

LOCAL TRANSPORTATION COMMISSION

COUNTY OF ALPINE, STATE OF CALIFORNIA REGULAR MEETING

AGENDA

TUESDAY, AUGUST 6, 2019 11:00 AM

Meeting to be held at County Administration Building, 99 Water Street, Markleeville CA.

1. CALL TO ORDER

2. ORAL COMMUNICATIONS - GENERAL PUBLIC COMMENT

This portion of the meeting is an opportunity for members of the public to address the Local Transportation Commission on subjects relating to county business. No action can be taken on matters not listed on the agenda.

3. CONSENT AGENDA

These matters are expected to be routine and non-controversial and are usually approved by a single majority vote without discussion. Items can be removed from the consent agenda to be discussed and considered separately. Prior to approval of the consent agenda the chair will announce that comments or questions will be taken from members of the public, staff or the Board on consent agenda items when the comment does not necessitate the item being removed for separate action.

- 3.1. Request regular meeting minutes of 06/18/2019. County Clerk
- 3.2. Request approval of the Local Transportation Commission Triennial Performance Audit and the Alpine County Transit Triennial Performance Audit Community Development Director

4. UNFINISHED BUSINESS

None

5. NEW BUSINESS

5.1. Request presentation, discussion and possible comments on the Draft Central Sierra Zero-Emission Vehicle Readiness Plan - Community Development Director

6. PUBLIC HEARINGS / PUBLIC MEETING

None

7. ADJOURNMENT

The Board will adjourn to the next regular meeting of at at Alpine County Government Center, 99 Water Street, Markleeville, California.

Local	Trans	portatior	n Commi	ssi	ion
Agend	la for	Tuesday	August	6,	2019

Teola L. Tremayne, County Clerk and ex officio Clerk of the Local Transportation Commission

AGENDA TRANSMITTAL

TO: Local Transportation Commission

FROM: Teola Tremayne, County Clerk

DATE OF MEETING: August 6, 2019

INSTRUCTIONS TO CLERK:

PREPARED BY: Teola Tremayne, County Clerk

TITLE: Request regular meeting minutes of 06/18/2019. **SUMMARY: RECOMMENDED ACTION:** Approve minutes **ISSUE STATEMENT AND DISCUSSION:** FISCAL IMPACT: (Not **SOURCE** 1) Budgeted Current Fiscal Year Applicable) Unanticipated \$0.00 2) Total Anticipated Cost Current \$0.00 Revenue From \$0.00 Year \$0.00 Contingency \$0.00 3) Total Anticipated Cost Annual \$0.00 Other: Year **FUNDING SOURCE:**

Local Transportation Commission

County of Alpine P.O. Box 158 Markleeville, CA 96120

FAX: 530-694-2491

MINUTES June 18, 2019

Unapproved: Subject to Correction

Phone: 530-694-2281

1. **CALL TO ORDER**

Chair David Griffith called the Regular Meeting to order at 11:30 AM with Supervisors Donald Jardine, Ron Hames, Katherine Rakow, Terry Woodrow, and David Griffith present.

ORAL COMMUNICATIONS - GENERAL PUBLIC COMMENT 2.

3. **CONSENT AGENDA**

Matters that are routine and non-controversial and are usually approved by a single majority vote without discussion. Items can be removed from the consent agenda to be discussed and considered separately.

MOTION Jardine / SECOND Hames approving the Consent Agenda as follows:

- 3.1. Regular meeting minutes of 05/07/2019 - County Clerk
- 3.2. Resolution No. LTC2019-02 approving fiscal year 2019/20 Overall Work Program and authorizing the Executive Secretary to sign the Overall Work Program Agreement Contract No. LTC2019-06 and other required documents. - Community Development Director
- 3.3. Resolution No. LTC2019-03 authorizing application for FTA 5311 funding for Public Transit. - Community Development Director
- 3.4. Resolution No. LTC2019-04 approving the 2019-20 Planning, Programming and Monitoring Activities Plan. - Community Development Director
- 3.5. Fiscal Year 2019/20 Local Transportation Fund budget and adopt a Resolution No. LTC2019-05 authorizing allocations of Local Transportation Funds pursuant Claim #1 for administrative purposes, Claim #2 for Dial-A-Ride purposes and Claim #3 for road purposes. - Community Development Director

4. **UNFINISHED BUSINESS**

None

NEW BUSINESS 5.

None

PUBLIC HEARINGS / PUBLIC MEETING 6.

6.1. Public hearing to determine if there are any unmet transit needs that are reasonable to meet and possible adoption of two resolutions: 1. Adoption of a resolution defining "unmet transit needs" and "reasonable to meet;" 2. Adoption of resolution finding that there are no unmet transit needs that are reasonable to meet. - Community Development Director

Local Transportation Program Manager Scott Maas reported that requirements to have a public hearing and recommendation from the Social Services Transportation Advisory Council to determine if there were any unmet transit needs that were reasonable to meet.

Chair Griffith opened the public hearing and hearing no comments, closed the public hearing.

MOTION Woodrow / SECOND Rakow adopting Resolution No. LTC2019-07 defining "unmet transit needs" and "reasonable to meet;".

AYES: Jardine, Hames, Rakow, Woodrow, Griffith; MOTION CARRIED.

MOTION Rakow / SECOND Jardine adopting Resolution No. LTC2019-08 finding that there are no unmet transit needs that are reasonable to meet.

AYES: Jardine, Hames, Rakow, Woodrow, Griffith; MOTION CARRIED.

7. ADJOURNMENT

The Board adjourned to the next regular meeting of Tuesday, August 6, 2019 at 11:00 AM at the County Administrative Office Building, Markleeville, California.

David Griffith, Chair, Board of Supervisors County of Alpine, State of California

ATTEST:

Teola L. Tremayne, County Clerk & ex officio Clerk of the Board of Supervisors

A complete audio recording of this meeting is available on the County website www.alpinecountyca.gov

AGENDA TRANSMITTAL

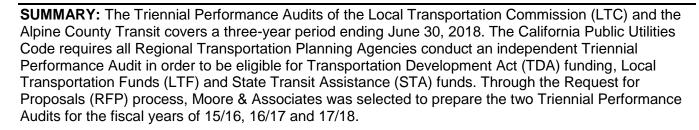
TO: Local Transportation Commission

FROM: Brian Peters, Community Development Director

DATE OF MEETING: August 6, 2019

PREPARED BY: Scott Maas, Alpine County Transportation Planner

TITLE: Request approval of the Local Transportation Commission Triennial Performance Audit and the Alpine County Transit Triennial Performance Audit



The LTC Triennial Performance Audit did not have any compliance findings. There was a functional finding that the LTC's Social Services Transportation Advisory Council (SSTAC) has functioned with a minimum number of members, with several positions vacant, and it is recommended to conduct ongoing recruitment for additional members.

The Alpine County Transit Triennial Performance Audit did not have any compliance findings. There were three functional findings; 1. The fare box recovery ratio declined each fiscal. 2. Use of the cutaway vehicle is limited and should be used more. And 3. Operating data was reported inconsistently among internal and external reports.

RECOMMENDED ACTION: Approve the LTC and the Alpine County Transit Triennial Performance Audits.

ISSUE STATEMENT AND DISCUSSION: The LTC Triennial Performance Audit had a functional finding to continue to recruit to fill positions on the SSTAC. Though the SSTAC had vacancies, each time the SSTAC met, there was a quorum.

The Alpine County Transit Triennial Performance Audit had three functional findings. The functional finding that the fare box recovery ratio declined each year is directly related to a decline in the number of full-cost recovery medical trips that Dial-A-Ride used to provide. In 2020, the Transit Plan will be updated and we can look into improving coordination with other agencies. The functional finding that the larger bus has limited use is because many rides are a single passenger and it is easier for the driver to use the minivan instead. And the functional funding that operating data is reported inconsistently with the same numbers to the State Controller's report, the National Transit Database, and what is reported in the TDA fiscal audits is primarily due to end of the fiscal year audit adjustments. The Community Development Department keeps track of transit performance measures on a monthly basis, and the expenses shown are balanced with the Finance Department. It is the end of the fiscal year adjustments that change what is reported in the TDA fiscal audits that are different. As the Community Development



staff and Finance staff continue to work together, the inconsistencies should be eliminated or be very small.

FISCAL IMPACT:		☐ (Not	SOURCE	
1)	Budgeted Current Fiscal Year	Applicable)	Unanticipated	<u>\$0.00</u>
2)	Total Anticipated Cost Current	\$15,000	☐ Revenue From	\$0.00
	Year	\$15,000	Contingency	<u>\$0.00</u>
3)	Total Anticipated Cost Annual	\$15,000	Other:	
	Year			

FUNDING SOURCE: The cost of the Triennial Performance Audits is paid from Local Transportation Funds (LTF).

INSTRUCTIONS TO CLERK: Please provide a Minute Order to the Community Development Director.



Triennial Performance Audit for FY 2015/16, FY 2016/17, and FY 2017/18













Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Table of Contents

Chapter 1: Executive Summary	01
Chapter 2: Audit Scope and Methodology	03
Chapter 3: Program Compliance	05
Chapter 4: Prior Recommendations	09
Chapter 5: Goal Setting and Strategic Planning	11
Chapter 6: Functional Review	19
Chapter 7: Findings and Recommendations	2 3

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

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Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Chapter 1

Executive Summary

The Triennial Performance Audit of the Alpine County Local Transportation Commission (LTC) covers a three-year period ending June 30, 2018. The California Public Utilities Code requires all Regional Transportation Planning Agencies conduct an independent Triennial Performance Audit in order to be eligible for Transportation Development Act (TDA) funding.

In 2019, the LTC selected Moore & Associates, Inc., to prepare Triennial Performance Audits of itself as the RTPA and the one transit operator to which it allocates TDA funding. Moore & Associates is a consulting firm specializing in public transportation. Selection of the firm followed a competitive procurement process.

This chapter summarizes key findings and recommendations developed during the Triennial Performance Audit of LTC for the period defined as:

- Fiscal Year 2015/16,
- Fiscal Year 2016/17, and
- Fiscal Year 2017/18.

We conducted this performance audit in accordance with generally accepted government auditing standards. Those standards require we plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our review objectives. We believe the evidence obtained provides a reasonable basis for our findings and conclusions based on our audit objectives.

The review was also conducted in accordance with the processes established by the California Department of Transportation, as outlined in the Performance Audit Guidebook for Transit Operators and Regional Transportation Planning Entities.

The Triennial Performance Audit includes five elements:

- 1. Compliance requirements,
- 2. Follow-up of prior recommendations,
- 3. Analysis of internal goal setting and strategic planning efforts,
- 4. Review of the RTPA's functions and activities, and
- 5. Findings and recommendations.

Test of Compliance

Moore & Associates concludes the LTC adheres to the Transportation Development Act (TDA) regulations in an efficient and effective manner.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Status of Prior Recommendations

The prior Triennial Performance Audit – completed in 2016 by LSC Transportation Consultants, Inc. for the three fiscal years ending June 30, 2015 – included the following recommendation:

1. Continue to provide sufficient oversight of the transit operator so as to ensure that data is collected in accordance with TDA and transit operating standards.

Status: Implemented.

Goal Setting and Strategic Planning

The Regional Transportation Plan provides a regional transportation vision across 10-year and 20-year planning horizons. The most recent Plan, adopted in December 2015, considers the role of transportation including economic factors, quality of life issues, and environmental factors. It is updated every five years; an update is planned for 2020. The goals contained within the 2015 RTP cover both the short-term (10-year) horizon and long-term (20-year) horizon, and are consistent with other state and local planning documents.

Findings and Recommendations

Based on the current review, the auditors have not identified any TDA compliance findings.

Moore & Associates identified one functional finding. While this finding is not a compliance finding, we feel it warrants being addressed within this review:

1. For several years, the LTC's Social Services Transportation Advisory Council has functioned with a minimum number of members, with several positions vacant.

In completing this Triennial Performance Audit, Moore & Associates submits the following findings and recommendations for the Alpine County Local Transportation Commission. They have been divided into two categories: TDA Program Compliance Findings and Recommendations and Functional Findings and Recommendations. TDA Program Compliance Findings and Recommendations are intended to assist in bringing the agency into compliance with the requirements and standards of the TDA, while Functional Findings and Recommendations address issues identified during the TPA that are not specific to TDA compliance. Each finding is presented with the elements identified within the 2011 *Government Auditing Standards* as well as one or more recommendations.

Exhibit 1.1 Summary of Recommendations

Functional Recommendations		Importance	Timeline
1	Conduct ongoing recruitment for additional members of the SSTAC.	Medium	Beginning FY 2019/20

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Chapter 2

Audit Scope and Methodology

The Triennial Performance Audit of the Alpine County Local Transportation Commission (LTC) covers a three-year period ending June 30, 2018. The California Public Utilities Code requires all Regional Transportation Planning Agencies conduct an independent Triennial Performance Audit in order to be eligible for Transportation Development Act (TDA) funding.

In 2019, the Alpine County Local Transportation Commission selected Moore & Associates, Inc., to prepare Triennial Performance Audits of itself as the RTPA and the two transit operators to which it allocates TDA funding. Moore & Associates is a consulting firm specializing in public transportation. Selection of the firm followed a competitive procurement process.

The Triennial Performance Audit is designed to be an independent and objective evaluation of LTC as the designated RTPA for Alpine County. Direct benefits of a triennial performance audit include providing RTPA 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 99246(a) that the RTPA designate an independent entity other than itself to conduct a performance audit of its activities as well as those of each operator to which it allocates funds.

Moore & Associates conducted this performance review in accordance with generally accepted government auditing standards. Those standards require Moore & Associates plan and perform the audit to obtain sufficient, appropriate evidence to provide a reasonable basis for our findings and conclusions based on our review objectives. Moore & Associates believes the evidence obtained provides a reasonable basis for our findings and conclusions based on our review objectives.

The review was also conducted in accordance with the processes established by the California Department of Transportation, as outlined in the Performance Audit Guidebook for Transit Operators and Regional Transportation Planning Entities.

Objectives

The Triennial Performance Audit has four primary objectives:

- 1. Assess compliance with TDA regulations,
- 2. Review actions taken by the RTPA to implement prior recommendations,
- 3. Evaluate the efficiency and effectiveness of the RTPA through a review of its functions, and
- 4. Provide sound, constructive recommendations for improving the efficiency and functionality of the RTPA.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Scope

The Triennial Performance Audit is intended to be a high-level review of performance evaluating the efficiency and effectiveness of the RTPA. The review of LTC included five related tasks:

- 1. Review of compliance with the TDA requirements and regulations.
- 2. Assess the implementation of recommendations presented in prior performance audits
- 3. Analysis of LTC's internal goal setting and strategic planning functions.
- 4. Examination of the following functions:
 - Administration and Management,
 - Transportation Planning and Regional Coordination,
 - Claimant Relationships and Oversight,
 - Marketing and Transportation Alternatives, and
 - Grant Applications and Management.
- 5. Recommendations to address opportunities for improvement based on analysis of the information collected and the review of the RTPA's core functions.

Methodology

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

- Triennial Performance Audit reports for the prior review period;
- Annual budgets;
- Audited financial statements;
- State Controller Reports;
- Agency organizational chart;
- Board meeting minutes and agendas; and
- TDA and transit funding allocations to operators.

The methodology for this review included interviews with Scott Maas (Transportation Program Manager) and Brian Peters (Director of Community Development) on July 11, 2019.

The report is comprised of seven chapters divided into three sections:

- 2. Executive Summary: A summary of the key findings and recommendations developed during the Triennial Performance Audit process.
- 3. Scope and Methodology: Discussion of the review, methodology, and pertinent background information.
- 4. Audit Results: In-depth discussion of findings surrounding each of the subsequent elements of the review:
 - Compliance with statutory and regulatory requirements,
 - Progress in implementing prior recommendations,
 - Goal setting and strategic planning,
 - Functional review, and
 - Findings and recommendations.

4

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Chapter 3

Program Compliance

This section examines the Alpine County Local Transportation Commission's compliance with the State of California's Transportation Development Act as well as relevant sections of California's Public Utilities Commission code. An annual certified fiscal audit confirms TDA funds were apportioned in conformance with applicable laws, rules, and regulations. Although compliance verification is not a Triennial Performance Audit function, several specific requirements concern issues relevant to the performance audit. The RTPA considers full use of funds under CCR Section 6754(a) to refer to operating funds but not capital funds. The Triennial Performance Audit findings and related comments are delineated in Exhibit 3.1.

Compliance was determined through discussions with LTC staff as well as a physical inspection of relevant documents, including the fiscal audits for each year of the triennium. Also reviewed were planning documents, Board actions, and other related documentation.

The auditors conclude the LTC adheres to Transportation Development Act (TDA) regulations in an efficient and effective manner.

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

Exhibit 3.1 Transportation Development Act Compliance Requirements

Compliance Element	Reference	Compliance	Comments
All transportation operators and city or county governments which have responsibility for serving a given area, in total, claim no more than those Local Transportation Fund monies apportioned to that area.	PUC 99231	In compliance	
The RTPA has adopted rules and regulations delineating procedures for the submission of claims for facilities provided for the exclusive use of pedestrians and bicycles (Article 3).	PUC 99233, 99234	Not applicable	The RTPA does not use Article 3 funds.
The RTPA has established a social services transportation advisory council. The RTPA must ensure that there is a citizen participation process that includes at least an annual public hearing.	PUC 99238, 99238.5	In compliance	Annual public hearings took place on: May 19, 2015 May 3, 2016 May 2, 2017
The RTPA has annually identified, analyzed, and recommended potential productivity improvements which could lower operating cost of those operators, which operate at least 50 percent of their vehicle service miles within the RTPA's jurisdiction. Recommendations include, but are not being limited to, those made in the performance audit. • A committee for the purpose of providing advice on productivity improvements may be formed. • The operator has made a reasonable effort to implement improvements recommended by the RTPA as determined by the RTPA, or else the operator has not received an allocation that exceeds its prior year allocation.	PUC 99244	In compliance	While the LTC does not have a productivity committee, transit performance metrics for the current and prior fiscal year are reviewed as part of the annual TDA claims process.
The RTPA has ensured that all claimants to whom it allocated TDA funds submit to it and to the state controller an annual certified fiscal and compliance audit within 180 days after the end of the fiscal year.	PUC 99245	In compliance	
The RTPA has submitted to the state controller an annual certified fiscal audit within 12 months of the end of the fiscal year.	CCR 6662	In compliance	FY 2015/16: March 30, 2017 FY 2016/17: March 29, 2018 FY 2017/18: March 29, 2019
The RTPA has submitted within seven months after the end of the fiscal year an annual financial transactions report to the state controller.	CCR 6660	In compliance	FY 2015/16: January 27, 2017 FY 2016/17: January 30, 2018 FY 2017/18: January 31, 2019

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

Compliance Element	Reference	Compliance	Comments
The RTPA has designated an independent entity to conduct a performance audit of operators and itself (for the current and previous triennia). For operators, the audit was made and calculated the required performance indicators, and the audit report was transmitted to the entity that allocates the operator's TDA money, and to the RTPA within 12 months after the end of the triennium. If an operators audit was not transmitted by the start of the second fiscal year following the last fiscal year of the triennium, TDA funds were not allocated to that operator for that or subsequent fiscal years until the audit was transmitted.	PUC 99246, 99248	In compliance	The prior Triennial Performance Audit of the RTPA and the operator was prepared by LSC Transportation Consultants, Inc. in June 2016. Alpine County LTC engaged Moore & Associates, Inc. to complete the current Triennial Performance Audit. Staff have contacted Caltrans regarding late submittal of the audit in 2019.
The RTPA has submitted a copy of its performance audit to the Director of the California Department of Transportation. In addition, the RTPA has certified in writing to the Director that the performance audits of operators located in the area under its jurisdiction have been completed.	PUC 99246(c)	In compliance	
The performance audit of the operator providing public transportation services shall include a verification of the operator's cost per passenger, operating cost per vehicle service hour, passenger per vehicle service mile, and vehicle service hours per employee, as defined in Section 99247. The performance audit shall include consideration of the needs and types of passengers being served and the employment of part-time drivers and the contracting with common carriers of persons operating under a franchise or license to provide services during peak hours, as defined in subdivision (a) of Section 99260.2.	PUC 99246(d)	In compliance	
The RTPA has established rules and regulations regarding revenue ratios for transportation operators providing services in both urbanized and non-urbanized and newly urbanized areas.	PUC 99270.1, 99270.2	Not applicable	There are no portions of Alpine County that are considered to be urbanized.
The RTPA has adopted criteria, rules, and regulations for the evaluation of claims filed under Article 4.5 of the TDA and the determination of the cost-effectiveness of the proposed community transit services.	PUC 99275.5	Not applicable	There are no Article 4.5 claimants in Alpine County.
State Transit Assistance funds received by the RTPA are allocated only for transportation planning and mass transportation purposes.	PUC 99310.5, 99313.3, Proposition 116	In compliance	
The amount received pursuant to the Public Utilities Code, Section 99314.3, by each RTPA for state transit assistance is allocated to the operator(s) in the area of its jurisdiction as allocated by the State Controller's Office.	PUC 99314.3	In compliance	STA funds are held in reserve for capital purchases once enough money has accumulated.

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

Compliance Element	Reference	Compliance	Comments
If TDA funds are allocated to purposes not directly related to public or specialized transportation services, or facilities for exclusive use of pedestrians and bicycles, the transit planning agency has annually: Consulted with the Social Services Transportation Advisory Council (SSTAC) established pursuant to PUC Section 99238; Identified transit needs, including: Groups that are transit-dependent or transit-disadvantaged; Adequacy of existing transit services to meet the needs of groups identified; and Analysis of potential alternatives to provide transportation alternatives; Adopted or reaffirmed definitions of "unmet transit needs" and "reasonable to meet"; Identified the unmet transit needs and those needs that are reasonable to meet; and Adopted a finding that there are no unmet transit needs, that are reasonable to meet, or that there are unmet transit needs including needs that are reasonable to meet. If a finding is adopted that there are unmet transit needs, these needs must have been funded before an allocation was made for streets and roads.	PUC 99401.5	In compliance	There were no "unmet transit needs" that were "deemed reasonable to meet during the audit period.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Chapter 4

Prior Recommendations

This section reviews and evaluates the implementation of the prior Triennial Performance Audit recommendations and determines degree of implementation. This objective assessment is to provide assurance the Alpine County Local Transportation Commission has made quantifiable progress toward improving both the efficiency and effectiveness of its functions.

The prior review – completed in June 2016 by LSC Transportation Consultants, Inc. for the three fiscal years ending June 30, 2015 – prescribed one recommendation:

1. Continue to provide sufficient oversight of the transit operator so as to ensure that data is collected in accordance with TDA and transit operating standards.

Discussion: The prior Alpine County transit operator audit noted the Dial-A-Ride service functioned effectively and without significant issues. However, since DAR's inception passenger trips had been recorded as round trips, rather than one-way trips. In order to be consistent with TDA and public transit standards, the prior auditor recommended Alpine County DAR record passengers in terms of one way trips. It also recommended LTC staff monitor data reporting semi-annually to ensure that it is consistent with TDA.

Progress: The data reporting is now being carefully monitored. LTC began monitoring deadhead miles as well.

Status: Implemented.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

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Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Chapter 5

Goal Setting and Strategic Planning

This chapter analyzes the Alpine County Local Transportation Commission's goal setting and strategic planning process. The primary regional planning document is the Regional Transportation Plan (RTP). The RTP provides a regional transportation vision across 10-year and 20-year planning horizons. The most recent Plan, adopted in December 2015, considers the role of transportation including economic factors, quality of life issues, and environmental factors. It is updated every five years; an update is planned for 2020.

Alpine County's RFP includes the three required elements: Policy Element, Action Element, and Financial Element. During the planning process, the LTC held five outreach sessions and consulted with its Social Services Transportation Advisory Council (SSTAC) and Caltrans as well as reached out to:

- Alpine County Health and Human Services (HHS),
- Alpine Trails,
- Alpine County Chamber of Commerce,
- Bear Valley Business Association,
- Bear Valley Springs Association,
- Bureau of Land Management,
- Grover Hot Springs State Park,
- Humboldt-Toiyabe National Forest,
- Hung-A-Lel-Ti Community Council,
- Scenic Byway Association,
- Woodfords Store,
- Washoe Tribe of Nevada and California, and
- Adjacent county RTPAs and MPOs.

The goals contained within the 2015 RTP cover both short-term (10-year) and long-term (20-year) horizons, and are consistent with other state and local planning documents, including the 2009 Alpine County General Plan Circulation Element and California Transportation Plan (CTP 2040). These goals, objectives, and supporting policies are detailed in Exhibit 5.1.

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

Exhibit 5.1 Goals, Objectives, and Policies

Goal	Objective	Policy
	Identify and prioritize improvements to the roadway system.	Support Tri-County Letter of Agreement projects which improve safety, mobility, and reliability for visitors and residents of Alpine County and travel to and from Alpine County.
	Maintain roadways at acceptable safety standards.	Identify and eliminate unsafe conditions on State highways and intersections, in coordination with Caltrans. Prioritize roadway projects according to safety standards, including required maintenance and repair, in the most costeffective manner given available resources.
Provide and maintain a safe, efficient,	Maintain Caltrans' desired Level of Service on all State highways.	If LOS falls below policy levels, coordinate with Caltrans to program projects which will improve traffic flow through the affected corridor.
and convenient countywide roadway system that meets the travel needs of people and goods within the region	Employ ITS strategies when feasible and cost effective.	The ACLTC will consider implementation of Intelligent Transportation Systems (ITS) technologies for individual modes based on availability, feasibility and funding.
and connecting to points beyond.	The County will work with developers and Caltrans to ensure intersection improvements are installed at the appropriate time and in accordance with State and County design standards.	Developers shall be responsible for constructing or improving intersections at new developments, including resort communities and ski areas, to maintain acceptable LOS on roadways that provide access or are affected by the development during the implementation of planned or phased development in these areas.
	Implement improvement projects which will help to reduce vehicle speeds in community commercial areas as well as increase the walkability and attractiveness of downtown areas.	The County will pursue traffic calming and streetscape projects in the downtown Markleeville area in coordination with stakeholders and avoiding significant loss of parking.

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

Goal	Objective	Policy
	Accept new roads into the locally maintained road system only when they meet the criteria established by the County and when financial means exist to support both maintenance and snow removal.	Existing roads should be maintained and upgraded as a priority over the construction of new roads to new areas except where the public benefit clearly outweighs overall costs.
	Improve averall payament condition ratings to	Develop a PMS and roadway inspection schedule as recommended in the Pavement Management System Report, and update the PMS report every few years as needed.
Upgrade and maintain roadways in order to preserve the County	Improve overall pavement condition ratings to a Pavement Condition Index (PCI) of 50 or better so as to reduce the need for expensive roadway reconstruction projects over the long term.	Prioritize roadway maintenance projects based on pavement condition data obtained from the Pavement Management System and Roadway Data Analysis Report and the overall regional importance of the local roadway.
roadway system.		Consider imposing traffic impact fees on any industrial, commercial, residential, or other development permit for the purpose of improving affected local roads.
	Maintain LOS "C" on County roadways and at intersections to ensure travel delays and congestion do not cause impacts to drivers. New development must comply with the Road Capacity policy and procedures outlined in the General Plan Land Use Element: Public Services and Facilities.	If LOS falls below level "C," implement projects which will improve traffic circulation on County roadways. The County may allow exceptions to the LOS standards where it finds that the improvements or other measures required to achieve the LOS standards are unacceptable based on established criteria. Exceptions to the standards may be allowed after all feasible measures and options are explored, including alternative forms of transportation.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Goal	Objective	Policy
	Tailor public transportation and transit service provisions to the area's population characteristics.	Implement recommendations from the Alpine County Short Range Transit Plan. Update the plan a minimum of every five years as required by Caltrans or as necessary. Consider transit services first in areas where the greatest operational efficiencies exist (i.e., dependent needs, recreational areas). Include the Washoe Tribe in the transit planning process.
Provide for the mobility needs of County residents, visitors and employees within the financial constraints of state and federal transit	Provide life-line transportation for transit-dependent residents.	The ACLTC will conduct a minimum of one public hearing annually to consider and take testimony on unmet transit needs prior to expending LTF funds. Ensure that public transit services are compliant with the Americans with Disabilities Act.
funding.	As funding permits, develop transit service as an effective alternative transportation mode choice.	Expand transit service to meet the needs of employees commuting between Douglas County and Alpine County as warranted and financially feasible. Support transit projects that serve visitors and residents for commute and recreation trip purposes and that would enhance economic development. Encourage coordination of inter- and intra-county transit service.
Maintain the Alpine County Airport as a safe and operable general aviation facility. Expand airport services only if additional funding is available beyond CAAP annual grant program.	Promote the safe, orderly, and efficient use of airport and air space and compatible land uses as addressed in the updated Airport Layout Plan.	Support land use decisions that discourage or prevent development in the vicinity of the airportthat may present significant public safety issues. Implement Airport Capital Improvement Projects as funding allows with priority for projects which are required to improve the safety of the airport.
Provide for the safe and efficient movement of goods within Alpine County and connecting to points beyond.	Mitigate conditions that transporters of goods deem dangerous or unacceptable.	Place a high level of importance on maintenance projects which will assist goods movement. Provide proper road geometry and consider passing lanes on roadways intended to accommodate truck traffic such as SR 88 and 89.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Goal	Objective	Policy
Promote a safe, convenient and efficient non-motorized transportation system that is part of a balanced overall transportation system.	Integrate pedestrian and bikeway facilities into a multimodal transportation system.	Implement recommendations of the adopted Bicycle and Pedestrian Plan. Continue to update the Bicycle and Pedestrian Plan in order to be eligible for State and Federal funding. Incorporate non-motorized facilities where feasible when implementing improvements or new developments to the existing roadway network. Prioritize roadway and street designs that avoid conflicts between automobiles and non-motorized users. Require bikeway and pedestrian facilities in all appropriate future and development projects to facilitate onsite circulation for pedestrian and bicycle travel and connections to the proposed system. Pursue alternative funding mechanisms for the development of bicycle and pedestrian facilities, as well as look for potential partnerships or interagency agreements. Implement complete streets that are context sensitive to rural areas, that foster equal access by all users in the roadway design.
	Provide a pedestrian and bikeway system that emphasizes safety.	Prioritize improvement projects which will increase bicycle safety along corridors and intersections frequently used by school children, recreational cyclists, residents and visitors.
Fulfill the parking needs of local citizens, travelers and tourists.	Promote off-street parking to reduce congestion, to accommodate snow removal, and to ensure safety and mobility.	Coordinate with Caltrans and the US Forest Service to construct and maintain off-street parking facilities as needed along State highways and County roadways to serve summer and winter recreational travelers.

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

Goal	Objective	Policy
	Employ ITS strategies when feasible and cost effective.	
Promote the use of alternative		Support the use of public transportation as a transportation control measure to reduce traffic congestion and vehicle emissions.
transportation to reduce the negative impacts of single-occupant	Advance the use of Transportation Demand Management (TDM) in a thorough, cost-	Work with Caltrans and local jurisdictions to locate and develop park-and-ride lots.
vehicle travel and to increase mobility for Alpine County residents.	effective manner that is feasible and appropriate in a rural context.	Provide outreach to media, employers, and the general public to promote awareness of alternative transportation. Designate a rideshare coordinator as necessary.
		Encourage special event organizers to promote carpooling among event attendees.
Enhance sensitivity to the	Dramata transportation policies and projects	Conduct environmental review consistent with CEQA for individual projects as they advance to the implementation stage of development.
environment in all transportation decisions.	Promote transportation policies and projects that support a healthy environment.	Avoid wildlife when constructing transportation facilities contained in the proposed system whenever feasible. If sensitive areas are affected by new routes, mitigate impacts through the appropriate CEQA or NEPA process.

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

Goal	Objective	Policy	
	Ensure that transportation projects contribute to the goal of lowering vehicle emissions.	Prioritize and recommend transportation projects that minimize vehicle emissions while providing cost effective movement of people and goods.	
		Promote projects that can be demonstrated to reduce air pollution, such as alternative fuel programs.	
Reduce greenhouse gas (CUC)		Develop plans that meet the standards of the California Clean Air Act and the Federal Clean Air Act and Amendments in coordination with the local Air Pollution Control District.	
Reduce greenhouse gas (GHG) emissions.	Reduce or maintain GHG emissions from transportation-related sources in Alpine County.	Comply with State and Federal climate change regulations and standards.	
		Consider GHG emissions as part of every transportation capital improvement project decision.	
		Pursue projects with positive GHG impacts that are realistic given the rural nature of Alpine County, including transit programs, ridesharing programs, bicycle and pedestrian improvements, ITS strategies, and maintenance of existing roadways to reduce vehicle emissions.	
Provide a well-balanced regional transportation system that meets the needs of all users.	Include regional entities in the transportation planning process.	Coordinate with Caltrans, California Transportation Commission, Washoe Tribe, neighboring Transportation agencies, local governments, Federal and State resource agencies and other pertinent entities when planning transportation capital improvements.	

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

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Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Chapter 6

Functional Review

The Alpine County Local Transportation Commission (LTC) is the Regional Transportation Planning Agency for Alpine County. The LTC is a function of the five-member Alpine County Board of Supervisors, which is both the legislative and executive authority for the County.

A functional review of the Alpine County Local Transportation Commission determines the extent and efficiency of the following functional activities:

- Administration and Management,
- Transportation Planning and Regional Coordination,
- Claimant Relationships and Oversight,
- Marketing and Transportation Alternatives, and
- Grant Applications and Management.

Administration and Management

The Board of Supervisors (BOS) sits as the Local Transportation Commission, Water Agency (WA), and Board of Equalization (BOE) for Alpine County. The BOS is made up of five District representatives. It meets at 9:00 a.m. on the first and third Tuesday of the month at the Board Chambers, County Administration Building, located at 99 Water Street in Markleeville. Live audio from BOS meetings is also available online via the County's website.

BOS members serving during this audit period include the following:

- David Griffith,
- Ron Hames,
- Donald M. Jardine,
- Katherine Rakow.
- Mary Rawson, and
- Terry Woodrow.

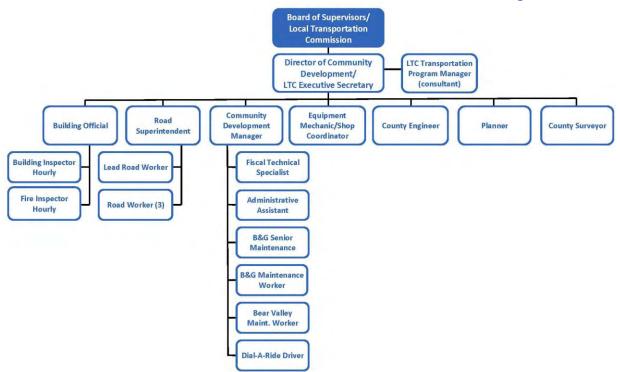
The Director of Community Development serves as the LTC's Executive Director, while the Transportation Program Manager provides planning and administrative support for the LTC as well as the transit program. While other County staff may provide additional support for the LTC, the majority of LTC functions are managed by these two positions, which is sufficient. There is no turnover. County staff are offered health insurance, vacation and sick leave, paid holidays, retirement benefits (CalPERS), and a voluntary deferred compensation program.

The RTPA processes TDA claims in an accurate and timely manner. It regularly receives, reviews, and acts upon reports on the progress and financial status of ongoing and special projects and programs.

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

Exhibit 6.1 Organizational Chart



Source: Alpine County Local Transportation Commission.

A Social Services Transportation Advisory Council (SSTAC) is in place and participates in the annual unmet transit needs process. Members serve for a three-year term. While the SSTAC typically has a quorum of five members, four positions have been vacant for several years.

Transportation Planning and Regional Controls

The LTC's Regional Transportation Plan (RTP) was last updated in 2015. It is scheduled to be updated again in 2020. It comprehensively identifies, documents, and assesses transportation needs within the RTPA's jurisdiction, providing transportation policy guidance and effectively identifying key issues. It accounts for anticipated growth across a 20-year horizon and includes appropriate stakeholder and community outreach. The RTP includes goals, objectives, supporting policies, and action items.

The LTC expects to go out to bid for both an RTP update and update of the Short Range Transit Plan, which also expires in 2020, within the next year. LTC recently completed an Active Transportation Plan, even though it is difficult to get ATP projects funded.

LTC often works with surrounding counties on planning efforts, as Alpine County often does not qualify for funding on its own. A Systemic Safety Analysis (completed in September 2018) was undertaken with Alpine and Amador counties. The LTC is currently involved in a zero-emission vehicle (ZEV) plug-in study with Amador, Calaveras, and Tuolumne counties. The final report, expected to be available in August 2019, will include recommendations on where to put ZEV charging stations, what type to use, etc. Alpine County tries to maximize its planning efforts even though it is not competitive statewide.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Most recently, Alpine County completed a wayfinding study, which included good recommendations on how to improve guide signs throughout the county. It recently implemented a five-county bicycle tourism and safety grant to look at promoting bicycle tourism and safety corridors.

Claimant Relationships and Oversight

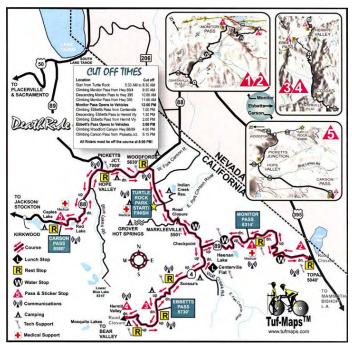
Alpine County is the LTC's only TDA claimant, and the same staff is responsible for handling grants and allocations on behalf of the LTC and the operator. The LTC does not have a stand-alone TDA claims manual, but does include the claims process within its Policies and Procedures Manual. A stand-alone TDA claims manual is not warranted. The LTC does not utilize TDA Article 3 funds for bike/pedestrian projects. There are no Article 4.5 claimants in Alpine County; as such, LTC does not have a process for such claims. Transit claimant performance metrics are reviewed as part of the claims process.

Marketing and Transportation Alternatives

As the transit operator as well as the LTC, Alpine County markets its transit program primarily through its transit webpage and a service brochure. While the most recent SRTP (completed in 2016) included additional potential alternatives to traditional transit (such as a volunteer driver program and vanpools), these have not been implemented.

Active transportation is very important to Alpine County. Alpine County is home to the annual 130-mile Death Ride, which is sponsored by the Alpine County Chamber of Commerce. The Death Ride usually draws around 2,500 entries. Two state highways are closed periodically during the 12-hour event, which includes climbs up five peaks greater than 8,000 feet in elevation. In preparation for this extreme ride, there are many cyclists who train on the roads and highways of Alpine County all summer. To optimize conditions for the cyclists, the LTC convinced Caltrans not to install rumble strips on the medians or shoulders of the state highways.

The LTC does not use Article 3 funds, as Alpine County does not have any Class 1 bike lanes, but relies on other funding for its bicycle



improvements. It recently installed Share the Road safety signs and bike route signage, and has obtained funding to install bike racks. A future project will add Class 2 bike shoulders (four- to five-foot shoulders created by narrowing travel lanes from 12 feet to 11 feet) on Hot Springs Road between Markleeville and Grover Hot Springs State Park.

Grant Applications and Management

The Transportation Program Manager handles grants on behalf of the LTC and the transit operator. Alpine County is often not competitive on its own with respect to many grants, so it often partners with other counties.

21

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

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Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Chapter 7

Findings and Recommendations

Conclusions

Moore & Associates concludes the Alpine County Local Transportation Commission, functioning as the RTPA, 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.

Findings and Recommendations

Based on the current review, we submit the no TDA compliance findings.

Moore & Associates identified one functional finding. While this finding is not a compliance finding, we feel it warrants being addressed within this review:

1. For several years, the LTC's Social Services Transportation Advisory Council has functioned with a minimum number of members, with several positions vacant.

In completing this Triennial Performance Audit, Moore & Associates submits the following findings and recommendations for the Alpine County Local Transportation Commission. They have been divided into two categories: TDA Program Compliance Findings and Recommendations and Functional Findings and Recommendations. TDA Program Compliance Findings and Recommendations are intended to assist in bringing the agency into compliance with the requirements and standards of the TDA, while Functional Findings and Recommendations address issues identified during the TPA that are not specific to TDA compliance. Each finding is presented with the elements identified within the 2011 *Government Auditing Standards* as well as one or more recommendations.

Given there are no compliance findings, only functional findings and recommendations are provided.

Functional Finding 1: For several years, the LTC's Social Services Transportation Advisory Council has functioned with a minimum number of members, with several vacant.

Criteria: PUC 99238 requires each RTPA to establish a Social Services Transportation Advisory Council (SSTAC), which is charged with participation in the annual unmet transit needs process and providing input on major transit issues. Nine specific positions are identified in the legislation, with other positions at the RTPA's discretion:

- One representative of potential transit users who is 60 years of age or older.
- One representative of potential transit users who is disabled.
- Two representatives of the local social service providers for seniors, including one representative of a social service transportation provider, if one exists.
- Two representatives of the local social service providers for the disabled, including one representative of a social service transportation provider, if one exists.
- One representative of a local social service provider for persons of limited means.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

• Two representatives from the local consolidated transportation service agency, if one exists, including one representative from an operator, if one exists.

Condition: Filling positions on the LTC's SSTAC can be challenging given the nature of the county. In 2017, the SSTAC included the following representation:

- One representative of potential transit users who is 60 years of age or older.
- One representative of the local social service providers for the disabled.
- One representative of the local social service providers for seniors, including being a representative of a social service transportation provider, if one exists.
- One representative of a local social service provider for persons of limited means.
- One representative of potential users from the Washoe Tribe.

While this rather modest group does provide appropriate representation across the key populations, it barely meets the requirement for a quorum. The SSTAC has consisted of only five members for the past several years. In April 2018, the LTC eliminated two positions, resulting in a total SSTAC of seven members. While this resulted in a greater likelihood of a quorum for each meeting, the SSTAC is still less than fully represented.

Cause: Recruitment of persons in the appropriate roles in a small community can be difficult.

Effect: If there is not a quorum due to an absence, decisions may need to be postponed.

Recommendation: Conduct ongoing recruitment for additional members of the SSTAC.

Recommended Action(s): While it is unlikely that all seven positions of the SSTAC will be filled every year, we recommend LTC undertake several simple actions to raise the profile of the SSTAC within the community and improve access to information about the group. This includes posting general information on the County's website (including the purpose of the group, its role as an advisory board, and the nature of its representation) as well as posting information about open positions along with the application process. The LTC may wish to consider promoting open positions in other ways as well.

Timeline: Beginning FY 2019/20.

Anticipated Cost: Very modest.

Exhibit 7.1 Summary of Recommendations

Functional Recommendations		Importance	Timeline
1	Conduct ongoing recruitment for additional members of the SSTAC.	Medium	Beginning FY 2019/20



Alpine County Local Transportation Commission Alpine County Transit

Triennial Performance Audit for FY 2015/16, FY 2016/17, and FY 2017/18













Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Table of Contents

Chapter 1: Executive Summary	01
Chapter 2: Audit Scope and Methodology	05
Chapter 3: Program Compliance	09
Chapter 4: Prior Recommendations	13
Chapter 5: Data Reporting Analysis	15
Chapter 6: Performance Analysis	17
Chapter 7: Functional Review	25
Chapter 8: Findings and Recommendations	33

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

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Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Chapter 1

Executive Summary

In 2019, the Alpine County Local Transportation Commission selected Moore & Associates, Inc. to prepare Triennial Performance Audits of itself as the RTPA, and the transit operator to which it allocates TDA funding.

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

The Triennial Performance Audit is designed to be an independent and objective evaluation of Alpine County Transit 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 Alpine County Transit for the period Fiscal Year 2015/16 through Fiscal Year 2017/18.

The Alpine County Community Development Department operates Alpine County Transit, a Dial-A-Ride service available to the general public and persons needing transportation assistance. Regular service operates within the Markleeville local area, Minden, Gardnerville, Dresslerville, Kirkwood, South Lake Tahoe, and the Carson City area. Service is available to the general public Monday, Tuesday, Wednesday, and Friday from 8:00 a.m. to 5:00 p.m. This service does not operate on weekends or designated holidays.

Special needs service is available for medical and social security needs only. The service operates to and from Placerville, Reno, Sacramento, and Truckee. Special needs service is available on Thursday from 8:00 a.m. to 5:00 p.m. This service does not operate on weekends or designated holidays.

This performance audit was conducted in accordance with generally accepted government auditing standards. Those standards require 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*.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

The Triennial Performance Audit includes five elements:

- Compliance requirements,
- Follow-up of prior report recommendations,
- Analysis of program data reporting,
- Performance Audit, and
- Functional review.

Test of Compliance

Moore & Associates concludes Alpine County Transit complies with the Transportation Development Act (TDA) regulations in an efficient and effective manner.

Status of Prior Recommendations

- Count passengers in terms of one-way (unlinked) trips not round trips as per TDA.
 Status: Implemented.
- 2. In an effort to preserve the life of the Alpine County Transit minivan, Alpine County Transit should use the minibus as the primary transit vehicle.

Status: Not implemented/no longer relevant.

Findings and Recommendations

Based on discussions with the County and its contracted staff, analysis of program performance, and a review of program compliance and function, Moore & Associates has not identified any compliance findings for Alpine County Transit.

Moore & Associates has identified three functional findings. While these findings do not affect TDA compliance, the auditor believes they are significant enough to be included within this report:

- 1. While in compliance with TDA requirements, the farebox recovery ratio declined each year of the current audit period.
- 2. Use of the cutaway vehicle is limited, and is expected to decrease further once the minivan is replaced.
- 3. Operating data is reported inconsistently among internal and external reports.

In completing this Triennial Performance Audit, Moore & Associates submits the following recommendations for Alpine County Transit. They are divided into two categories: TDA Program Compliance Recommendations and Functional Recommendations. TDA Program Compliance Recommendations are intended to assist in bringing the operator into compliance with the requirements and standards of the TDA, while Functional Recommendations address issues identified during the audit that are not specific to TDA compliance.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Exhibit 1.1 Summary of Audit Recommendations

Funct	Functional Recommendations		Timeline
1	Identify strategies for maintaining or improving the County's farebox recovery ratio year-over-year.	Medium	Ongoing
2	Use the cutaway vehicle for longer trips and/or group trips to extend the life of the minivan.	Medium	FY 2019/20
3	Determine the cause for data reporting inconsistencies and strive to resolve them.	Medium	FY 2019/20

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

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Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Chapter 2

Audit Scope and Methodology

The Triennial Performance Audit (TPA) of Alpine County Transit's public transit program covers the three-year period ending June 30, 2018. 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 2019, the Alpine County Local Transportation Commission selected Moore & Associates, Inc. to prepare Triennial Performance Audits of itself as the RTPA and the transit operator to which it allocates TDA funding. Moore & Associates is a consulting firm specializing in public transportation. Selection of the firm followed a competitive procurement process.

The Triennial Performance Audit is designed to be an independent and objective evaluation of Alpine County Transit. 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 transit operator to which it allocates TDA funds.

This performance audit was conducted in accordance with generally accepted government auditing standards. Those standards require 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 its 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 Audit Standards* published by the U.S. Comptroller General.

Objectives

A Triennial Performance Audit has five primary objectives:

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

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Scope

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

- 1. A review of compliance with TDA requirements and regulations.
- 2. An assessment of the implementation of recommendations contained in prior performance audits.
- 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. Examination of the following functions:
 - General management and organization;
 - Service planning;
 - Scheduling, dispatching, and operations;
 - Personnel management and training;
 - Administration;
 - Marketing and public information; and
 - Fleet maintenance.
- 5. 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 Alpine County Transit included thorough review of documents relevant to the scope of the audit, as well as information contained on the County's website. The documents reviewed included the following (spanning the full three-year period):

- Triennial Performance Audit report for the prior audit period;
- Monthly performance reports;
- State Controller Reports;
- Annual budgets;
- TDA fiscal audits;
- Transit marketing collateral;
- Fleet inventory;
- Preventive maintenance schedules and forms;
- National Transit Database reports;
- Short Range Transit Plan; and
- Organizational chart.

The methodology for this review included interviews with Scott Maas (Transportation Program Manager) and Brian Peters (Director of Community Development) on July 11, 2019.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

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,
 - Progress in implementing prior recommendations,
 - Data analysis,
 - Performance measures and trends,
 - Functional audit, and
 - Findings and recommendations.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

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Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Chapter 3

Program Compliance

This section examines Alpine County Transit'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. The Alpine County Local Transportation Commission 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.

Compliance was determined through discussions with County staff as well as a physical inspection of relevant documents including the fiscal audits for each year of the triennium, TDA claim forms, State Controller annual filings, California Highway Patrol terminal inspections, year-end performance reports, and other compliance-related documentation.

Alpine County Transit met the test of compliance with respect to all Transportation Development Act (TDA) regulations.

Recent Changes Regarding Compliance

Two changes specific to the TDA and TDA funding went into effect beginning July 1, 2016. The first change was an amendment to the Public Utilities Code specific to the definition of operating cost and what costs can be excluded. It should be noted that many of the exclusions pertain only to *changes* in certain costs, either over the prior year or beyond the change in the Consumer Price Index. They do not apply to *all* costs related to specified exclusion categories.

Senate Bill 508, dated October 9, 2015, amended Section 99268.17 to read as follows:

99268.17 (a) Notwithstanding subdivision (a) of Section 99247, the following costs shall be excluded from the definition of "operating cost" for the purposes of calculating any required ratios of fare revenues to operating cost specified in this article:

- (1) The additional operating costs required to provide comparable complementary paratransit service as required by Section 37.121 of Title 49 of the Code of Federal Regulations, pursuant to the federal Americans with Disabilities Act of 1990 (42 U.S.C. Sec. 120101 et seq.), as identified in the operator's paratransit plan pursuant to Section 37.139 of Title 49 of the Code of Federal Regulations that exceed the operator's costs required to provide comparable paratransit service in the prior year as adjusted by the Consumer Price Index.
- (2) Cost increases beyond the change in the Consumer Price Index for all of the following:
 - (A) Fuel.
 - (B) Alternative fuel programs.
 - (C) Power, including electricity.



Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

- (D) Insurance premiums and payments in settlement of claims arising out of the operator's liability.
- (E) State and federal mandates.
- (3) Startup costs for new services for a period of not more than two years.
- (b) The exclusion of costs from the definition of operating costs in subdivision (a) applies solely for the purpose of this article and does not authorize an operator to report an operating cost other than as defined in subdivision (a) of Section 99247 or a ratio of fare revenue to operating cost other than as that ratio is described elsewhere in this article, to any of the following entities:
 - (1) The Controller pursuant to Section 99243.
 - (2) The entity conducting the fiscal audit pursuant to Section 99245.
 - (3) The entity conducting the performance audit pursuant to Section 99246.

Operators should be aware that the reporting forms for the State Controller may not be updated to reflect these exclusions for FY 2016/17. Until revised forms are made available, it is important for agencies to ensure any exclusions from operating cost are clearly itemized within TDA audits or other farebox revenue ratio calculations so that compliance can be clearly assessed.

The second change, also contained within Senate Bill 508, related to the type of funds that can be used to supplement farebox revenue. Prior to this bill, "local funds" was defined as "revenues derived from taxed imposed by the operator or by a county transportation commission." Senate Bill 508 amended Section 99268.19 to read:

99268.19 If fare revenues are insufficient to meet the applicable ratio of fare revenues to operating cost required by this article, an operator may satisfy that requirement by supplementing its fare revenues with local funds. As used in this section, "local funds" means any non-federal or non-state grant funds or other revenues generated by, earned by, or distributed to an operator.

This expanded definition opens up new revenue sources that can be used to offset farebox shortfalls. Applicable revenues include funds received through advertising, interest income, sale of surplus vehicles, and other such sources. While these funds are no longer limited to those generated by local taxes, they cannot be state or federal funds.

Another change affected the submittal deadline for the State Controller's Transit Operators Financial Transaction Report. Beginning with Fiscal Year 2016/17, the submittal deadline was changed from 110 days following the end of the fiscal year (typically October 18-20) to seven months following the end of the fiscal year (January 31). The original submittal deadline was in force during reporting for FY 2015/16, while the new deadline was utilized for FY 2016/17 forward.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Exhibit 3.1 Transit Development Act Compliance Requirements

Compliance Element	Reference	Compliance	Comments
State Controller Reports submitted on time.	PUC 99243	In compliance	FY 2015/16: October 17, 2016 FY 2016/17: January 30, 2018 FY 2017/18: January 31, 2019
Fiscal and compliance audits submitted within 180 days following the end of the fiscal year (or with up to 90-day extension).	PUC 99245	In compliance	FY 2015/16: March 30, 2017 FY 2016/17: March 29, 2018 FY 2017/18: March 29, 2019 With 90-day extension as allowed under TDA.
Operator's terminal rated as satisfactory by CHP within the 13 months prior to each TDA claim.	PUC 99251 B	Not applicable	A CHP terminal rating is not required given the County uses 9-passenger vehicles or smaller.
Operator's claim for TDA funds submitted in compliance with rules and regulations adopted by the RTPA.	PUC 99261	In compliance	
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	Not applicable	
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 2015/16: +2.10% FY 2016/17: +29.71% FY 2017/18: +19.73% Annual budgeting must include CalPERS costs, which may vary depending on the driver's anticipated work hours. As a result, the budget for any given year may be more than 15 percent higher than the prior year. Source: County budgets, FY 2015 – FY 2017.
The operator's definitions of performance measures are consistent with the Public Utilities Code Section 99247.	PUC 99247	In compliance	
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	In compliance	FY 2015/16: 12.69% FY 2016/17: 7.70% FY 2017/18: 5.41% Effective May 4, 2010, the LTC adopted a minimum farebox ratio requirement of 1.0%. Source: TDA fiscal audits, FY 2016 – FY 2018.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Compliance Element	Reference	Compliance	Comments
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	Not applicable	
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	County staff are eligible for retirement benefits through CalPERS.
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	
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	In compliance	The County did not qualify using either method, and did not use any STA funds for operating purposes during the audit period.
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 capital and 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	

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Chapter 4

Prior Recommendations

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

The prior audit – completed in June 2016 by LSC Transportation Consultants, Inc. for the three fiscal years ending June 30, 2015 – included two recommendations:

1. Count passengers in terms of one-way (unlinked) trips not round trips as per TDA.

Discussion: In order to be consistent with TDA definitions and standard data collection procedures for public transit, the prior auditor recommended Alpine County Transit record the number of passengers as one-way trips in performance spreadsheets. In other words, each boarding and alighting is considered one trip. The auditor suggested another column be added in the Daily Vehicle Travel Log for One-way Passenger Trips. The revised data collection method would make Alpine County Transit consistent with industry standards as well as improve the accuracy of performance statistics.

Progress: Management has been monitoring this issue closely and confirmed that each trip reported during the audit period is a one-way trip. Ridership has decreased and continues to decrease.

Status: Implemented.

2. In an effort to preserve the life of the Alpine County Transit minivan, Alpine County Transit should use the minibus as the primary transit vehicle.

Discussion: At the time of the prior audit, the minivan had more than 100,000 miles and was becoming more costly to maintain as it had reached the end of its useful life. The minibus only had around 30,000 miles and a longer potential lifespan. The prior audit noted Alpine County had set forth a financial plan to save local funds for the replacement of the minibus over the next seven years. It was not expected that the minivan would be replaced using federal or local funds but with a county surplused vehicle at some point. Given the uncertainty of replacement funding for the minivan, the prior auditor recommended Alpine County Transit preserve the life of the minivan by establishing the minibus as the primary transit vehicle.

Progress: The County's TAM Plan (updated May 2019) shows the minibus with approximately 26,000 miles and the minivan with approximately 155,000 miles, indicating this recommendation has not been implemented. However, this issue is not so clear-cut. The County continues to use the minivan as its primary vehicle due to driver preference.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Most of the time the van carries only one person, and the minivan is easier to maneuver than the eight-passenger cutaway. The primary disadvantage with the minivan is its low clearance and inability to be fitted with chains. In the winter, the cutaway bus must be used as it has automatic chains on it. The County is currently looking at replacing the minivan with a Ford Transit vehicle using accumulated FTA Section 5311 funds and accumulated STA funds for a local match. The County expects the Section 5311 standard agreement to be approved in Fall 2019 and to take delivery of the replacement vehicle in mid- to late 2020.

While this recommendation was not implemented, we have determined it to be no longer relevant due to driver preference for the smaller vehicle and the County's current plan for its replacement. We have suggested to the County it re-assess the designated Useful Life Benchmark (ULB) for its cutaway vehicle. The current ULB for the cutaway bus is 10 years. However, due to its use as a backup vehicle and its extremely low mileage accrual, the County may wish to increase that ULB to 15 or even 20 years, depending on its experience with the vehicle. This would need to be done through annual NTD reporting.

Status: Not implemented/no longer relevant.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

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 Alpine County Transit to the State Controller and Federal Transit Administration specific to the audit period. Submissions to these entities were included within the State Controller's Transit Operators Financial Transactions Report and the National Transit Database (NTD) report, respectively.

Exhibit 5.1 provides a comparison between performance data reported within the NTD and State Controller reports for the current audit period (ending FY 2015/16 through FY 2017/18), as well as the data reported via System Performance Reports and County Audited Financial Statements. Passengers and FTE are not discussed, as they were consistently reported each year.

- Operating Cost: In each fiscal year, operating cost was inconsistently reported among internal and external sources. In FY 2015/16, the monthly performance data was consistent with what was reported to the NTD, but that figure was approximately one percent lower than that reported to the State Controller and 2.6 percent higher than that reported in the TDA fiscal audit. In FY 2016/17, the monthly performance data and NTD report were consistent, as were the State Controller Report and TDA fiscal audit, but the two operating costs were approximately 15 percent apart. This same pattern was noted in FY 2017/18, though the variance increased to 18.1 percent.
- Fare Revenue: In FY 2015/16 and FY 2017/18, the fare revenue reported in the monthly performance reports and NTD was slightly different than that reported in the TDA fiscal audit and State Controller Report. In FY 2016/17, all data was consistent.
- Vehicle Service Hours: A similar pattern was noted with respect to vehicle service hours (VSH). In FY 2015/16, VSH reported to the NTD and State Controller was nearly five percent lower than that reported on the monthly performance report. In FY 2016/17 and FY 2017/18, the State Controller reports were consistent with the monthly performance reports, but were 15.2 percent higher and 50 percent higher than the NTD reports, respectively.
- Vehicle Service Miles: A similar pattern was also noted with respect to vehicle service miles (VSM). In FY 2015/16, VSM reported to the NTD and State Controller was slightly lower than that reported on the monthly performance report. In FY 2016/17 and FY 2017/18, the State Controller reports were consistent with the monthly performance reports, but were 12.2 percent higher and 6.4 percent lower than the NTD reports, respectively.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Exhibit 5.1 Data Reporting Consistency

	Exhibit 5.1 Data Reporting Consistency			
Performance Measure	System-Wide			
Terrormance wicasure	FY 2015/16	FY 2016/17	FY 2017/18	
Operating Cost (Actual \$)				
Monthly Performance Reports	\$70,941	\$72,159	\$84,087	
TDA fiscal audit	\$69,097	\$83,217	\$99,338	
National Transit Database	\$70,941	\$72,159	\$84,087	
State Controller Report	\$71,559	\$83,217	\$99,338	
Fare Revenue (Actual \$)				
TDA fiscal audit	\$8,770	\$6,405	\$5,370	
Monthly Performance Reports	\$8,336	\$6,405	\$5,462	
National Transit Database	\$8,336	\$6,405	\$5,462	
State Controller Report	\$8,770	\$6,405	\$5,370	
Vehicle Service Hours (VSH)				
Monthly Performance Reports	813	864	1,337	
National Transit Database	774	750	894	
State Controller Report	774	864	1,337	
Vehicle Service Miles (VSM)				
Monthly Performance Reports	16,463	15,350	15,690	
National Transit Database	16,140	13,683	16,758	
State Controller Report	16,140	15,350	15,690	
Passengers				
Monthly Performance Reports	479	454	601	
National Transit Database	479	454	601	
State Controller Report	479	454	601	
Full-Time Equivalent Employees				
State Controller Report	1	1	1	
Per TDA methodology	1	1	1	

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

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 interrelationships 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) – excludes the following:

1

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.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

- 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.² 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. (Fare revenue does not include additional local revenues which can be used to supplement the farebox recovery ratio.)

18

² A vehicle is considered to be in revenue service despite a no-show or late cancellation if the vehicle remains available for passenger use.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

TDA Required Indicators

To calculate the TDA indicators for Alpine County Transit, the following sources were employed:

- Operating Cost was not independently calculated as part of this audit. Operating Cost data
 were obtained via Comprehensive Annual Financial Reports for each fiscal year covered by
 this audit. Operating Cost from the reports was compared against that reported to the State
 Controller and NTD and was determined 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 Comprehensive Annual Financial Reports for each fiscal year covered by this audit. Fare revenue from the reports is consistent with TDA guidelines.
- Vehicle Service Hours (VSH) data were obtained via System Performance Reports for each fiscal year covered by this audit. Data from these reports were then compared with information included within the County's monthly performance data summary reports. The County's calculation methodology is consistent with PUC guidelines.
- Vehicle Service Miles (VSM) data were obtained via System Performance Reports for each fiscal year covered by this audit. Data from these reports were then compared with information included within the County's monthly performance data summary reports. This methodology is consistent with PUC guidelines.
- Unlinked trip data were obtained via System Performance Reports for each fiscal year covered by this audit. Data from these reports were then compared with information included within the County's monthly performance data summary reports. The County calculation methodology is consistent with PUC guidelines.
- Full-Time Equivalent (FTE) methodology was provided by the County. The data reported to the State Controller is consistent with the TDA definition (hours worked divided by 2,000).

Given the variances with the data variances observed in the prior chapter, we have elected to use State Controller Report data in the following analysis. For each year of the triennium, the State Controller Report was consistent with at least one other data source for all metrics.

System Performance Trends

Operating cost experienced a net increase of 34.6 percent between FY 2012/13 and FY 2017/18. The operating cost is not only reflective of the number of trips provided, but also a difference in the cost of benefits depending on how many hours the driver actually works. Fare revenue has consistently declined during the current audit period, peaking in FY 2015/16. Fare revenue decreased 38.8 percent between FY 2015/16 and FY 2017/18.

Vehicle service hours (VSH) declined 35.4 percent between FY 2012/13 and FY 2015/16, then rebounded to a peak of 1,337 (72.7 percent) in FY 2017/18. However, this resulted in a net increase of just 11.5 percent across the six-year period. Vehicle service miles (VSM) was somewhat more consistent, with a net decrease of 9.1 percent within the same period and more modest year-over-year changes.

Ridership during the current audit period is significantly lower than during the prior audit. It is possible the prior TDA auditor overestimated the number of one-way trips during the prior audit period, when

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

many trips were reported as round-trips. This would account for some of the difference, but there has still been a significant decline.

FTE was consistently reported as one full-time employee equivalent. Even when applicable hours for other employees are taken into account, this figure still rounds to one.

Productivity metrics generally declined across the audit period, though efficiency measures fluctuated. Passengers/VSM saw little change, while Operating Cost/VSM rose each year. VSM/VSH declined each year.

Exhibit 6.1 System Performance Indicators

			EXIIID	it o.i system	i Periormano	e muicators
D. (System-wide			
Performance Measure	FY 2012/13	FY 2013/14	FY 2014/15	FY 2015/16	FY 2016/17	FY 2017/18
Operating Cost (Actual \$)	\$73,795	\$66,394	\$69,115	\$71,559	\$83,217	\$99,338
Annual Change		-10.0%	4.1%	3.5%	16.3%	19.4%
Fare Revenue (Actual \$)	\$5,437	\$7,100	\$7,046	\$8,770	\$6,405	\$5,370
Annual Change		30.6%	-0.8%	24.5%	-27.0%	-16.2%
Vehicle Service Hours (VSH)	1,199	931	827	774	864	1,337
Annual Change		-22.4%	-11.2%	-6.4%	11.6%	54.7%
Vehicle Service Miles (VSM)	17,260	17,492	16,899	16,140	15,350	15,690
Annual Change		1.3%	-3.4%	-4.5%	-4.9%	2.2%
Passengers	896	854	922	479	454	601
Annual Change		-4.7%	8.0%	-48.0%	-5.2%	32.4%
Employees	1	1	1	1	1	1
Annual Change		0.0%	0.0%	0.0%	0.0%	0.0%
Performance Indicators						
Operating Cost/VSH (Actual \$)	\$61.55	\$71.31	\$83.57	\$92.45	\$96.32	\$74.30
Annual Change		15.9%	17.2%	10.6%	4.2%	-22.9%
Operating Cost/Passenger (Actual	\$82.36	\$77.74	\$74.96	\$149.39	\$183.30	\$165.29
Annual Change		-5.6%	-3.6%	99.3%	22.7%	-9.8%
Passengers/VSH	0.75	0.92	1.11	0.62	0.53	0.45
Annual Change		22.7%	21.5%	-44.5%	-15.1%	-14.5%
Passengers/VSM	0.05	0.05	0.05	0.03	0.03	0.04
Annual Change		-6.0%	11.8%	-45.6%	-0.3%	29.5%
Farebox Recovery	7.4%	10.7%	10.2%	12.3%	7.7%	5.4%
Annual Change		45.1%	-4.7%	20.2%	-37.2%	-29.8%
Hours/Employee	1199.0	931.0	827.0	774.0	864.0	1337.0
Annual Change		-22.4%	-11.2%	-6.4%	11.6%	54.7%
TDA Non-Required Indicators						
Operating Cost/VSM	\$4.28	\$3.80	\$4.09	\$4.43	\$5.42	\$6.33
Annual Change		-11.2%	7.8%	8.4%	22.3%	16.8%
VSM/VSH	14.40	18.79	20.43	20.85	17.77	11.74
Annual Change		30.5%	8.8%	2.0%	-14.8%	-33.9%
Fare/Passenger	\$6.07	\$8.31	\$7.64	\$18.31	\$14.11	\$8.94
Annual Change		37.0%	-8.1%	139.6%	-22.9%	-36.7%

Sources: All FY 2012/13 – FY 2014/15 data from prior Triennial Performance Audit. FY 2015/16 – FY 2017/18 data from State Controller Reports.

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

Exhibit 6.2 System Ridership

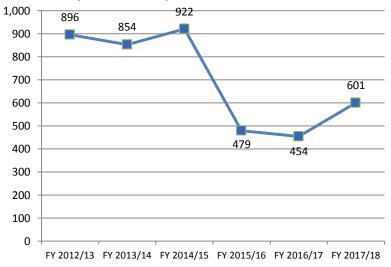


Exhibit 6.3 System Operating Cost/VSH

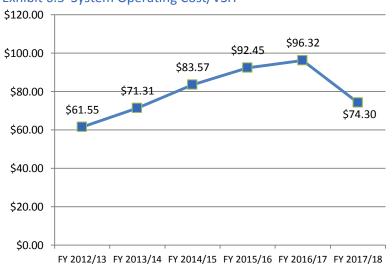


Exhibit 6.4 System Operating Cost/VSM

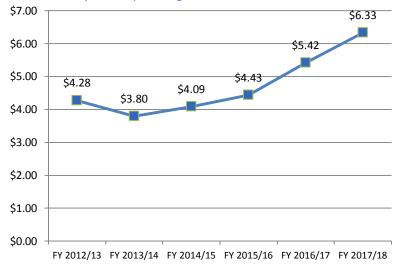
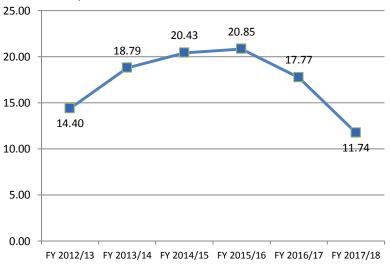


Exhibit 6.5 System VSM/VSH

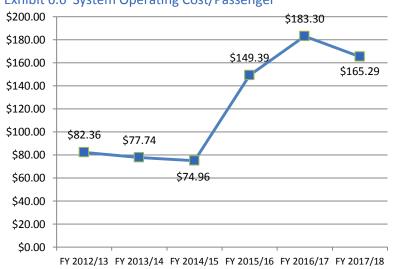


21

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report







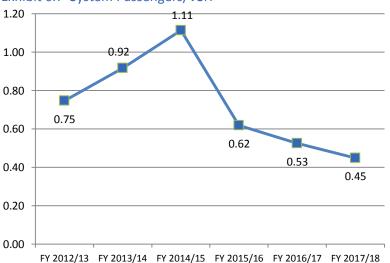


Exhibit 6.8 System Passengers/VSM

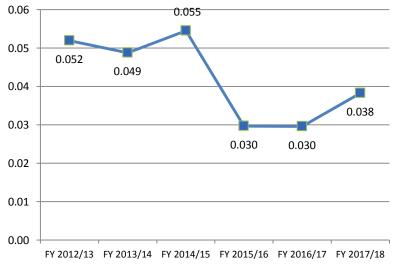
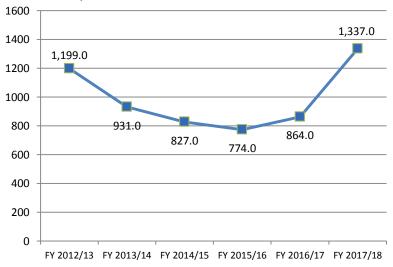


Exhibit 6.9 System VSH/FTE



22

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

Exhibit 6.10 System Farebox Recovery

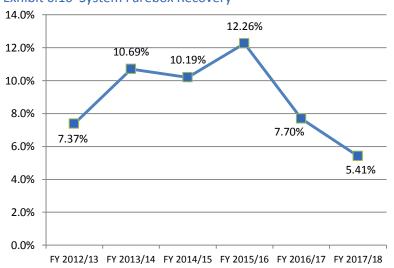
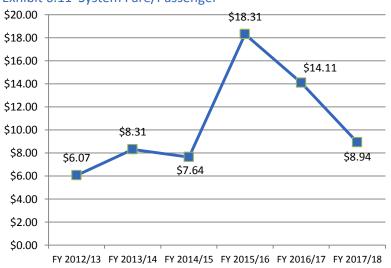


Exhibit 6.11 System Fare/Passenger



Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

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Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Chapter 7

Functional Review

A functional review of Alpine County Transit is intended to assess the effectiveness and efficiency of the operator. Following a general summary of Alpine County'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 Alpine County Transit through its transit program:

- 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 Alpine County Community Development Department operates Alpine County Transit, a Dial-A-Ride service available to the general public and persons needing transportation assistance. Regular service operates within the Markleeville local area, Minden, Gardnerville, Dresslerville, Kirkwood, South Lake Tahoe, and the Carson City area. Service is available to the general public Monday, Tuesday, Wednesday, and Friday from 8:00 a.m. to 5:00 p.m. This service does not operate on weekends or designated holidays.



Special needs service is available for medical and social security needs only. The service operates to and from Placerville, Reno, Sacramento, and Truckee. Special needs service is available on Thursday from 8:00 a.m. to 5:00 p.m. This service does not operate on weekends or designated holidays.

Trips are provided on a first-come, first-served basis. Requests for regular service are encouraged to be scheduled 48 hours in advance prior to pick up. Special needs service encourages scheduling seven days prior to the desired travel date.

Exhibit 7.1 Current Fares

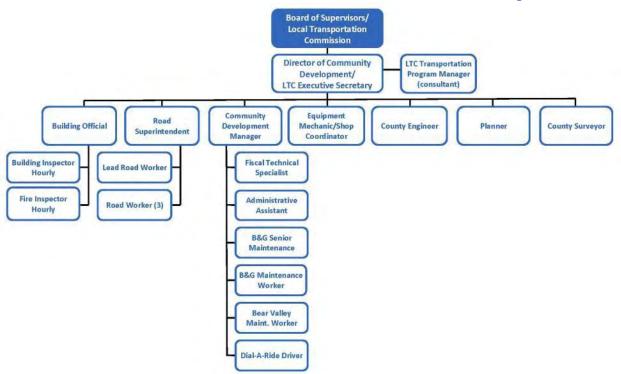
Fare Category	One-way trip	Round trip
Markleeville Local Area	\$2.00	\$4.00
Minden, Gardnerville, Dresslerville, Kirkwood, and South Lake Tahoe	\$4.00	\$8.00
Carson City Area	\$5.00	\$10.00

Triennial Performance Audit, FY 2015/16 - FY 2017/18

Draft Report

Transit is located within Alpine County's Community Development Department. The Director of Community Development also serves as the Executive Secretary of the Local Transportation Commission. The Director of Community Development oversees a contracted Transportation Program Manager as well as the Dial-A-Ride Driver and maintenance staff. The Transportation Program Manager also provides oversight of the County's transit program. There are clear lines of communication, with management providing regular monitoring of the transit program, though the driver generally works with little supervision on a day-to-day basis.

Exhibit 7.2 Organizational Chart



Source: Alpine County.

The Alpine County Board of Supervisors (BOS) is the governing board for the County's transit program. The BOS meets at 9:00 a.m. on the first and third Tuesday of the month in the County Board Chambers at the County Administration Building, located at 99 Water Street in Markleeville. All meetings are open to the public. Meetings are accessible by the County's Dial-A-Ride service.

There is no citizen's advisory committee beyond the Social Services Transportation Advisory Council (SSTAC). Persons having a concern/question regarding transit typically raise it at a regular Board of Supervisors meeting.

Service Planning

Alpine County's most recent Short Range Transit Plan, prepared by a consultant, was adopted in February 2016. It included a review of existing conditions as well as a recommended transit plan. Potential service alternatives included improved connectivity to the Lake Tahoe area, connectivity with transit operators in neighboring counties, participation in the CTAA vanpool program, hiring a backup

26

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

driver, implementation of a volunteer driver program, and provision of special event transportation. The recommended service plan primarily called for the maintenance of status quo operations, the hiring of a backup driver, and implementation of service alternatives as funding allows. The County has hired a backup driver but has not implemented other alternatives. The SRTP expires in 2020 and is expected to be updated soon. The most recent customer survey was conducted as part of the prior SRTP.

Transit service is provided for the general public, but there are few general public riders. Most rides are reimbursed through the County's Health and Human Services (HHS) and Behavioral Health Services (BHS) departments. The County originally set up a voucher program, and certain conditions fully reimburse the cost of service (i.e., transportation to Truckee and back for dialysis). Other riders need transportation for general services; there is no grocery store in Alpine County, only a general store with limited selection. It is estimated that only about 20 unique riders compose the entire Dial-A-Ride customer base. As a result, losing just one or two riders can have a significant impact.

Scheduling, Dispatch, and Operations

The Dial-A-Ride program is staffed by one permanent, part-time driver and an as-needed back-up driver. The back-up driver fills in approximately four to five times per year. Both drivers are represented through the Alpine County Employees' Association as part of the Operating Engineers' Local 3, AFL-CIO.

The Dial-A-Ride driver self-dispatches. Customers call into a dedicated number and leave a message. The driver comes in, picks up messages, and schedules trips.

Revenue collection is via drop-vault fareboxes onboard both transit vehicles. The weekly cash exposure is very modest. Once or twice a month, the Roads Department's Cost Accountant empties the vault, which is counted by two people. Cameras are installed inside and outside the vehicles. The vehicles are parked overnight in the secure Roads Department yard, which is fully fenced with barbed wire at the top. Gate access requires a special pass.

Personnel Management and Training

Driver training is coordinated with Amador Transit, located about 85 miles to the southwest. The County's driver attends training approximately once per year. Amador Transit does not charge to include Alpine County's driver in training activities. In return, Alpine County often signs over small funding allocations that are too small for any meaningful expenditure to Amador County.

Administration

The Transportation Program Manager works with the Community Development Manager to prepare the annual transit budget. The budget is then presented to the Board of Supervisors for approval. There can be a significant variance in the budget from one year to the next depending on the number of trips anticipated. CalPERS contributions for the Dial-A-Ride driver are based on how many hours she is expected to work (i.e., 0.5 FTE versus 0.66 FTE), which can make budgeting somewhat problematic. This also results in actual operating costs which may be significantly different than budgeted expenses. The Transportation Program Manager also serves as the grants manager.

Risk management is through Alpine County. The County is part of the CSAC Excess Insurance Authority (EIA) Joint Powers Authority, which was formed in 1979. The EIA offers comprehensive coverage

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

programs as well as risk management resources and support. The County also manages all payroll, accounts payable, accounts receivable, and procurement.

Funding received through State Transit Assistance (STA) is generally accumulated until the County has accrued for a sufficient amount to support capital purchases. Currently the County is saving these funds for a replacement vehicle. At an allocation rate of \$2,000 to \$6,000 per year, funding the replacement vehicle takes several years.



The County has no transit-specific facilities. It owns one bus shelter located in Hung-A-Lel-Ti, which is maintained by the Washoe Tribe. The County encourages pickups at the shelter to better group rides together, but will still provide curb-to-curb service for anyone who wants/needs it. The community likes having the shelter.

Marketing and Public Information

Alpine County's primary transit marketing tools are its transit webpage and its transit brochure. Both the webpage (https://www.alpinecountyca.gov/index.aspx?NID=159) and brochure contain essential service information about the Dial-A-Ride program, including operating hours, service area, reservation phone number, and rider guidelines. The webpage also includes a Title VI Notice to the Public in English and Spanish and a link to the downloadable version of the Dial-A-Ride Service Guidelines and Complaint Form.



Maintenance

All vehicle maintenance is performance by the County's Public

Works department. There is one Equipment Mechanic/Shop Coordinator, who is able to work on the transit vehicles as needed. The County has a 50 percent spare ratio (the lowest it can have with a single spare vehicle) and has not missed any service due to any maintenance issues. The County has a Transit Vehicle Maintenance Plan which details all preventive maintenance and includes maintenance forms. Daily pre- and post-trip inspections are conducted by the driver. Preventive maintenance inspections are conducted every 3,000 miles or 45 days, whichever comes first.

Exhibit 7.3 Alpine County Transit Fleet

Year	Make	Model	PAX	Fuel	Mileage	Mode	Status
2008	Chevrolet	Braun Entervan	4+1 WC	Gas	130,000	DAR	Active
2014	Glaval Titan II	GM 3500	8+1 WC	Diesel	30,000	DAR	Active

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report



Alpine County Transit cutaway bus.



Interior of cutaway bus and wheelchair lift.



Alpine County Transit cutaway bus.



Farebox mounted in cutaway bus.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report



Alpine County Transit minivan.



Interior of minivan and farebox.



Alpine County Transit minivan.



Wheelchair ramp in minivan.

Triennial Performance Audit, FY 2015/16 - FY 2017/18 **Draft Report**



Vehicle storage yard.



Bus shelter in Hung-A-Lel-Ti.



Transit vehicles in fenced storage yard.



Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

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Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Chapter 8

Findings and Recommendations

Conclusions

Moore & Associates finds Alpine County Transit 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.

Findings and Recommendations

Based on discussions with County staff, analysis of program performance, and an audit of program compliance and function, the audit team presents no compliance findings.

Moore & Associates has identified three functional findings. While these findings do not affect TDA compliance, we believe they are significant enough to be included within this audit:

- 1. While in compliance with TDA requirements, the farebox recovery ratio declined each year of the current audit period.
- 2. Use of the cutaway vehicle is limited, and is expected to decrease further when the minivan is replaced.
- 3. Operating data is reported inconsistently among internal and external reports.

Program Recommendations

In completing this Triennial Performance Audit, Moore & Associates submits the following recommendations for Alpine County Transit. They are divided into two categories: TDA Program Compliance Recommendations and Functional Recommendations. TDA Program Compliance Recommendations are intended to assist in bringing the operator into compliance with the requirements and standards of the TDA, while Functional Recommendations address issues identified during the audit that are not specific to TDA compliance.

Given there are no compliance findings, only Functional Recommendations are provided.

Functional Finding 1: While in compliance with TDA requirements, the farebox recovery ratio declined each year of the current audit period.

Criteria: Effective May 4, 2010, the LTC adopted a minimum farebox ratio requirement of 1.0 percent, with the condition Alpine County Transit strives to improve this metric each year.

Condition: During the audit period, the County remained in compliance with the TDA as its farebox recovery ratio was well above 1.0 percent. However, the farebox recovery ratio declined each year, from 12.69 percent in FY 2015/16, to 7.70 percent in FY 2016/17, to 5.41 percent in FY 2017/18. While this is not a TDA compliance issue at this time, continued decline of the farebox recovery ratio could become a TDA compliance issue in the future.

Alpine County Transit

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Cause: The decline in farebox recovery ratio is likely due to decreasing farebox revenue combined with an increase in operating cost.

Effect: Failure of the fare revenue to keep pace with increases in operating cost results in a decline in the farebox recovery ratio.

Recommendation: Identify strategies for maintaining or improving the County's farebox recovery ratio year-over-year.

Recommended Action(s): Either separately or as part of the next Short Range Transit Plan, identify strategies for maintaining or improving the farebox recovery ratio. This could include reducing the operating costs wherever possible, identifying other local revenue sources, or raising fares.

Timeline: FY 2019/20.

Anticipated Cost: Negligible.

Functional Finding 2: Use of the cutaway vehicle is limited, and is expected to decrease further when the minivan is replaced.

Criteria: The prior audit recommended the County utilize the cutaway vehicle as its primary service vehicle, with the older (and higher-mileage) minivan reserved as a backup vehicle. The County's TAM Plan showed that the minivan's mileage has continued to increase, while the cutaway vehicle's mileage has remained largely static.

Condition: As noted in the prior audit, the County utilizes the minivan far more than the cutaway vehicle. This is due primarily to driver preference, as the minivan is easier to maneuver and a higher passenger capacity is not typically needed. At present, the cutaway vehicle must be used when snow chains are required, but this may not be necessary when a higher-profile Ford Transit vehicle is placed into service sometime in 2020. As such, the minivan accrues mileage at a significantly higher rate than the cutaway vehicle. It is likely that once the minivan is replaced with the Ford Transit vehicle, regular use of the cutaway will decline further.

Cause: Driver preference and ease of maneuverability have resulted in regular use of the minivan.

Effect: The constant use of the minimum causes it to accrue mileage faster and increases the maintenance costs.

Recommendation: Use the cutaway bus for longer trips and/or group trips to extend the life of the minivan.

Recommended Action(s): We recommend the County use the cutaway vehicle for longer (i.e., out-of-county) special needs trips as well as for any trips for which more than two or three riders are scheduled (i.e., group trips). This will extend the life of the smaller vehicle while ensuring the larger vehicle is used (and inspected) regularly.

Alpine County Transit

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

Timeline: FY 2019/20.

Anticipated Cost: Negligible.

Functional Finding 3: Operating data is reported inconsistently among internal and external reports.

Criteria: PUC 99246 requires the Triennial Performance Audit include a verification of the performance measures defined in PUC 99247.

Condition: In Chapter 5, a comparison of the data reported in monthly performance reports, the TDA fiscal audit, the State Controller Report, and the NTD report showed variances in how data was reported. Inconsistencies can affect the accuracy of performance metrics as well as the farebox recovery ratio.

Cause: In some cases, the timing of the report can affect its accuracy, depending on whether it is using audited or unaudited data. In other cases, such as operating cost, some reports may exclude depreciation expenses while others may not.

Effect: Data tended to be consistent between two reports but not three or all four.

Recommendation: Determine the cause for data reporting inconsistencies and strive to resolve them.

Recommended Action(s): Ensure the data used for reporting is consistent. If data is not consistent due to how it is being reported, note the source of the variance for future assessments.

Timeline: FY 2019/20.

Anticipated Cost: Negligible.

Exhibit 8.1 Summary of Audit Recommendations

Functional Recommendations		Importance	Timeline
1	Identify strategies for maintaining or improving the County's farebox recovery ratio year-over-year.	Medium	Ongoing
2	Use the cutaway vehicle for longer trips and/or group trips to extend the life of the minivan.	Medium	FY 2019/20
3	Determine the cause for data reporting inconsistencies and strive to resolve them.	Medium	FY 2019/20

Alpine County Transit

Triennial Performance Audit, FY 2015/16 - FY 2017/18 Draft Report

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AGENDA TRANSMITTAL

TO: Local Transportation Commission

FROM: Brian Peters, Community Development Director

DATE OF MEETING: August 6, 2019

Emission Vehicle Readiness Plan

PREPARED BY: Brian Peters, Community Development Director



SUMMARY: Alpine County is participating with the Amador County Transportation Commission, Calaveras County Council of Governments, and the Tuolumne County Transportation Commission (TCTC) to develop the Central Sierra Zero-Emission Vehicle Readiness Plan. This effort is funded by a grant from the California Energy Commission and is being led by the TCTC. The Center for Sustainable Energy (CSE) was chosen to prepare the plan.

TITLE: Request presentation, discussion and possible comments on the Draft Central Sierra Zero-

Work on the plan began in 2017. The draft plan is now complete and is being presented to the governing boards of the participating agencies. Staff from CSE will be at the Board meeting to present the plan, answer questions and take comments. Following this process a final plan will be prepared and submitted to the governing boards for acceptance. The Table of Contents, Executive Summary and Introduction sections of the plan are attached. The full plan is available for review on the Alpine County web site at [url to be added prior to final agenda packet].

RECOMMENDED ACTION: Discussion and comments to be submitted on the draft plan

ISSUE STATEMENT AND DISCUSSION: The goal of the Plan is to improve opportunities for Zero Emission Vehicle (ZEV) Readiness in the Central Sierra Region (Region) and resolve barriers to the widespread deployment of private and public ZEV infrastructure. In pursuit of this goal, the following critical project objectives were identified:

- 1. Evaluate the current state of the ZEV market;
- 2. Study and analyze site locations needed for ZEV infrastructure deployment;
- 3. Evaluate opportunities to streamline ZEV permitting, installation, and inspection to facilitate the timely approval and construction of ZEV infrastructure;
- 4. Study and analyze the feasibility of ZEV adoption in municipal fleets;
- 5. Create a venue for stakeholder coordination and gain input from key stakeholders on the ZEV Readiness Plan:
- 6. Identify funding sources for an implementation program.

FI	SCAL IMPACT:	☐ (Not	SOURCE	
1)	Budgeted Current Fiscal Year	Applicable)	Unanticipated	<u>\$0.00</u>
2)	Total Anticipated Cost Current	\$0.00	□ Revenue From	<u>\$0.00</u>
	Year	<u>\$0.00</u>	Contingency	<u>\$0.00</u>
3)	Total Anticipated Cost Annual	\$0.00	Other:	
	Year			

FUNDING SOURCE:	Plan funded by a grant from the California Energy Commission
INSTRUCTIONS TO (TEDK.

















Draft Central Sierra Zero-Emission Vehicle Readiness Plan

June 28, 2019

Prepared for

Tuolumne County Transportation Council

Prepared by

Center for Sustainable Energy









TABLE OF CONTENTS

Executive Summary	6
ntroduction	9
Regional Overview	17
Zero Emission Vehicle Technology	33
Electric Vehicle Charging Station Technology	44
Existing Conditions	63
Gaps Analysis	74
Recommendations	82
mplementation	112
EVCS Planning Tools	125
Appendices	142

Appendix A: Toolkits

Appendix B: Fleet Adoption Appendix C: ICE Alternatives

Appendix D: Utility Coordination Gude

Appendix E: Permitting Guide Appendix F: Outreach Plan

Attachment: 2019.08.06 LTC Pages from CSZEV Draft Plan_Draft June (ZEV Readiness Plan)

LIST OF FIGURES

Figure 1: Counties in the Central Sierra Regio	n	18
Figure 2: Aerial View of the Central Sierra Reg	jion	18
Figure 3: Spring/Summer Solar Potential and	Transmission Lines	19
Figure 4: Fall/Winter Solar Potential and Trans	smission Lines	19
Figure 5: Population by Census Tract, 2010		21
Figure 6: State Highways		22
Figure 7: Parks, Lakes, and Forests		23
Figure 8: Transit Routes		26
Figure 9: Cellular Coverage Map		27
Figure 10: Elevation		29
Figure 11: Amador Transit Route Elevation		30
Figure 12: Calaveras Transit Route Elevation.		30
Figure 13: Tuolumne Transit Route Elevation		31
Figure 14: YARTS Sonora Route Elevation		31
Figure 15: Key Differences Between Level 1,	Level 2, and DC Fast Chargers	44
Figure 16: ADA Accessible Space Site Plan a	and Surface Markings	49
Figure 17: Common Considerations for EVCS	Planning and Siting	50
Figure 18: Freewire Mobi		
Figure 19: Envision Solar EV-Arc		57
Figure 20: Rotational Charging		58
Figure 21: Conventional Load Balancing Syst	em	59
Figure 22: A Dynamic or Adaptive Load Balar		
Figure 23: CVRP Rebates per Month for the F		
Figure 24: Existing Charging Infrastructure		68
Figure 25: Existing and Projected PEVs by Co		
Figure 26: Projected Visitors to the Region thr		
Figure 27: Tourism & Recreation	=	
Figure 28: Schools		83
Figure 29: Airports		83
Figure 30: Lakes and Lake Parking		84
Figure 31: Amador City District, Amador		86
Figure 32: Angels Camp District, Calaveras		87
Figure 33: Columbia District, Tuolumne		88
Figure 34: East Sonora District, Tuolumne		89
Figure 35: Groveland District, Tuolumne		90
Figure 36: Ione District, Amador		91
Figure 37: Jackson District, Amador		92
Figure 38: Jamestown District, Tuolumne		93
Figure 39: Markleeville District, Alpine		94
Figure 40: Plymouth District, Amador		95
Figure 41: Sonora District, Tuolumne		96
Figure 42: Sutter Creek District, Amador		97
Figure 43: Twain Harte District, Tuolumne		
Figure 44: Destinations for EVCS		
Figure 45: State Highway Network		
Figure 46: DCFC Siting Every 20 Miles		
Figure 47: PG&E Time of Use		
Figure 48: Utility Coordination Process		

LIST OF TABLES

Table 1: Regional Transportation Planning Goals Supporting EV Infrastructure	14
Table 2: Cities and Communities in the Region by County	20
Table 3: Population Estimates by County as of January 1, 2017	21
Table 4: 2017 Yosemite National Park Recreation Visitors per Month	24
Table 5: Central Sierra State Park Visitor for FY 2015-16	24
Table 6: Central Sierra Region 2017 Annual Agency Profile	25
Table 7: Typical Hardware, Software and Networking Capability Requirements	47
Table 8: ADA-Accessible Chargers Required at Installations of New Public Charging Spaces	50
Table 9: EVCS Potential Survey Questions	51
Table 10: Approximate Costs for Non-Residential Single-Port EVCS	52
Table 11: Specific Installation Cost Considerations	52
Table 12: Curbside EVCS Requirements	53
Table 13: Per-kWh electricity generation carbon intensities, 2016	56
Table 14: California PEV Registrations, 2018	64
Table 15: CVRP Rebates for the Region	64
Table 16: Central Sierra Region PEV Registrations, 2018	64
Table 17: CVRP Rebates per Year by County	65
Table 18: PDepartment of Energy AFDC Station Counts	66
Table 19: Statewide PEV Deployment by Year	74
Table 20: State of California EVI Projections (Number of Charging Ports)	74
Table 21: State of California PEV Projections (Number of PEVs)	74
Table 22: State of California EVI Projections (Vehicles)	75
Table 23: Alpine County EVI Projections (Number of Charging Ports)	76
Table 24: Amador County EVI Projections (Number of Charging Ports)	76
Table 25: Calaveras County EVI Projections (Number of Charging Ports)	76
Table 26: Tuolumne County EVI Projections (Number of Charging Ports)	76
Table 27: Average Estimate Totals for PEV Charging Ports in 2025 by County	77
Table 28: County Progress Toward 2025 Scenario Goals	77
Table 29: Regional Visitor Projections through 2040 (per day)	78
Table 30: Stops on The Sonora – Highway 120 Route	84
Table 31: EVCS Type by Destination Type	99
Table 32: Destinations for EVCS	101
Table 33: Recommendations for Charging at Regional Resorts and Lodging	106
Table 34: Locations Near DCFC Siting Every 20 Miles	108
Table 35: Approximate Costs for Non-Residential Single-Port EVCS	114
Table 36: Specific Installation Cost Considerations	114
Table 37: ARFVTP Funded Projects in the Region	119
Table 38: Available EVCS Funding & Incentive Programs	
Table 39: Permitting Electric Vehicle Charging Stations Scorecard	128
Table 40: Replacement Counts from Central Sierra Fleet Analysis	
Table 41: CVRP Rebate Amounts for Light-Duty Vehicles	134
Table 42: HVIP Voucher Amounts for Zero-Emissions Trucks & Buses	135
Table 43: Maximum HVID Voucher Amounts for Hybrid Trucks & Ruses	125

Executive Summary

Alternative fuel technology in the State of California is quickly moving towards the electrification of vehicles. As evidence, Executive Order B-16 tasked the California Energy Commission (CEC) and other state agencies to support benchmarks to bring 1.5 million zero-emission vehicles (ZEVs) to California's roads by 2025 (extended to 5 million ZEV by 2030) and the California Air Resource Board developed the Innovative Clean Transit regulation, to electrify transit fleets throughout the State. Due to its size, population, and tourism draw, the Central Sierra Region plays an important part in helping the State reach these goals. Building a network of ZEV infrastructure will continue to support the draw to the Region as a center for visitor attractions as well as support the continued adoption of ZEV among Central Sierra residents.

This Zero-Emission Vehicle (ZEV) Readiness Plan (the Plan) was developed by Tuolumne County Transportation Council (TCTC) in collaboration with the Center for Sustainable Energy (CSE). The Plan places the Central Sierra Region (Region) on a pathway to accelerate the transition to electrified transportation, respond to evolving driver needs, and reduce greenhouse gas emissions related to vehicle travel. The Plan profiles existing ZEV conditions, identifies barriers to ZEV deployment in rural communities, recommends siting for infrastructure, and actions to support continued adoption.

The Region is located along the western slope of the Sierra Nevada mountain range and includes a four-county area: Alpine County, Amador County, Calaveras County, and Tuolumne County. The Regional population is approximately 139,438 people, 45% whom are close to retirement and live locally year-round. The second largest segment of individuals within the Region (10.2%) are also close to retirement but reside in the area seasonally. Despite the relatively small permanent population, the Region is home to several historical state and national parks with beautiful scenery and recreational activities that attract year-round visitors.

The Region has existing ZEV drivers and ZEV infrastructure but has not achieved wide-adoption. Zeroemission vehicles encompass two distinct types of vehicle technology: hydrogen fuel-cell electric vehicles (FCEVs) and plug-in electric vehicles (PEVs). Both types of technology are considered "zeroemission" due to the lack of combustion exhaust generated during their operation. This Plan primarily addresses PEV planning due to limited current FCEV registrations and lack of State funded FCEV infrastructure projects proposed in the Region before 2025.

There are currently 203 plug-in hybrid electric vehicles (PHEVs) and 196 battery electric vehicles (BEVs) in the Region according to 2018 vehicle registration data from the State of California. This accounts for just 0.16% of total vehicle registrations in the four-county Region. EV vehicle growth projections identify two scenarios for PEV growth in the Region: Scenario A and Scenario B. Scenario A, High PEV Projection, anticipates 2,233 PEVs in the Region by 2025, representing 0.17% of the estimated statewide PEV fleet. Scenario B, Low PEV Projection, estimates 1,548 PEVs in the Region by 2025, representing 0.12% of the estimated statewide PEV fleet.

Currently, there are 27 sites that offer EV charging with a total of 70 charging ports. While the current charging infrastructure is sufficient in terms of number of charging plugs per vehicle, analysis of geographical coverage of existing public charging stations shows that these charging stations are heavily concentrated in southern and western portions of the Region and are mainly located in small cities in the foothills. Existing infrastructure is means there are opportunities for deployment along

major travel routes that lead over the Sierra Nevada's or state/national parks located further east in the Region.

Demand projections suggest that in order to meet resident demand, a minimum of 230 EV charging units will be required with a maximum estimate of 320 charging units in the Region by 2025. Charging station plug projections will require 191 to 249 destination Level 2 charging station plugs in the Region and 39 to 71 direct current (DC) fast charging plugs to support the expected growth in number of EVs by 2025. This means that the number of destination level 2 charging plugs will need to increase nearly 5-fold over the next 7 years and the number of DC fast charging plugs will need to increase nearly 7-fold over the same time.

The California Statewide Regional Travel Model estimates that 23,299 daily trips originated outside and ended within Central Sierra in 2010; that count is projected to increase by 89% to 44,068 daily trips in 2040 (California Department of Transportation, 2014). On average, daily EV visitors to each County in 2025 is expected to be: Alpine County 27, Amador 647, Calaveras 801, Tuolumne 758.

Combining resident and visitor travel projections, EVI investment for 2025 increases to 8 ports for Alpine, 130 for Amador, 122 for Calaveras, and 128 for Tuolumne (388 total ports).

To meet the expected demand, the Central Sierra Region should:

- 1. Create and maintain a Regional EVI collaborative;
- 2. Integrate this Plan into local planning efforts;
- 3. Utilize and promote fuding opportunities;
- 4. Track Plan progress and report to community;
- 5. Prioritize investment in DCFC at a 20-mile radius;
- 6. Develop a Regional EVI expert & technical advisory program;
- 7. Plan for ZEB transition for small transit fleets;
- 8. Engage with the business community and other stakeholders; and
- 9. Prioritize Level 2 infrastructure at public sites and destinations (e.g., hospitality and recreation).



INTRODUCTION



Introduction

Governor Edmund G. Brown Jr.'s Executive Order B-16-2012 tasked the California Energy Commission (CEC) and other state agencies to support benchmarks to bring 1.5 million zero-emission vehicles (ZEVs) to California's roads by and in conjunction make sure that Californians have easy access to ZEV infrastructure to charge those vehicles by 2025. Further committing to the adoption of ZEVs, Governor Brown signed Executive Order B-48-18 in January 2018, committing to the adoption of 5 million ZEVs on the road by 2030. With the transportation sector being the largest contributor to greenhouse gas (GHG) emissions in California, ZEVs are integral for meeting GHG emission reduction goals identified in AB 32, AB 197, and SB 32, and play a significant role in meeting regional targets identified in Tuolumne County Transportation Council's (TCTC) Rural Sustainable Strategies from the 2016 Tuolumne Regional Transportation Plan. To meet state and regional targets, TCTC engaged the Center for Sustainable Energy (CSE) to develop a Central Sierra ZEV Readiness Plan (the Plan) for the four-county area: Alpine County, Amador County, Calaveras County, and Tuolumne County.

The goal of the Plan is to improve opportunities for ZEV Readiness in the Central Sierra Region (Region) and resolve barriers to the widespread deployment of private and public ZEV infrastructure. In pursuit of this goal, the following critical project objectives were identified:

- 1. Evaluate the current state of the ZEV market:
- 2. Study and analyze site locations needed for ZEV infrastructure deployment;
- 3. Evaluate opportunities to streamline ZEV permitting, installation, and inspection to facilitate the timely approval and construction of ZEV infrastructure;
- 4. Study and analyze the feasibility of ZEV adoption in municipal fleets;
- Create a venue for stakeholder coordination and gain input from key stakeholders on the ZEV Readiness Plan;
- 6. Identify funding sources for an implementation program.

Stakeholders and Contributors

The development of this Plan required input and advisory from a diverse array of regional stakeholders. As part of the project, a Working Group was assembled with leaders from each of the four Counties and Regional Transportation Planning Agency (RTPA). A full listing of stakeholders and contributors are listed below.

Project Leads

Darin Grossi and Alex Padilla - Tuolumne County Transportation Council

Scott Walsh, David Lange, Kevin Wood, Derek Ichien - Center for Sustainable Energy

RTPA Members

Brian Peters - Alpine County Community Development

John Gedney, Nancy Champlin, and Felicia Bridges - Amador County Transportation Commission

Amber Collins - Calaveras Council of Governments

Tuolumne County Transportation Council (see above)

Plan Structure

Section	Description	
Section I. Introduction	Describes the project goals, outlines the structure of the document and recognizes regional contributors to the Blueprint development and deployment.	
Section II. ZEV Technology	Provides an overview of existing ZEV Technology and Alternatives.	
Section III. EV Infrastructure Basics	Provides details on EV charging equipment, EV infrastructure (EVI) processes, associated costs, business models to consider, and innovations.	
Section IV. Existing Conditions	Discusses the current state of EVI in the Region.	
Section V. Gaps Analysis	Identifies the infrastructure needed to support the deployment of EVs and the projections of tourism in the Region.	
Section VI. Charger Siting Recommendations	Details site recommendations for destinations and public L2 and DC Fast chargers (DCFC) along highway corridors and at regional and tourist destinations.	
Section VII. Implementation	Provides recommendations for Plan implementation and an overview of the tools to utilize in implementing regional EVI.	
Section VIII. EV Charging Station (EVCS) Planning Tools	Provides an overview of the Utility Coordination Guidebook, Permitting Guidebook, and Fleet Adoption.	
Section IX. Conclusion	Summarizes the overall findings of the Plan	

Policy Context

Over the past 20 years, there have been an increasing number of national- and state-level policies that have improved and guided the climate for ZEVs. Policy is typically directed at one of two areas: the vehicles themselves or the infrastructure used to fuel them, commonly referred to as hydrogen fueling stations for fuel-cell electric vehicles (FCEVs) and electric vehicle charging stations (EVCS) for plug-in electric vehicles (PEVs).

ZEV Vehicles

Historically, one of the largest barriers to EV adoption was the price premium associated with buying a ZEV over an internal-combustion vehicle. To combat this, in 2010, the Internal Revenue Service (IRS) implemented Code Section 30D, which offers a national-level tax credit for the purchase of a plug-in hybrid, battery-electric, or fuel-cell-electric vehicle, set to sunset on a per-manufacturer basis as each manufacturer sells 200,000 cumulative eligible vehicles in the United States.

In 2012, California Governor Edmund G. Brown Jr. set a mandate for 1.5-million ZEVs to be on the road by 2025. This mandate was supplemented in 2018 by of Executive Order B-48-18, which set a goal of 5-million ZEVs on California roads by 2030. Additionally, several bills (Assembly Bill 32 (AB 32), AB 197, and State Bill 32 (SB 32) have been adopted to reduce statewide greenhouse gas (GHG) emissions. With the transportation sector contributing over 40% of GHG emissions in California, ZEVs are am integral component of meeting GHG emission reduction goals.

Charging Infrastructure

Electric Vehicle Charging Stations (EVCS)

As part of Governor Brown's ZEV mandate, the state of California has set a statewide goal for 250,000 EVCS by 2025. Throughout the state, critical stakeholders are working to incentivize and install stations to meet that goal. The state's three largest utilities – Pacific Gas and Electric (PG&E), Southern California Edison (SCE), and San Diego Gas and Electric (SDG&E) – all offer some form of financial incentive to potential site hosts who are interested in installing public EV charging on their properties.

Fuel Cell Electric Vehicles and Infrastructure

In January of 2018, Governor Edmund G. Brown Jr. signed Executive Order B-48-18, boosting the use of ZEV including hydrogen refueling infrastructure in California. Part of this order calls for a hydrogen station network development target of 200 hydrogen fueling stations by 2025 with proposed funding activities totaling \$20 million in annual awards to meet this goal.

The California Fuel Cell Partnership (CaFCP) members recently published an ambitious shared vision for the potential growth of the industry to 2030. In their vision, the targets of the Executive Order are a

stepping stone on the path to 1,000,000 FCEVs on the road by 2030, supported by a network of 1,000 hydrogen stations. Accomplishing these goals in such a short period of time requires a significant change in the pace of developments going forward, along with combined resolve and commitment from all stakeholders.

Building Codes

The 2016 California Green Building Standards Code (CALGreen Code), effective since January 1, 2017, identifies mandatory and voluntary codes for EV infrastructure in buildings and parking lots within California. These codes establish construction requirements for new residential and commercial buildings.

- Section 4.106.4 of the CALGreen Code describes EV charging guidelines for new residential construction, detailing parking space dimension designations and electrical configurations in accordance with California Electrical Code, Article 625. New single- and two-family dwellings must have raceways installed that accommodate 208/240-volt circuits for every unit, while 3% of multi-unit dwellings (MUDs) with 17 or more units must accommodate 40-amp circuits (California Building Standards Commission, 2016). Service or subpanels with EV charging circuits must be marked as "EV CAPABLE" to support future EV charging.
- Section 5.106.5.3 provides codes for new construction at commercial locations, which provides electrical configuration and parking space requirements for EV charging spaces. Newly designated EV charging spaces are required to support 40-amp circuits and mark EV-capable panels for future spaces.
- Section 4.106.8 provides additional code tiers for residential locations that facilitate future EV charging installation. Under this mandate, new single- and two-family dwellings and townhomes with attached private garages must meet mandatory requirements and be labeled as EV-ready for future installations. For MUDs, 5% of total spaces for buildings with 17 or more units will be designated EV charging spaces. This was amended in 2018 to require that 10% of parking spaces must be "EV Capable" starting on January 1, 2020.
- Section A5.106.5.3 introduces additional tiers for new commercial development.

Table 1: Regional Transportation Planning Goals Supporting EV Infrastructure

Table 1: Regional transportation Planning Goals Supporting EV infrastructure			
County	Plan	Goal	Policy or Objective
Tuolumne	2016 RTP Regional & Interregional Transportation Chapter	TSM Goal: Develop a transportation system that maximizes the use of transportation facilities in the most efficient and cost-effective way.	Policy: Develop and support a regional Electric Vehicle Infrastructure Implementation Plan for Tuolumne County.
Tuolumne	2016 RTP Rural Sustainable Strategies Chapter	Goal 3: Practice environmental stewardship by protecting air quality, natural resources, and historical and cultural assets. (Regional Goal 5)	Policy 6: Support the planning and construction of plug-in electric vehicle charging stations.
Tuolumne	2016 RTP Rural Sustainable Strategies Chapter	List Of Rural Sustainable Strategies	Zero-Emission Vehicles (ZEV) – Support and facilitate ZEV planning and infrastructure projects which help improve air quality and reduce greenhouse gas emissions.
Alpine	Alpine County Regional Transportation Plan (2015)	Goal 10: Reduce Greenhouse Gas (GHG) Emissions.	Objective: Ensure that transportation projects contribute to the goal of lowering vehicle emissions. Policy: Promote projects that can be demonstrated to reduce air pollution, such as alternative fuel programs.
Amador	2015 Amador County Regional Transportation Plan	Goal 9A: Implement a comprehensive set of transportation improvements that will collectively result in regional air quality improvements	Policy 9A: Invest in efficient and effective public transportation infrastructure, transit services, alternative strategies, and emerging technologies that will help improve air quality throughout the Region.
Calaveras	Calaveras 2017 Regional Transportation Plan	Goal 3: Enhance sensitivity to the environment in all transportation decisions.	Objective 3B: Promote and design transportation projects that will reduce greenhouse gas emissions and thereby positively contribute to meeting statewide global warming emissions targets set in the Global Warming Solutions Act of 2006 (AB 32).