all RTD assets are in optimal operating condition. Inspections routinely evaluate the condition of RTD assets. Deficiencies found during the inspections are corrected immediately or scheduled for repair based on the nature of the task being performed.

The maintenance program is managed using Hexagon EAM software. Once the asset has reached the OEM's Preventative Maintenance recommendation in mileage, days, or hours, the system generates a Preventative Maintenance Inspection (PMI) Work Order. Once the work has been completed and the Work Order is closed, the system will automatically generate the next maintenance inspection/PMI. Compliance is monitored through reporting that is accessible daily, weekly, monthly, and annually.

Preventive maintenance is generally conducted overnight so it does not conflict with regular service. However, revenue service may be impacted if required parts are not readily available. RTD also provides contracted maintenance to United Cerebral Palsy.

Warranty work is tracked through the Hexagon EAM platform. Most vendors and manufacturers provide warranty work within a week. There have been longer wait times for the newer battery-electric buses when batteries need to be replaced. Warranty work is typically sent out and not done in-house. Other work that is sent out includes body and paint repairs and heavy-duty engine repairs. RTD does not have an appropriate facility for body and paint repairs, so those are sent to local body shops. RTD does not have the space or manpower to do heavy-duty engine repairs, so those are sent to the local dealerships.

RTD's operations and maintenance facility features 19 bus bays (six with in-ground lifts and 12 portable lifts) as well as two fleet service/support vehicle/automotive bays. The facility also features a steam bay, wash bay, and revenue and non-revenue fuel islands. At present, RTD's five hydrogen fuel cell electric buses (FCEBs) must be maintained outside the facility. Hydrogen fueling is currently provided by a mobile gaseous cascade-fill system that takes one to three hours to fully fuel a bus, depending on the existing fuel level. RTD anticipates its next step will be to procure a mobile liquid hydrogen fueling solution.

The RTD's offices, facilities, and bus stops are managed by the Facilities Superintendent. Facilities technicians and porters are part of ATU 256, though administrative staff are not represented. RTD is currently assessing the building for hydrogen refit/FCEB maintenance repair.

RTD's primary challenges in maintaining its transit fleet include:

1. Parts and supplies not available for extended durations (three to six months, depending on the part). Some parts have taken over 14 months due to supply chain issues. Most recently, the most difficult parts to procure have been for the cutaway buses – seating, interior parts, suspension components.
2. Available training (basic and advanced) for new zero-emission technology.
3. A lack of qualified mechanics. The Maintenance Department has two vacant positions due to a lack of applications from qualified candidates. About eight years ago, RTD launched an apprenticeship program, which has had mixed results in terms of producing good mechanics. Most recent good hires have been from local dealerships. Mechanics must have basic electrical training, but none of the most recent hires have had electric vehicle training. They are struggling to make the leap to hybrid and hydrogen vehicles.



Parts are stored in a secure parts room controlled by an ID badge lock system. Storekeepers, buyers, leads/supervisors, manager-level staff, and some Porters have access. Parts are tracked through an Enterprise Asset Management (EAM) system. Storekeepers track parts using the EAM system, and parts accessed when a Storekeeper is not present are recorded in the Part Issue Log so they can be added to the EAM system by a Storekeeper later. Targeted inventory levels are based on usage and availability and automatically reordered. With the exception of parts that are unavailable due to manufacturer bankruptcy or supply chain issues, RTD generally maintains an appropriate stock of part to minimize vehicle downtime. Parts that have been difficult to obtain include those for Braun lifts and Proterra and Forest River parts. In some cases, contingency buses have had to be put into service, particularly due to overhead charger part delays and battery-electric bus part delays.

RTD currently has 17 Proterra buses, with two having just been retired. Ten of these buses are overhead charge only. Parts can only be obtained through dealers, and there are no dealers. Some Proterra parts have more than one year wait time – there is an 18-month wait time for drive motors. The Proterra diagnostic software shut down and it took two months to get a work-around. When Foothill Transit stopped operating its Proterras, RTD bought its chargers to cannibalize parts. RTD is also talking to other operators phasing out Proterras about sourcing their units for parts.

Vehicles are equipped with automatic vehicle location (AVL), automatic passenger counters (APC), mobile data terminals, head signs, pedestrian avoidance system (PDS), fareboxes, and infotainment systems. RTD is working with its infotainment systems provider to work through issues with those systems.

When breakdowns occur, operations staff calls the Maintenance Department and a work request is entered into the EAM program. Repairs are prioritized and passed down from day shift (senior mechanics) to subsequent shifts verbally and in an Excel document. Dispatch receives two yard maps daily showing buses that are ready for service.



Exhibit 7.5 RTD Transit Fleet

Quantity	Model Year	Vehicle	PAX	Fuel
5	2006	Gillig Lowfloor	31	Diesel hybrid
3	2009	Gillig Lowfloor	40	Diesel hybrid
7	2010	Gillig Lowfloor	37	Diesel hybrid
2	2011	Gillig Hybrid	26	Diesel hybrid
6	2012	Gillig G30D102N4	26	Diesel hybrid
20	2013	Gillig Hybrid	40	Diesel hybrid
2	2013	MCI	55	Diesel
6	2014	Nova LFS Articulated	49	Diesel hybrid
6	2016	Ford Starcraft	9	Diesel
9	2016	Proterra Catalyst	40	Battery Electric
1	2016	Proterra ECO Ride BE-35	40	Battery Electric
22	2017	Glaval Titan II	19	Gasoline
5	2018	Proterra Catalyst BE	40	Battery Electric
12	2018	Gillig	39	Diesel
14	2019	Glaval Commute	9	Gasoline
4	2020	Arboc Spirit of Mobility		
2	2021	MCI	55	Diesel
9	2022	Gillig BEB	40	Battery Electric



Chapter 8 | Findings and Recommendations

Conclusions

Outside of the impacts of the recent cyberattack, Moore & Associates finds the San Joaquin Regional Transit District to be in compliance with the requirements of the Transportation Development Act. In addition, the entity generally functions in an efficient, effective, and economical manner.

Recommendations

Based on discussions with RTD staff, analysis of program performance, and an audit of program compliance and function, the audit team has identified one significant issue to be addressed by this audit:

1. RTD experienced a cyberattack in March 2024 that impacted its ability to comply with some elements of the TDA during the current and subsequent audit period.

Multiple recommendations related to this issue are discussed below.

Issue: RTD experienced a cyberattack in March 2024 that impacted its ability to comply with some elements of the TDA during the current and subsequent audit period.

Criteria: The recent cyberattack has the potential to impact RTD's ability to complete several compliance-related activities within the established timeframes, including completion of the annual fiscal audit (PUC 99245) and submittal of the Transit Operators Financial Transaction Report to the State Controller (PUC 99243), as well as the potential to delay TDA allocations for FY 2025/26 due to the delay in the annual fiscal audit (CCR 6664).

Condition: As discussed in Chapter 7, the RTD has had to rebuild its entire financial database month-by-month as a result of the cyberattack. As a result, it cannot conduct a fiscal audit or provide other financial data for FY 2023/24 until the database has been rebuilt. RTD has requested an extension beyond March 31, 2025 for its fiscal audit and also requested extensions from the State Controller and FTA with respect to other external reports. The reconstruction of the financial database is also taking longer than expected, which has further delayed the FY 2023/24 fiscal audit.

Cause: The cyberattack was the clear cause for these issues. Prior to the cyberattack, RTD was clearly in compliance with all of its audits and reporting.

Effect: RTD cannot report its financial data for FY 2023/24 until the financial database has been rebuilt. That will put it beyond established deadlines for these reports.

Recommendation 1: Clearly document all communication with external agencies and any extensions granted.

Recommended Action: For compliance purposes, RTD should clearly document its communications with external agencies regarding extensions to deadlines. This will provide the information needed for any future questions about compliance. These communications should be stored in a location that is accessible by multiple individuals (e.g., not stored only as emails in an individual's email account).



Timeline: FY 2024/25.

Anticipated Cost: Negligible.

Recommendation 2: Complete the FY 2023/24 fiscal audit, State Controller reports, and NTD reports in a timely manner once the database reconstruction is completed.

Recommended Action: Once the reconstruction of the financial database is complete, RTD should move quickly to prepare its FY 2023/24 fiscal audit, State Controller reports, and NTD reports. Communication should be maintained with all external agencies involved regarding timelines for completion.

Timeline: FY 2024/25.

Anticipated Cost: Negligible cost over what is already budgeted.

Recommendation 3: Work with SJCOG to ensure RTD receives its TDA allocation for FY 2025/26 even if completion of the audit is delayed.

Recommended Action: Under CCR 6664, the RTPA should not allocate funds to any claimant that has not submitted its fiscal audit for the prior year. However, given the cyberattack was outside of RTD's control, the audit team believes it should not be punished by having its funding withheld while it engages in the reconstruction of its financial database. This would have a negative impact on the continuing operation of RTD. To that end, it is recommended that RTD file its TDA claim for FY 2025/26 as it would normally do, even if it has not completed its FY 2023/24 audit, and that SJCOG pay that claim as it normally would. **This action must be paired with Recommendation 4**, which calls for a reconciliation of RTD's eligibility for funds received in FY 2023/24 against its claim for FY 2025/26.

Timeline: FY 2024/25.

Anticipated Cost: Negligible.

Recommendation 4: Ensure the FY 2023/24 audit includes a robust analysis of RTD's eligibility to receive TDA funds for that year so that any funds it was not eligible to claim (as the result of allocating funds before the audit was complete) can be reimbursed.

Recommended Action: One of the reasons a fiscal audit for the prior year must be provided as part of the TDA claim for the next funding year is to ensure that the next funding year includes any corrections that must be applied to the allocation. This can include penalties for not meeting the farebox recovery ratio (currently waived) or reimbursements for funds the operator was not eligible to receive under CCR 6634. Recommendation 3 encourages RTD to work with SJCOG to grant the claim for FY 2025/26 even though the FY 2023/24 audit has not been completed. Upon completion of the audit, the FY 2025/26 allocation should be adjusted as necessary to reflect a reduction for any funds RTD received that it was not eligible to receive.

Timeline: FY 2024/25.



Anticipated Cost: Already budgeted as part of the TDA fiscal audit.

Exhibit 8.1 Audit Recommendations

Recommendations		Importance	Timeline
1	Clearly document all communication with external agencies and any extensions granted.	High	FY 2024/25
2	Complete the FY 2023/24 fiscal audit, State Controller reports, and NTD reports in a timely manner once the database reconstruction is completed.	High	FY 2024/25
3	Work with SJCOG to ensure RTD receives its TDA allocation for FY 2025/26 even if completion of the audit is delayed.	High	FY 2024/25
4	Ensure the FY 2023/24 audit includes a robust analysis of RTD’s eligibility to receive TDA funds for that year so that any funds it was not eligible to claim (as the result of allocating funds before the audit was complete) can be reimbursed.	High	FY 2024/25



This page intentionally blank.