TAHOE TRANSPORTATION DISTRICT

BUDGET FINANCE COMMITTEE
Meeting Agenda

Virtual Meeting **May 8, 2020**
Via GoToWebinar **8:30 a.m.**

CORONOVIRUS (COVID-19) ADVISORY NOTICE

Consistent with Executive Orders No.-25-20 and No. N-29-20 from the Executive Department of the State of California and Declaration of Emergency Directive 006 from the Executive Department of the State of Nevada, the Tahoe Transportation District Governance Committee meeting will not be physically open to the public and all Committee Members will be teleconferencing into the meeting via GoToWebinar. To maximize public safety while still maintaining transparency and public access, members of the public can join the meeting by registering via the link below. Members of the public may provide public comment by sending comments to the Clerk to the Board by email at jallen@tahoetransportation.org. Please note which agenda item the comment pertains to. Comments will then be read into the record, with a maximum allowance of three minutes per individual comment, subject to the Committee's discretion. All comments should be a maximum of 500 words, which corresponds to approximately three minutes of speaking time. Comments for each agenda item should be submitted prior to the close of that agenda item.

Any member of the public who needs accommodations should email or call Judi Allen who will use her best efforts to provide reasonable accommodations to provide as much accessibility as possible, while also maintaining public safety in accordance with TTD's procedure for resolving reasonable accommodation requests. All reasonable accommodations offered will be listed on the TTD website at tahoetransportation.org.

Please register for the TTD Finance Committee Meeting / TTD/C Board Meeting / Governance Committee Meeting at:
https://attendee.gotowebinar.com/register/6650364601386490895

There is only one registration link for all three meetings. After registering, you will receive a confirmation email containing information about joining the webinar.

All items on this agenda are action items unless otherwise noted. Items on the agenda may be taken out of order. The Committee may combine two or more items for consideration. The Committee may remove an item from the agenda or delay discussion relating to an item on the agenda at any time.

I. PUBLIC INTEREST COMMENTS

All comments are to be limited to no more than five minutes per person. Comments made cannot be acted upon or discussed at this meeting, but may be placed on a future agenda for consideration.

II. DISCUSSION ITEMS

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A.	*Information Only:* Informational Item on Future Revenue Sources and Agency Position for the Next Two to Three Years	**1**
B.	*For Possible Recommendation:* Review and Acceptance of the District's Financial Statement of Operations through February 2020 (Item VII.A.)	**55**

C. *For Possible Recommendation:* Ratification of Agreement Amendment #2 for Exploration Services Inc. for Outreach Services for US 50 South Shore Community Revitalization Project through the End of Fiscal Year 2020 (Item VII.B.) **70**

D. *For Possible Recommendation:* Authorize Issuance of a Contract Award to Flyers Energy for the Provision of Card-Based Fueling Services for Transit Operations (Item VII.C.) **73**

E. *For Possible Recommendation:* Adopt Resolution 2020-004 Authorizing the Execution of the 2019/20 Fiscal Year Allocation of the Low Carbon Transit Operations Program Funds for the Fare Free Transit Program (Item VII.F.) **107**

III. PUBLIC INTEREST COMMENTS

IV. ADJOURNMENT

TAHOE TRANSPORTATION DISTRICT (TTD)
TAHOE TRANSPORTATION COMMISSION (TTC)

Meeting Agenda

Virtual Meeting **May 8, 2020**
Via GoToWebinar **9:30 a.m.**

CORONOVIRUS (COVID-19) ADVISORY NOTICE

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All items on this agenda are action items unless otherwise noted. Items on the agenda may be taken out of order. The Board may combine two or more items for consideration. The Board may remove an item from the agenda or delay discussion relating to an item on the agenda at any time.

I. CALL TO ORDER AND GENERAL MATTERS

A. Roll Call and Determination of Quorum of TTD/TTC
B. Approval of Agenda for May 8, 2020
C. Approval of Minutes of April 10, 2020

II. PUBLIC INTEREST COMMENTS

At this time, members of the public shall have the opportunity to directly address the Board. All comments are to be limited to no more than five minutes per person. The Board is prohibited by law from taking immediate action on or discussing issues raised by the public that are not listed on this agenda. In addition, members of the public shall have the opportunity to directly address the Board after each item on which action may be taken is discussed by the public body, but before the public body takes action on the item.

III. BUDGET FINANCE COMMITTEE REPORT

IV. GOVERNANCE COMMITTEE REPORT

V. TAHOE TRANSPORTATION COMMISSION (TTC) BUSINESS ITEMS

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A.	*For Possible Approval:* Recommend Approval of the Lake Tahoe Transportation Overall Work Program for Fiscal Year 2020/2021 to the Tahoe Metropolitan Planning Organization Governing Board	**3**

VI. ADJOURN AS TTC AND RECONVENE AS TTD

VII. TAHOE TRANSPORTATION DISTRICT (TTD) CONSENT ITEMS
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B.	Ratification of Agreement Amendment #2 for Exploration Services Inc. for Outreach Services for US 50 South Shore Community Revitalization Project through the End of Fiscal Year 2020	**70**
C.	Authorize Issuance of a Contract Award to Flyers Energy for the Provision of Card-Based Fueling Services for Transit Operations	**73**
D.	Review and Acceptance of the Quarterly Transit Report for the Second Quarter of Fiscal Year 2020	**101**
E.	Review and Acceptance of the Quarterly Transit Report for the Third Quarter of Fiscal Year 2020	**104**
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C.	*For Possible Action:* Adopt Resolution 2020-005 Approving the Public Transit Agency Safety Plan for the Tahoe Transportation District	**226**

IX. DISTRICT MANAGER REPORT

X. BOARD, COMMISSION MEMBER AND STAFF COMMENTS

XI. PUBLIC INTEREST COMMENTS

XII. ADJOURNMENT

COMPLIANCE WITH PUBLIC NOTICE REQUIREMENTS

This notice and agenda has been posted at the TTD office and at the Stateline, Nevada post office. The notice and agenda has also been posted at the North Tahoe Conference Center in Kings Beach, the Incline Village GID office and the North Tahoe Chamber of Commerce and on the TTD website: www.tahoetransportation.org.

For those individuals with a disability who require a modification or accommodation in order to participate in the public meeting, please contact Judi Allen at (775) 589-5502 or jallen@tahoetransportation.org.

Nevada Open Meeting Law Compliance
Written notice of this meeting has been given at least three working days before the meeting by posting a copy of this agenda at the principal office of the Board and at three other separate, prominent places within the jurisdiction of the Board not later than 9 a.m. of the third working day before the meeting.

Written notice of this meeting has been given by providing a copy of this agenda to any person who has requested notice of the meetings of the Board. Such notice was delivered to the postal service used by the Board not later than 9 a.m. of the third working day before the meeting for transmittal to the requester by regular mail, or if feasible for the Board and the requester has agreed to receive the public notice by electronic mail, transmitted to the requester by electronic mail sent not later than 9 a.m. of the third working day before the meeting.

Supporting materials were provided to any person requesting such materials and were made available to the requester at the time the material was provided to the members of the Board or, if provided to the members of the Board at the meeting, were made available to the requester at the meeting and are available on the TTD website: www.tahoetransportation.org. Please send requests for copies of supporting materials to Judi Allen at (775) 589-5502 or jallen@tahoetransportation.org.

TAHOE TRANSPORTATION DISTRICT / COMMISSION
BOARD MEETING MINUTES
April 10, 2020

TTD/C Board Members in Attendance:

Steve Teshara, SS-TMA, Chair
Marsha Berkbigler, Washoe County
Cindy Gustafson, Placer County
Lucia Maloney, Carson City, Vice Chair
Wesley Rice, Douglas County
Sue Novasel, El Dorado County
Cody Bass, City of South Lake Tahoe
Vince Arthur, Member at Large
Andy Chapman, TNT-TMA
Sondra Rosenberg, NDOT
Alex Fong, Caltrans

TTD/C Board Members Absent:

Mike Gabor, U.S. Forest Service
Serrell Smokey, Washoe Tribe

Others in Attendance:

Carl Hasty, Tahoe Transportation District
Joanie Schmitt, Tahoe Transportation District
George Fink, Tahoe Transportation District
Michelle Glickert, Tahoe Regional Planning Agency
Judi Allen, Tahoe Transportation District
Nira Doherty, Legal Counsel

I. TAHOE TRANSPORTATION DISTRICT AND TAHOE TRANSPORTATION COMMISSION CALL TO ORDER AND ROLL

A. Roll Call and Determination of Quorum
The meeting of the Tahoe Transportation District and Tahoe Transportation Commission was called to order by Chairman Teshara at 9:30 a.m., via a GoToWebinar. Roll call was taken and it was determined a quorum was in attendance for the TTD/TTC.

B. Approval of TTD/TTC Agenda of April 10, 2020
Motion/second by Ms. Novasel/Ms. Berkbigler to approve the TTD/TTC agenda for today's meeting. The motion passed unanimously.

C. Approval of TTD/TTC Meeting Minutes for March 13, 2020
Motion/Second by Ms. Maloney/Mr. Rice to approve the TTD and TTC minutes, as amended by Mr. Teshara. The motion passed, with Mr. Chapman abstaining.

II. PUBLIC INTEREST COMMENTS

No public interest comments were made.

III. TAHOE TRANSPORTATION COMMISSION (TTC) BUSINESS ITEMS

A. Presentation of Draft Fiscal Year 2020/21 Tahoe Regional Planning Agency Transportation Planning Overall Work Program and Public Hearing

Ms. Glickert reviewed this item and gave a presentation. Ms. Maloney asked about adding a work product that would show what the Regional Transportation Plan does for the Tahoe Region. Ms. Glickert added the TMPO will be hosting webinars for the Regional Transportation Plan. Ms. Rosenberg thanked Ms. Glickert and Mr. Haven for their partnership with NDOT and the other MPO's.

Action Requested: Conduct Public Hearing

The public hearing was conducted and there were no public comments.

IV. ADJOURN AS TTC AND RECONVENE AS TTD

V. TAHOE TRANSPORTATION DISTRICT (TTD) CONSENT ITEMS

A. Adopt Resolution 2020-002 Authorizing the Submittal of Proposals and Execution of Subsequent Contracts for Fiscal Year 2020/2021 Federal Transit Administration Grant Funds for Sections 5311 and/or 5339 to the Nevada Department of Transportation and Local Assurances Page of Application

Mr. Hasty commented that with the CARES Act passage, NDOT provided some guidance regarding the 5311 funds, since the program will be different than in the past. He added the District will be requesting FTA 5339 funds for the Incline Elementary School site purchase.

Ms. Gustafson motioned to approve the consent calendar, Ms. Berkbigler seconded the motion. The motion passed unanimously.

Mr. Arthur arrived at 10:30 a.m.

VI. TAHOE TRANSPORTATION DISTRICT (TTD) BUSINESS ITEMS

A. Adoption of Personnel Policies Related to the Coronavirus Disease 2019, State and Local Emergency Declarations, the Coronavirus Aid, Relief, and Economic Security Act, and Other Federal and State Statutes and Guidance

Mr. Hasty reviewed the three policies related to sick leave, family medical leave, and administrative leave. Mr. Fink reviewed transit operations and noted transit will start offering free fare transit.

Action Requested: For Possible Action

Ms. Novasel made the motion to approve the adoption of personnel policies related to Coronavirus Disease 2019 emergency response and operations. Mr. Chapman seconded the motion. The motion passed unanimously.

B. Adopt Resolution 2020-003 Approving the Updated Title VI Plan of the Civil Rights Act of 1964, Public Participation Plan, and Limited English Proficiency Plan for the Tahoe Transportation District
Ms. Allen reviewed this item.

Action Requested: For Possible Action

Ms. Berkbigler made the motion to adopt Resolution 2020-003 approving the updated Title VI Plan of the Civil Rights Act of 1964, Public Participation Plan, and Limited English Proficiency Plan. Mr. Rice seconded the motion. The motion passed unanimously.

C. Authorize Issuance of a Contract Award to Davis Farr, LLP for Auditing Services for Three Fiscal Years, With Two One-Year Extension Options for Two Additional Fiscal Year Audits
Ms. Schmitt reviewed this item.

Action Requested: For Possible Action

Ms. Gustafson made the motion to authorize staff to award a contract to Davis Farr, LLP for auditing services for fiscal years 2020 through 2022, with two one-year extension options. Ms. Novasel seconded the motion. The motion passed unanimously.

VII. DISTRICT MANAGER REPORT

Mr. Hasty noted he is very appreciative of staff during this time.

VIII. BOARD, COMMISSION MEMBER AND STAFF COMMENTS

Mr. Rice commented the Event Center will be on the next Board of Commissioners meeting agenda.

Mr. Arthur noted the Heavenly parking lots will be closed to the public to reduce access to the resort.

Mr. Fong gave some updates regarding the Echo Summit bridge replacement and various road closures at South Shore.

Ms. Rosenberg noted Nevada traffic counts are currently down 30 to 70 percent.

IX. PUBLIC INTEREST COMMENTS

No public interest comments were made.

X. ADJOURNMENT

The meeting adjourned at 10:50 a.m.

Respectfully Submitted:

Judi Allen
Executive Assistant
Clerk to the Board
Tahoe Transportation District

(The above meeting was recorded in its entirety, anyone wishing to listen to the aforementioned tapes, please contact Judi Allen, Clerk to the Board, (775) 589-5502.)

Tahoe Transportation DISTRICT

Connecting our communities

MEMORANDUM

Date: May 4, 2020

To: Tahoe Transportation District (TTD) Board of Directors

From: TTD Staff

Subject: Informational Item on Future Revenue Sources and Agency Position for the Next Two to Three Years

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Action Requested:
It is requested the Finance Committee hear the presentation for discussion as background to the proposed budget for fiscal year (FY) 2021, current national economic response to COVID-19 and possible opportunities and constraints over the next two to three years.

Fiscal Analysis:
The budget for next fiscal year (Agenda Item VIII.A.) is predicated on existing and known revenues for the coming fiscal year with some expectation to revisions, when a source like Transportation Development Act funding is expected to be reduced from what has been projected by the state of California, as a result of the economic slowdown due to COVID-19. Offsets created by the Coronavirus Aid, Relief, and Economic Security Act (CARES Act) are expected to fill the void of any reduction for transit operations. This discussion is looking at the next two and three years out, what it means for TTD, and what risks and opportunities lies ahead.

Work Program Analysis:
FY 2021's work program will be heard in the budget and work program item, within which are efforts to address future revenue development. The budget decision, additional potential state and federal legislative stimulus bills, and TTD's efforts on revenue mechanisms like the One Tahoe Initiative will shape future work programs.

Background:
The TTD is an unusual public agency in that it has no dedicated revenue stream for its operations and bi-state compact mission, with some offset to that fact changed in federal legislation of 2015 described below. The primary revenue option authorized by Article IX of the Compact is a sales tax mechanism that is largely unworkable. The current iteration of TTD has realized the closest fulfillment of the Compact intent, thanks to a series of five separate years of federal transportation funds earmarked for Lake Tahoe, of which TTD was a sub-recipient beginning in FY 2009. That start launched a program of project development work via an agreement between TRPA and TTD for TTD to deliver. Transit finance operational issues of a prior operating body for the south shore system saw a transition of the service to TTD in 2010. Up until 2016, TTD was entirely a discretionary funded based agency for both projects and transit. This untenable situation was vulnerable; especially for transit, as its primary source of discretionary funds via NDOT was at risk of diminishment with increased demand in Nevada

and a decrease in accumulated funds due to draw downs. TTD addressed a more sustained revenue source for both projects and transit in the Basin in 2014/2015 by leading the effort to make a technical correction to the formula fund urbanized designation of the Tahoe Metropolitan Planning Organization (TMPO), which took place in the Fixing America's Surface Transportation Act (FAST Act) in December 2015. With this change, the two public transit services in the basin became eligible for direct federal transit operating funds, and any public agency implementing projects relevant to the national highway system could compete for discretionary formula grants from the TMPO, something that had been unavailable prior. This partial solution to more sustainable revenue streams has allowed TTD to successfully continue its work, but the challenge to complete projects and grow transit services remains an enormous challenge.

Discussion:

A fundamental weakness in TTD's operational fund is its lack of a general fund source and its dependence on limited discretionary and formula funds for projects and transit. When the current TTD structure and work program began in 2009, the general fund account had a slightly negative balance. Since that time, through mindful and sound grant management business practice, TTD has been able to build up the cash balance to $2.9 million ($2.3 million from the transit ops fund and $600K in general fund). Along with an unsecured line of credit TTD was able to secure with a local bank, its cash flow needs have been met until eligible expenses are reimbursed.

Efforts to establish a dedicated revenue source for the general fund to be used for operational expenses, grant match, and core staff salaries have not been successful to date. One approach was to have some annual local government contribution to TTD. That has not been successful due to relatively flat local budgets. Another idea was to have state support and become part of the state's budget processes like TRPA, especially given that now there are to be two governor appointees on the Board, one from each state. To date, that has been unsuccessful and the current economic downturn ensures that it will be out of the question for the next biennium. It makes the One Tahoe Initiative and the effort to change the Article IX funding authority to something workable for both TTD and the regional transportation program all the more important. It is important to keep in mind that successful enabling language in 2021 won't see implementation until at least 2023. Any delay or lack of progress on enabling mechanism risks further erosion of TTD's or the Tahoe basin's ability to implement additional transit and project improvements.

The economic downturn may provide some short-term stimulus funds for projects, in particular in 2021 from federal and state sources as part of economic recovery. The federal transportation bill is up for reauthorization in FY 2021 and current efforts in Washington and Sacramento are shaping decision making about how to offset losses in transportation and move investment forward for economic recovery and job creation.

Staff will present information highlighting circumstances for TTD, risks posed, opportunities posed, and the significance of decisions as circumstances play out over the next several years for the committee to consider and discuss with Staff.

Additional Information:

If you have any questions or comments regarding this item, please contact Carl Hasty at (775) 589-5501 or chasty@tahoetransportation.org.

CH/ja FINANCE COMMITTEE AGENDA ITEM: II.A.

TAHOE REGIONAL PLANNING AGENCY
TRANSPORTATION

Mail
PO Box 5310
Stateline, NV 89449-5310

Location
128 Market Street
Stateline, NV 89449

Contact
Phone: 775-588-4547
Fax: 775-588-4527
www.trpa.org

MEMORANDUM

Date: May 4, 2020

To: Tahoe Transportation Commission (TTC)

From: TRPA Transportation Staff

Subject: Recommend Approval of the Lake Tahoe Transportation Overall Work Program for Fiscal Year 2020/2021 to the Tahoe Metropolitan Planning Organization Governing Board

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Action Requested:
Staff is requesting the Commission to recommend approval of the Lake Tahoe Transportation Overall Work Program (OWP) for Fiscal Year 2020/2021 (FY 2021) (Attachment B) to the Tahoe Metropolitan Planning Organization (TMPO) Governing Board.

Staff Recommendation:
Staff recommends the TTC recommend approval by the TMPO Governing Board of the FY 2021 OWP.

Project Description/Background:
Federal regulations (Title 23, Sec. 450.314) require each Metropolitan Planning Organization to prepare an annual program of work in cooperation with the States and operators of publicly owned transit services. The regulations specify the OWP shall discuss transportation planning priorities for the Region and all transportation and transportation-related air quality planning activities anticipated in the area during the fiscal year (July 1, 2020 - June 30, 2021). The detailed description of the transportation planning activities in the OWP serves as the direction for the expenditure of various transportation planning funds received by TMPO/Tahoe Regional Planning Agency (TRPA). The transportation OWP also forms the basis for inclusion of the transportation planning functions of the agency into the TRPA annual work program and budget.

Some of the primary tasks and deliverables for the coming fiscal year include:

- Finalization of the Regional Transportation Plan
- Improvements to Transportation Modeling and Information Sharing
- Collaborative Regional Transit Planning
- Partner-Based Corridor Planning (US 50 East and SR89/Emerald Bay)
- Federal and State Funding Distribution and Accounting
- Continued and Enhanced Partnerships with Transportation Management Associations (TMAs)
- Continue to Conduct Robust Public Outreach around TRPA Transportation Planning Efforts

MG/ja AGENDA ITEM: V.A.

Discussion:

TRPA staff prepared the draft 2020 OWP and initiated the required 30-day public comment period on March 24, 2020, distributing copies of the draft to the public, state and federal agencies, as well as the Tahoe Transportation Commission (TTC). Staff presented the draft 2020 OWP to the TTC Board and the public at the April 10, 2020 board meeting. The public comment period closed on April 24, 2020 and all comments received have been considered and included as appropriate. The TMPO Governing Board is scheduled to consider approval at the May 27, 2020 meeting. A summary of the FY 2021 OWP briefly describing the individual work elements and showing the overall budget is attached (Attachment A).

Contact Information:

If you have any questions or comments regarding this item, please contact Michelle Glickert, at mglickert@trpa.org or 775-589-5204.

Attachments:

A. FY 2021 Overall Work Program Executive Summary
B. Final Draft TMPO FY 2021 Overall Work Program

MG/ja

AGENDA ITEM: V.A.

Lake Tahoe Transportation Planning
Overall Work Program - FY 2020/21

May 2020

FINAL OWP Summary

Introduction

The Overall Work Program (OWP) defines the continuing, comprehensive, and coordinated regional transportation planning process for the Lake Tahoe Basin. It establishes transportation, air quality, and other regional planning objectives and associated funding for Fiscal Year 2020/21. The OWP also serves as a management tool for the Tahoe Regional Planning Agency (TRPA), serving as the Tahoe Metropolitan Planning Organization (TMPO), through the identification of work elements containing tasks and products to be provided during the year, including Federal and State mandated transportation planning requirements and other regional transportation planning activities.

Work Elements

The OWP is organized by *functional areas* and **work elements** combining similar activities, and products in one place. Below is a list of the work elements with a brief description of each and budget which includes staff time and contracts:

Outreach and Administration

WE 101 – Overall Work Program Administration - $174,976

This work element contains the administrative activities to support the Lake Tahoe transportation program, including budgets, work program development and tracking, and professional staff development.

WE 102 – Transportation Development Act - $49,505

The Transportation Development Act (TDA) is a major source of regional transit operating funding from California. This work element outlines the administration and management of the TDA funding coming into the Lake Tahoe Region including an audit of the administration.

WE 103 – Public Outreach and Coordination - $54,000

Public outreach and collaboration with partners are key to TRPA's success. This work element includes activities to support a transparent, educational, and effective regional transportation planning process as the Tahoe Metropolitan Planning Organization. The element also includes specific public outreach and agency collaboration efforts, TMPO/TTC Board support, tribal government consultation, staff professional development, and environmental justice activities.

Regional Intermodal Planning

WE 104 – Regional Intermodal Planning - $207,188

This work element contains a variety of transportation planning activities that include the development of regional transportation policy documents including, 2020 Regional Transportation Plan, updates to the Active Transportation Plan, Transit plans, etc.. This element also includes the execution of programs including trip planning apps, transportation demand management, transit planning support including updates to Transit Development Plans, and other travel mode planning activities to implement regional transportation policy.

WE 105 – Transportation Data Management and Forecasting - $100,000

This work element includes regional transportation data collection and modeling efforts to support transportation data needs of staff, partners, and the general public**.** This element also includes the update and maintenance of the TRPA travel demand model and various

transportation data sets for the next RTP and to address TRPA, Federal, and State requirements. These activities are coordinated by the TRPA Research and Analysis Program.

Tracking and Financial Management

WE 106 – Project Tracking and Financial Management - $163,834

This work element supports the financial management activities related to federal and state funded transportation projects in the Region. This element includes the required administration of transportation funding allocated by the TMPO, and updates to the Federal Transportation Improvement Program (FTIP) and Regional Transportation Improvement Program (RTIP).

Regional Coordination

WE 107 –Performance-Based Planning - $92,898

This work element supports the continual development of TMPO's performance-based planning framework that directly supports monitoring the performance of the Regional Transportation Plan and Sustainable Communities Strategy. This element also includes integration with TRPA's performance management system, including the development, tracking, and reporting on TRPA, State, and Federal transportation performance measures, and the development of a federally-required Congestion Management Process.

WE 108.3 –Sustainable Communities Planning - $139,735

This sub work element continues corridor planning activities to be undertaken with FY 19/20 SB1 - Sustainable Communities Formula Grant funding. Activities include the release of a draft and finalization of the SR89/ Emerald Bay Recreation Corridor Plan, Final US 50 Stateline Main Street Management Plan, and development of a set of tools for project evaluation and impact analysis to support the RTP/SCS.

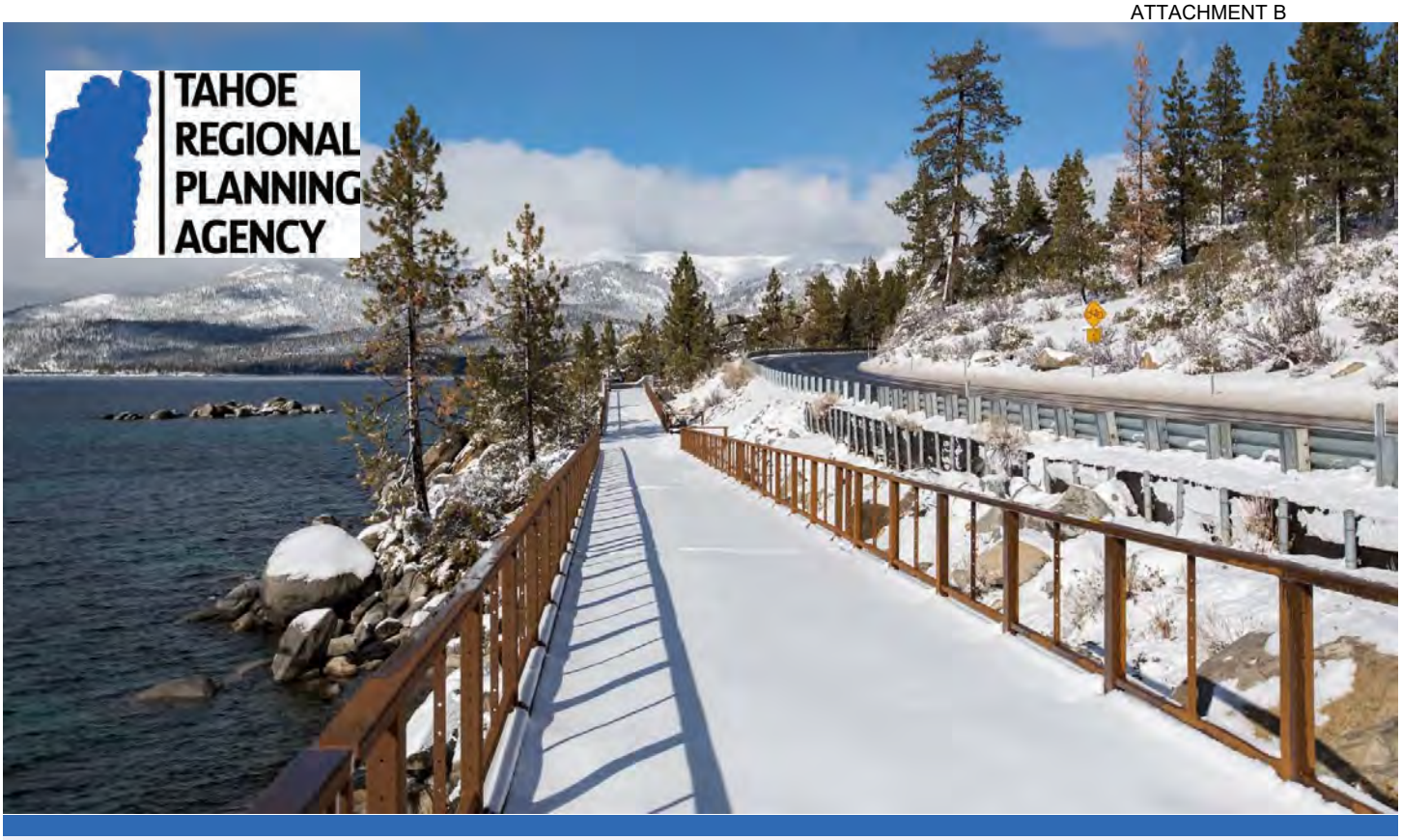
WE 108.4 –Sustainable Communities Planning - $181,585

This sub work element highlights the next phase of corridor planning activities to be undertaken with FY 20/21 SB1 - Sustainable Communities Formula Grant funding. Activities include the finalization of the project evaluation and impact tool along with continued updates to the travel demand model and forecasting tools.

TMPO Transportation Program Revenues:

Funding Source	FY 2021
Federal	
FHWA PL (CA)	$645,000
FHWA PL (CA-Carryover)	$254,576
FTA 5303 (CA)	$93,000
FTA 5303 (CA Carryover)	$71,312
FHWA PL (NV)	$261,278
FTA 5303 (NV)	$31,730
Federal Subtotal:	**$1,356,896**
Non-Federal	
CA-RMRA 20/21	$160,750
CA-RMRA 19/20 C/O	$123,707
CA-RMRA 18/19 C/O	$0
TRPA General	$118,863
TDA Administration	$48,358
TDA Planning	$35,000
Non-Federal Subtotal:	**486,678**
GRAND TOTAL:	**$1,843,574**

Contact: Michelle Glickert,
Principal Transportation Planner
775-589-5204 - mglickert@trpa.org

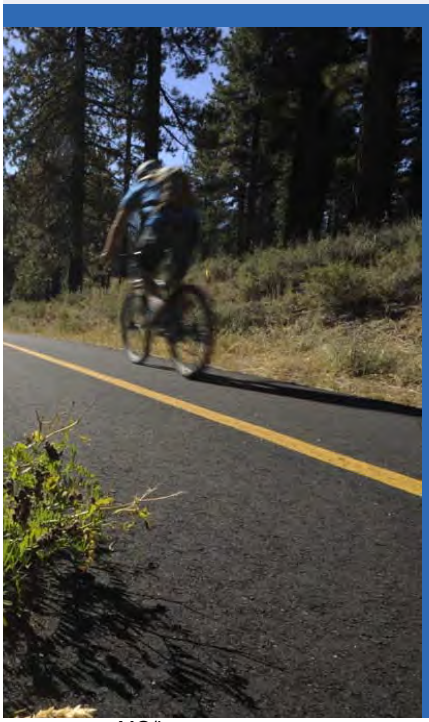


TAHOE REGIONAL PLANNING AGENCY

TRANSPORTATION PLANNING OVERALL WORK PROGRAM 2020-2021

TAHOE METROPOLITAN PLANNING ORGANIZATION
TAHOE REGIONAL PLANNING AGENCY

lake tahoe



The Lake Tahoe Transportation Overall Work Program for FY 2020/2021 is a comprehensive annual plan of work for the Tahoe Regional Planning Agency's Transportation Planning Program and is funded through transportation planning grants administered by the following agencies:

California Department of Transportation (Caltrans)

Nevada Department of Transportation (NDOT)

Federal Highway Administration (FHWA)
California Division Office
Nevada Division Office

U.S. DOT Credit/Disclaimer:

This report was funded in part through grants from the Federal Highway Administration, U.S. Department of Transportation. The views and opinions of TRPA expressed herein do not necessarily state or reflect those of the U.S. Department of Transportation.

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GLOSSARY OF ACRONYMS AND ABBREVIATIONS

Caltrans	California Department of Transportation
CARB	California Air Resources Board
CFPG	California Federal Programming Group
CMAQ	Congestion Mitigation and Air Quality
CMP	Congestion Management Process
CSLT	City of South Lake Tahoe
DBE	Disadvantaged Business Enterprise
EDCTC	El Dorado County Transportation Commission
EIP	Environmental Improvement Agency
EPA	Environmental Protection Agency
FAST Act	Fixing America's Surface Transportation Act (2016 Federal Transportation bill)
FHWA	Federal Highway Administration
FTA	Federal Transit Administration
FTIP	Federal Transportation Improvement Program
GHG	Greenhouse Gas
HPMS	Highway Performance Monitoring System
ITS	Intelligent Transportation Systems
LTF	Local Transportation Funds
MAP-21	Moving Ahead for Progress in the 21st Century (2012 Federal Transportation bill)
MPO	Metropolitan Planning Organization
NDOT	Nevada Department of Transportation
OWP	Overall Work Program
PEA	Planning Emphasis Areas
PPP	Public Participation Plan
RIP	Regional Improvement Program
RSTP	Regional Surface Transportation Program
RTC	Regional Transportation Commission
RTIP	Regional Transportation Improvement Program
RTP	Regional Transportation Plan
RTPA	Regional Transportation Planning Agency
SB 375	California State Senate Bill 375
SB 575	California State Senate Bill 575
SCS	Sustainable Communities Strategy
SSTAC	Social Services Transportation Advisory Council
SS/TMA	South Shore Transportation Management Association
STA	State Transit Assistance
STIP	Statewide Transportation Improvement Program
TART	Tahoe Truckee Area Regional Transit
TDA	California Transportation Development Act
TDM	Transportation Demand Management
TMPO	Tahoe Metropolitan Planning Organization
TNT/TMA	Truckee North Tahoe Transportation Management Association
TRPA	Tahoe Regional Planning Agency
TTC	Tahoe Transportation Commission
TTD	Tahoe Transportation District
UPWP	Unified Planning Work Program (also referred to as OWP)
USFS-LTBMU	United States Forest Service, Lake Tahoe Basin Management Unit

INTRODUCTION

The Overall Work Program (OWP), also referred to as a Unified Planning Work Program, defines the continuing, comprehensive, and coordinated regional transportation planning process for the Lake Tahoe Basin. It establishes transportation, air quality, and other regional planning objectives for Fiscal Year 2020/2021 covering the period of July 1, 2019 through June 30, 2021 (FY 20/21), and a corresponding budget to complete the work. The OWP is a strategic management tool for the Tahoe Regional Planning Agency (TRPA) serving as the Tahoe Metropolitan Planning Organization (TMPO) for the Lake Tahoe Region organized by work elements that identify activities and products to be accomplished during the year. These activities include core metropolitan planning functions, mandated metropolitan planning requirements and other regional transportation planning activities. The OWP presents an annual outline of the TRPA's transportation planning resources and includes a budget containing a variety of funding sources that are available to the TRPA for FY 20/21.

All activities contained in this OWP are carried out by TRPA's Metropolitan Planning Organization (MPO) function and will be referred to as TRPA throughout the document. The OWP is also as an informative tool for the Tahoe Transportation Commission (TTC) who serves as an advisory board to the TMPO. The MPO Policy Board, referred to as the TMPO, convenes as a separate entity that is made up of the TRPA Governing Board with the addition of a United States Forest Service voting representative. The TMPO is convened as necessary to act on all MPO related actions.

LAKE TAHOE TRANSPORTATION PLANNING OVERVIEW

TRPA holds three integrated regional transportation planning authorities: 1) Tahoe Regional Planning Compact (PL 96-551) planning requirements, 2) Regional Transportation Planning Agency for the California portion of the Lake Tahoe basin, and 3) the Metropolitan Planning Organization for the Tahoe Region. The Tahoe Regional Planning Compact also created the Tahoe Transportation District in Article IX which includes public transit and transportation implementation responsibilities.

The 1980 Tahoe Regional Planning Compact includes the following transportation related provisions:

> "…there be established a Tahoe Regional Planning Agency with the powers conferred by this compact including the power to establish environmental threshold carrying capacities and to adopt and enforce a regional plan and implementing ordinances which will achieve and maintain such capacities while providing opportunities for orderly growth and development consistent with such capacities."

The TRPA Regional Plan shall be a single enforceable plan with the following related elements:

- ✓ A Goals and Policy Plan
- ✓ A Transportation Plan for the integrated development of a regional system of transportation, including but not limited to parkways, highways, transportation facilities, transit routes, waterways, navigation facilities, public transportation facilities, bicycle facilities and appurtenant terminals and facilities for the movement of people and goods, within the region.
- ✓ The goal of transportation planning shall be:

  - To reduce dependency on the automobile by making more effective use of existing transportation modes and of public transit to move people and goods within the region; and
  - To reduce, to the extent feasible, air pollution caused by motor vehicles.
- ✓ Where increases in capacity are required, the agency shall give preference to providing such capacity through public transportation and public programs and projects related to transportation.
- ✓ The plan shall provide for an appropriate transit system for the region.
- ✓ The plan shall give consideration to:
  - Completion of the Loop Road in the states of Nevada and California
  - Utilization of a light rail mass transit system in the South Shore area
  - Utilization of a transit terminal in the Kingsbury Grade area

TRPA establishes transportation and land use policy direction by virtue of the Code of Ordinances, Goals and Policies, Plan Area Statements, and Local Area Plans. Additionally, TRPA administers the Environmental Improvement Program (EIP), a regional investment program focused on the restoration and protection of Lake Tahoe. The EIP is a programmatic approach to implementing transportation improvements, in addition to other resource area investments. The Transportation and Air Quality subprogram of the EIP is the largest category of identified investments in the EIP and is coordinated with federal funding allocations and programming activities of TRPA.

In addition to the responsibilities under the Tahoe Regional Planning Compact, TRPA is recognized as the Regional Transportation Planning Agency (RTPA) in California. As the RTPA, TRPA is charged with developing a Regional Transportation Plan (RTP), a Regional Transportation Improvement Program (RTIP) to account for California state transportation funding programs.

The Metropolitan Planning Organization (MPO) authority was established in 1999 by the Governors of California and Nevada by designating the Lake Tahoe MPO under authority provided in federal regulations. TRPA's MPO role is primarily a transportation planning and financial programming role. The three primary products required of an MPO by federal rule are a Regional Transportation Plan, Federal Transportation Improvement Program (FTIP), and an OWP. The MPO Governing Board is comprised of the TRPA Governing Board, with the addition of a voting representative of the United States Forest Service, Lake Tahoe Basin Management Unit (USFS-LTBMU).

The integration of the three authorities listed above is supported by the various activities and programs carried out by TRPA's Transportation Planning Program. The ability to integrate land use and transportation planning at a regional level, while considering impacts on implementation efforts, is a prime focus of this program and supports federal and state planning guidance.

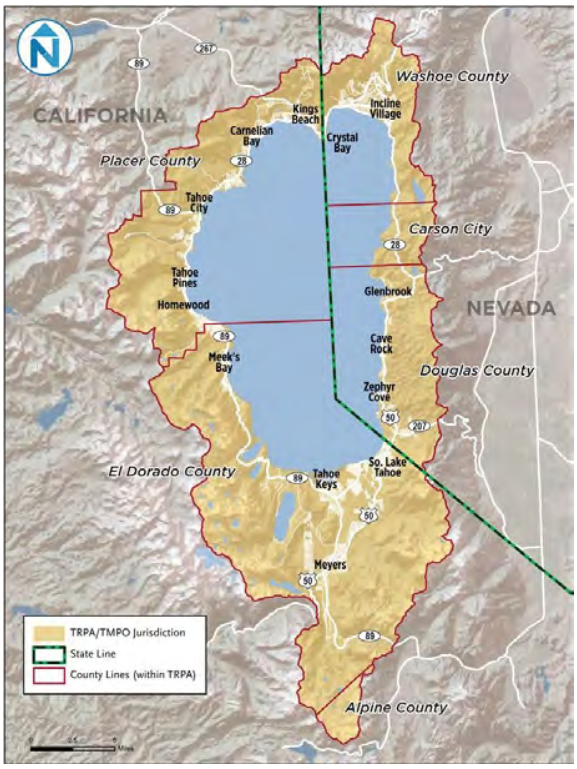
Lake Tahoe's unique setting and environmental stature necessitates developing transportation plans and projects that are evaluated in conjunction with TRPA's environmental standards called "environmental threshold carrying capacities" (under the following nine categories: water quality, air quality, noise, scenic quality, soil preservation and stream environment zones, wildlife, fisheries, vegetation conservation, and recreation) and transportation goals.

SETTING

The Tahoe Region is located on the border of the states of California and Nevada, between the Sierra Crest and the Carson Range. Approximately two-thirds of the Region is located in California, with one-third within the state of Nevada. The Tahoe Region contains an area of about 501 square miles, of which approximately 191 square miles comprise the surface waters of Lake Tahoe and includes a 37 square mile urban boundary containing the commercial and residential activity. Lake Tahoe dominates the features of the Region and is the primary focus of local and regional environmental regulations to protect its exceptional water clarity. Over 80% of the land area in the Lake Tahoe Basin is publicly owned and represents a major recreation attraction.

Located within the California portion of the Tahoe Region is the incorporated City of South Lake Tahoe and portions of El Dorado County and Placer County. This part of the Region is within the fourth Congressional District of California. Based on the 2010 Census, the resident population of the Tahoe Region was 54,862. This is a significant decline from the 62,894 population estimated by the 2000 Census. Of the 54,862 population figure, 41,176 people reside within the California portion, while the Nevada side of the Tahoe Region, portions of Washoe County, Douglas County, and the rural area of Carson City make up the remaining 13,686 in population. The Nevada portion of the Region is within Nevada's second Congressional district.

Lake Tahoe and the surrounding areas serve as a major recreation destination for residents of the surrounding metropolitan areas of northern Nevada and California. The primary market for recreation at Lake Tahoe is from northern California, primarily the Sacramento and San Francisco Bay Area. Residents from Reno/Sparks and Carson Valley are also frequent day visitors to the area. Additional domestic and international visitors arrive via Reno Tahoe International and Sacramento International Airports. Visitors account for over 10 million cars annually.



Serving the resident and visitor populations are public and private fixed route transit, shuttles, and specialized transit services, as well as general aviation services at the South Lake Tahoe Airport. The Federal and State highway network around the Lake serve as community main streets. There are seven access points to the Basin from outside the region. A variety of state route segments encircle the lake. Portions of the Region are served by a growing bicycle and pedestrian network. Public transit is provided on the north shore by Tahoe Truckee Area Regional Transit (TART), operated by Placer County and transit service on the south shore is provided by the TTD. Both public transit systems are complemented by a variety of private shuttles for summer and winter activities. Airport shuttle operations, including the North Lake Tahoe Express and the South Tahoe Airporter, provide shuttle service to the Reno/Tahoe Airport.

TAHOE BASIN TRANSPORTATION PLANNING INSTITUTIONAL STRUCTURE

As noted previously, the Lake Tahoe Region holds various federal, state and local transportation planning authorities. The Region's planning complexity requires the utmost coordination and collaboration among transportation and land use planning partners. The following section provides a brief description of the regional entities that have a role in the transportation policy or technical decision-making process.

TAHOE REGIONAL PLANNING AGENCY The Tahoe Regional Planning Agency (TRPA) was created by the Tahoe Regional Planning Compact (updated in 1980 through P.L. 96-551) and is governed by a fourteen-member Governing Board, with a non-voting federal representative as the fifteenth member. Each state has seven representatives, with each local jurisdiction within the Region also represented. TRPA is unique because of its regional bi-state responsibilities under the Compact for land use planning, transportation planning, project review and approval, enforcement of regional land-use and environmental ordinances, and the achievement of environmental goals. The TRPA Governing Board has established an Environmental Improvement Program Committee that provides feedback on various transportation planning and funding allocation proposals.

TAHOE REGIONAL PLANNING AGENCY TRPA, as the Metropolitan Planning Organization, is responsible for taking the required actions under federal regulations regarding metropolitan planning. The MPO metropolitan planning area is concurrent with that of the TRPA. The MPO Board of Directors is comprised of the fourteen voting members of the TRPA Governing Board, and a voting representative of the United States Forest Service, USFS-LTBMU. The MPO voted to provide that the Chair and Vice-Chair of the TRPA serve as Chair and Vice-Chair of the MPO, unless the MPO votes otherwise. The Placer County seat on the TMPO board is the transit operator representation required by MAP-21.

It is important to note that these two policy bodies, although they include many of the same individuals, have diverse missions and responsibilities. The TRPA's overriding obligation is adherence to the Compact, including attaining and maintaining environmental thresholds. The MPO's mission, on the other hand, is to provide policy decisions on transportation plans and programs. As described above, integration of the land use and transportation planning process is in place to support the TRPA mission and policies through the MPO and Regional Transportation Planning Agency authorities and planning requirements.

TAHOE REGIONAL PLANNING AGENCY TRPA is statutorily designated by the State of California as a Regional Transportation Planning Agency for the Tahoe Region. As an RTPA, TRPA must fulfill various statutory requirements, including those of the Transportation Development Act, coordination with California Department of Transportation (Caltrans) on the development of Regional Transportation Plans and Regional Transportation Improvement Programs and other project related activities. The TRPA Governing Board indicates that it is sitting as the RTPA when taking a policy action, but no changes to the membership of the Governing Board occur.

Tahoe Transportation DISTRICT Article IX of the Tahoe Regional Planning Compact created the Tahoe Transportation District. The TTD is responsible for the implementation of transportation plans, programs and projects. The TTD may acquire, own and operate public transportation systems and parking facilities, and other transportation infrastructure serving the Tahoe Region and provide access to convenient transportation terminals outside of the Region. The TTD also has limited authority to generate revenue to support transit and transportation facilities. Board membership includes representation from the Basin's two Transportation Management Associations, an at-large member representing transit providers, and a representative for any special transit districts formed under California law. Caltrans and the Nevada Department of Transportation (NDOT) each have a non-voting member on the Board of Directors. New legislation from the State of California (SB-785) and Nevada amended Article IX Transportation District of the compact changing membership of the board by adding to the board three new appointees; one by the Governor of California, one by the Governor of Nevada and one by the Tahoe Regional Planning Agency. The TTD is an important partner for implementing the RTP and increasing project implementation capacity region-wide.

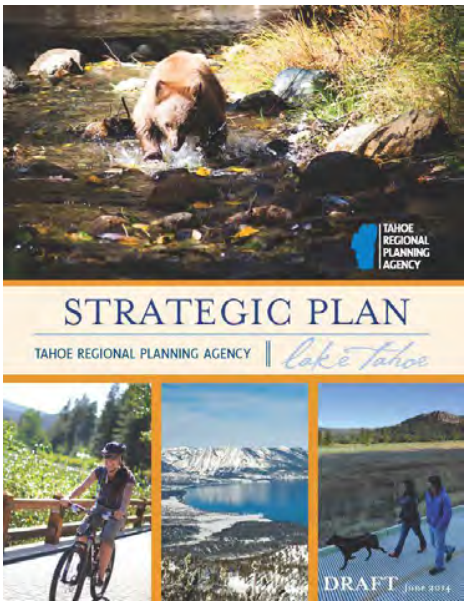
TAHOE TRANSPORTATION COMMISSION

The Tahoe Transportation Commission (TTC) is a designated advisory body in the metropolitan planning process responsible with providing the MPO and TRPA transportation planning and policy recommendations. The TTC was formalized through TRPA and TMPO resolutions passed in 1999.

The TTC is charged with providing the MPO with technical input and recommendations on transportation plans and programs, offering proactive public participation through its meeting noticing requirements, and providing the MPO Board time necessary to address the full range of complex and interrelated transportation issues facing the Lake Tahoe Basin. The TTC provides policy guidance to the TRPA and is where additional debate can take place prior to final actions being taken. The TTC is comprised of the voting membership of the TTD, with the addition of representatives from the Washoe Tribe of California and Nevada, USFS-LTBMU and the TRPA Advisory Planning Commission (APC).

TRPA STRATEGIC PLAN AND THE TRANSPORTATION PROGRAM

The Transportation Planning Program plays an integral role in implementing the TRPA Strategic Plan. The TRPA Strategic Plan encompasses the intent of the federal cooperative, continuing, and comprehensive transportation planning approach required of MPOs. Building partnerships that result in projects that support the human and natural environment is a fundamental vision of the Strategic Plan.

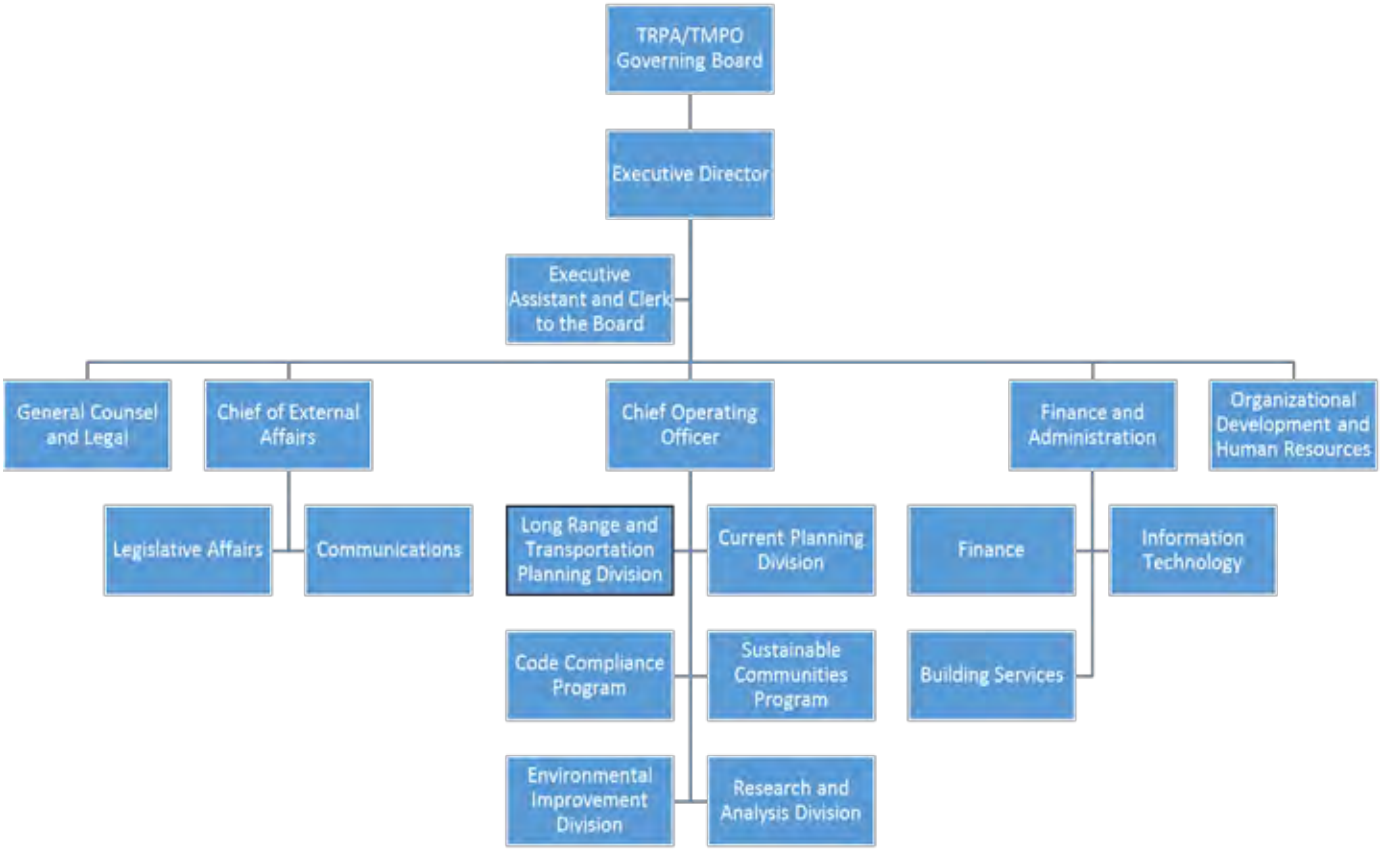


TRPA "Strategic Goals" include:

1) **Accelerate Threshold Attainment**
   Focus on Regional issues and develop new funding opportunities to continue the Environmental Improvement Program.
2) **Propel the Development and Use of Best Information, Data and Science**
   Continue strong relations with the science community and improve measurement and reporting for accountability.
3) **Establish TRPA as a Leader in Environmental & Sustainability Programs**
   Seek best practices and form new strategic alliances.
4) **Operate as a High-Performance Organization**
   Create an enduring organizational culture of high performance and continuous improvement.

TRPA Strategic Plan	Work Elements							
Strategic Priorities	**101**	**102**	**103**	**104**	**105**	**106**	**107**	**108**
1) Accelerate Threshold Attainment		◊		◊		◊	◊	◊
2) Propel the Development and Use of Best Information, Data and Science	◊		◊	◊	◊		◊	◊
3) Establish TRPA as a Leader in Environmental & Sustainability Programs				◊			◊	◊
4) Operate as a High-Performance Organization	◊		◊				◊	◊

TAHOE REGIONAL PLANNING AGENCY
ORGANIZATIONAL CHART



TAHOE REGIONAL PLANNING AGENCY
GOVERNING BOARD

Representing:

California Senate Rules Committee Appointee	William Yeates, Chair
Governor of Nevada Appointee	Mark Bruce, Vice Chair
Carson City Representative	Shelly Aldean
Nevada Department of Conservation & Natural Resources	James Lawrence
Governor of California Appointee	Casey Beyer
Douglas County Commissioner	Wesley Rice
El Dorado County Supervisor	Sue Novasel
Nevada Secretary of State	Barbara Cegavske
Placer County Board of Supervisors	Cindy Gustafson
City of South Lake Tahoe Council Member	Brooke Laine
Washoe County Commissioner	Marsha Berkbigler
Governor of California Appointee	Vacant
Nevada At-Large Member	Timothy Cashman
California Assembly Speaker Appointee	Belinda Faustinos
President of the United States Appointee	A.J. “Bud” Hicks

TRPA Executive Director ..... Joanne S. Marchetta

TAHOE METROPOLITAN PLANNING ORGANIZATION
GOVERNING BOARD

Representing:

California Senate Rules Committee Appointee	William Yeates, Chair
Governor of Nevada Appointee	Mark Bruce, Vice Chair
Carson City Representative	Shelly Aldean
Nevada Department of Conservation & Natural Resources	James Lawrence
Governor of California Appointee	Casey Beyer
Douglas County Commissioner	Nancy McDermid
El Dorado County Supervisor	Sue Novasel
Nevada Secretary of State	Barbara Cegavske
Placer County Board of Supervisors	Cindy Gustafson
City of South Lake Tahoe Council Member	Brooke Laine
Washoe County Commissioner	Marsha Berkbigler
Governor of California Appointee	E. Clement Shute, Jr.
Nevada At-Large Member	Timothy Cashman
California Assembly Speaker Appointee	Belinda Faustinos
President of the United States Appointee	A.J. “Bud” Hicks
USFS Forest Supervisor	Jeff Marsolais

TRPA Executive Director ..... Joanne S. Marchetta
Long Range and Transportation Planning Division Manager ..... Nick Haven

TAHOE TRANSPORTATION COMMISSION
BOARD OF DIRECTORS

Representing:

South Shore TMA	Steve Teshara, Chair
Carson City	Lucia Maloney, Vice Chair
Douglas County	Wesley Rice
City of South Lake Tahoe	Cody Bass
Placer County	Cindy Gustafson
Washoe County	Marsha Berkbigler
Truckee - North Tahoe TMA	Andy Chapman
El Dorado County	Sue Novasel
Member At-large	Vince Arthur
USFS Lake Tahoe Basin Management Unit	Michael Gabor
TRPA Advisory Planning Commission	Vacant
California Department of Transportation (non-voting)	Sukhvinder (Sue) Takhar
Nevada Department of Transportation (non-voting)	Sondra Rosenberg
Washoe Tribe of Nevada and California	Serrell Smokey

Long Range and Transportation Planning Division Manager ..... Nick Haven

OUTREACH AND PUBLIC INVOLVEMENT

An important component of the MPO transportation planning process is consultation and public participation in the development of plans, programs and policy. The regional transportation planning program establishes an important forum for discussing and resolving regional transportation issues. Some examples of executing the continuing, coordinated, and cooperative planning process include board meetings, public workshops, technical committees, issue specific meetings, public hearings, and formal public document review periods. TRPA has developed specific policies and procedures for consulting partners and engaging public participation through the recently updated *Public Participation Plan (PPP)* (link). The PPP emphasizes efforts to coordinate with underserved and underrepresented groups and the utilization of both new technology and conventional in-person communication to maximize public participation and engagement. Additional information regarding TRPA's effort to provide a transparent non-discriminatory operation is documented by the TRPA Title VI Program.

NATIVE AMERICAN TRIBAL GOVERNMENT CONSULTATION

The Lake Tahoe Region is home to one Tribal Government, the Washoe Tribe of California and Nevada. TRPA conducts regular government-to–government communication with the Washoe Tribe to consider tribal needs in the planning and programming process. The Washoe Tribe is a voting member of the Tahoe Transportation Commission, the advisory body to the TMPO Governing Board. TRPA is actively working with the Washoe Tribe on a MOU to memorialize the government-to-government relationship between the two parties.

CORE MPO PLANNING FUNCTIONS

TRPA ensures MPO core planning functions are identified in the OWP and include a clear description of the activities, products, and schedules that support the federal transportation planning process as identified in 23 CFR 450. MPO Core Functions include:

- Overall Work Program (**Work Element 101**)
- Public Participation and Education (**Work Element 103**)
- Regional Transportation Plan (**Work Element 104 and 108**)
- Federal Transportation Improvement Program (**Work Element 106**)
- Congestion Management Process (**Work Element 107**)
- Annual Listing of Projects (**Work Element 106**)

FEDERAL HIGHWAY ADMINISTRATION (FHWA) PLANNING FACTORS

The latest Federal transportation bill (FAST Act) expanded the scope of factors to consider in the transportation planning process. The matrix below illustrates how FAST Act planning factors (23 USC Section 134(h)) are addressed across work elements in the OWP.

Fiscal Year 20/21 FHWA Transportation Planning Factors

		Work Elements							
		101	**102**	**103**	**104**	**105**	**106**	**107**	**108**
FAST Act Planning Considerations	***Support the economic vitality of the metropolitan area, especially by enabling global competitiveness, productivity, and efficiency***				X			X	
	Increase the safety of the transportation system for motorized and non-motorized users.				X			X	X
	Increase the security of the transportation system for motorized and non-motorized users.				X			X	X
	Increase the accessibility and mobility of people and for freight.		X		X			X	X
	Protect and enhance the environment, promote energy conservation, improve the quality of life, and promote consistency between transportation improvements and State and local planned growth and economic development patterns.				X		X	X	X
	Enhance the integration and connectivity of the transportation system, across and between modes, people and freight.			X	X			X	X
	Promote efficient system management and operation.		X		X		X	X	X
	Emphasize the preservation of the existing transportation system.				X				X
	Improve transportation system resiliency and reliability and reduce or mitigate the storm water impacts of surface transportation				X		X	X	X
	Enhance travel and tourism coordination				X	X		X	X

FY 20/21 WORK ELEMENTS

Outreach and Administration

WE 101 – Program Administration

WE 102 – Transportation Development Act

WE 103 – Public Outreach and Coordination

Regional Intermodal Planning

WE 104 – Regional Intermodal Planning

WE 105 – Transportation Data Management and Forecasting

Tracking & Financial Management

WE 106 – Project Tracking and Financial Management

Regional Partnerships

WE 107 –Performance-Based Planning

Sustainable Communities

WE 108 –Sustainable Communities Planning

NOTE: **All activities and products identified in the following Work Elements are part of the regional transportation planning process and are assumed to be eligible expenses for the budgeted funding sources.**

WORK ELEMENT 101: PROGRAM ADMINISTRATION

PURPOSE

To support tasks necessary for the overall administration of the regional transportation planning program; to support the MPO core planning function to provide on-going management of the OWP/UPWP; to support staff career development through professional trainings and seminars related to transportation planning.

DISCUSSION

The TRPA regional transportation planning program is administered through a Unified Planning Work Program (UPWP), also known as an Overall Work Program (OWP). The OWP must include all anticipated transportation planning activities proposed with federal and state planning funds. As a priority MPO core planning function, TRPA staff develops the OWP in a transparent public process and is ultimately adopted by the MPO Governing Board.

In the most recent federal transportation authorization bill, Fixing America's Surface Transportation Act (FAST Act), the Lake Tahoe Region was recognized as a Transportation Management Area (TMA) with a total population of 210,000. As a TMA there are additional requirements that address congestion management, additional planning and programming considerations, and FHWA Planning Certification reviews every four years. The activities included in this work element involve administrative efforts to support the MPO program as required by federal planning statues. TRPA completed its first Federal Certification Review as a TMA in 2019 and had no corrective actions and one commendation regarding its public involvement process. The next certification review is due by December of 2023. Specific ongoing TMA planning activities are called out in subsequent Work Elements.

TRPA invests in the professional development of its workforce to aid in creating a high-performance organization.

PREVIOUS WORK

- FY 19/20 OWP administration and financial reporting
- TRPA staff attended transportation planning professional development trainings
- Supported FHWA/FTA Planning Certification Review process

PRODUCTS		COMPLETION DATE
P-1	Closeout FY 19/20 OWP	**July 2020**
P-2	Final FY 20/21 OWP and OWPA	**July 2020**
P-3	FY 20/21 OWP Amendment(s)	**April 2021**
P-4	Draft FY 21/22 OWP	**March 2021**

TASKS

T-1 **Overall Work Program/Budget**

- Administer FY 20/21 OWP document and related amendments
- Coordinate quarterly and end of year reporting
- Provide grant management and oversight of transportation planning grants
- Budget and agreement administration

- Host annual meeting with State and Federal partners to review proposed FY 21/22 OWP initiatives
- FY 21/22 OWP development

T-2 **Staff Development in Regional Transportation Planning**

- Support internal cross training to promote diverse staffing capabilities in regional transportation planning
- Attend trainings, both in-house and outside courses and seminars, that directly relate to transportation planning

Work Element 101 Budget:

REVENUES		EXPENDITURES	
Direct Costs:		**Direct Costs:**	
TRPA General	$20,000	Travel/Training	$20,000
Subtotal:	**$20,000**	**Subtotal:**	**$20,000**
TMPO Staff:		**TMPO Staff:**	
FHWA PL (CA)	$55,000		
-Toll Credits (PL-CA)	$6,309		
FHWA PL (CA-Carryover)	$72,976		
-Toll Credits (CA-PL Carry)	$8,370		
		Wages/Benefits:	**$73,130**
		Est. Indirect Cost:	**$54,846**
Subtotal:	**$127,976**	**Subtotal:**	**$127,976**
Total:	**$147,976**	**Total:**	**$147,976**

**Toll Credits are displayed for tracking purposes and are not a form of cash or revenue.

WORK ELEMENT 102: TRANSPORTATION DEVELOPMENT ACT

PURPOSE

To administer requirements of the California Transportation Development Act (TDA); to process the Local Transportation Funds (LTF) and State Transit Assistance (STA) funds for allocation to local entities; to prepare the annual Unmet Transit Needs Assessment; to monitor the completion of necessary operational and financial audits; to conduct productivity and efficiency analysis of TDA-funded transit operations per TDA requirements and provide recommendations.

DISCUSSION

LTF and STA funds are eligible for funding transportation projects in the Tahoe Region. TRPA, serving as the Regional Transportation Planning Agency, is responsible for processing and monitoring the distribution and use of these funds. These required roles help TRPA ensure LTF and STA funds are being administered in accordance with TDA requirements.

One of the annual tasks included in this work element is the "Unmet Transit Needs" process, which is required under California Public Utilities Code (PUC) Section 99401.5. TRPA's unmet transit needs process is accomplished through the Social Services Transportation Advisory Council (SSTAC), in accordance with TDA requirements, with additional assistance from the Tahoe Area Coordinating Council for the Disabled (TACCD), Truckee - North Tahoe Transportation Management Association (TNT-TMA), Community Collaborative of Truckee Tahoe (CCTT), South Shore Transportation Management Association (SSTMA). The process is also conducted in cooperation with Placer County Transportation Planning Agency (PCTPA) and Nevada County Transportation Commission (NCTC). The unmet needs process is also coordinated with transit operators and short-range transit plan development.

Per PUC Section 99244, TRPA is required to annually identify, analyze, and recommend potential transit productivity improvements, which could lower operating costs and increase efficiency. TRPA fulfills this requirement with the Transit Productivity Improvement Program (PIP) that monitors operations data and works cooperatively with the transit operators to implement recommended service improvements.

All TDA funds are used for public transit, therefore TRPA conducts unmet needs hearings as transit forums that provide for the identification of needs and direct operational feedback to transit operators. SSTAC reviews the information annually at a public hearing.

PREVIOUS WORK

- Began work on Triennial Performance Audits of transit operators receiving TDA funds
- Completed updated TDA Handbook for use by claimants
- Provided LTF and STA Estimates
- Processed TDA Claims
- Held 2019 Unmet Transit Needs Forum

PRODUCTS		COMPLETION DATE
P-1	Submit TDA Schedule of Performance Audits	**August 2020**
P-2	Submit Annual Report of Financial Transactions	**September 2020**
P-3	Develop Productivity Improvement Recommendations	**October 2020**
P-4	Complete claimant and TRPA Financial Audits	**December 2020**

P-5	Conduct and document Unmet Transit Needs/Transit Forums	**October 2020**
P-6	Release LTF and STA Preliminary Findings of Apportionment	**February 2021**
P-7	Prepare and produce FY 20 Unmet Transit Needs Assessment	**March 2021**
P-8	Release Final LTF Apportionments	**May 2021**
P-9	LTF and STA allocation instructions to County Auditors	**June 2021**
P-10	Triennial Performance Audits	**September 2020**

TASKS

T-1 **TDA Administration**

- Process TDA Claims: notify claimants of funds available for apportionment; process claims for TRPA approval; submit allocation instructions to Auditor-Controllers
- Monitor quarterly reports from Auditor-Controllers
- Audit Coordination: provide assistance to auditors for TRPA fiscal audits; monitor completion and submittal of claimant audits.
- Review statutes, rules and regulations, and pending legislation pertinent to transit and transit funding
- Analyze service performance and recommend productivity improvements

T-2 **Social Services Transportation Advisory Council**

- Preparation and coordination for holding unmet transit needs/transit forum hearings
- Conduct meetings of the SSTAC on the north and south shores

T-3 **Unmet Transit Needs**

- Review and analyze Unmet Transit Needs, make a determination to the SSTAC regarding unmet transit needs and those that are reasonable to meet, discuss, review and accept the Transit Needs Assessment
- Conduct and document unmet transit needs hearings and outreach efforts with traditionally underrepresented and underserved populations and their community leaders (i.e., elderly, disabled, low income, and minorities: Black, Hispanic, Asian American, American Indian/Alaskan Native, and Pacific Islander)

Work Element 102 Budget:

REVENUES		**EXPENDITURES**	
Direct Costs:		**Direct Costs:**	
TDA Administration	$16,358	TDA Financial Audit	$16,358
Subtotal:	**$16,358**	**Subtotal:**	**$16,358**
TMPO Staff:		**TMPO Staff:**	
TDA Administration	32,000	**Wages/Benefits:**	**$18,941**
TDA Planning	1,147		
		Est. Indirect Cost:	**$14,206**
Subtotal:	**$33,147**	**Subtotal:**	**$33,147**
Total:	**$49,505**	**Total:**	**$49,505**

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WORK ELEMENT 103: PUBLIC OUTREACH AND COORDINATION

PURPOSE

To support policy boards and attend various local, regional, state, and federal meetings; to coordinate and involve community members, visitors, organizations, and individuals, including the Washoe Tribe of California and Nevada in the regional transportation planning process; to utilize electronic and innovative outreach to maximize the reach to the public; to monitor and report on outreach effectiveness in the next Public Participation Plan (PPP)

DISCUSSION

As part of the regional transportation planning process, staff supports the TRPA/MPO Governing Board and Tahoe Transportation Commission through the development of agendas, staff reports and other board requests. TRPA's regional transportation planning and programming process fosters coordination, consultation, and cooperation and includes participation in various local, regional, state, and federal meetings and committees. Regional collaboration is one of TRPA's core functions. The approach to public involvement and reporting on effectiveness of outreach is contained in the TRPA Public Participation Plan (PPP) and is updated every four years prior to the development of the Regional Transportation Plan.

TRPA has established a transparent inclusive regional transportation planning forum that invites and solicits public input on proposals. Existing policies and procedures are in place to ensure a non-discriminatory transparent public process and are documented in TRPA's Title VI program.

TRPA engages with the Washoe Tribe of California and Nevada through coordination meetings that ensure the Washoe Tribe is involved and aware of transportation policies and projects under consideration in the region. This consultation with the Washoe Tribe is considered a formal government-to-government consultation and is above and beyond any general public outreach. As a member of the TTC, the Washoe Tribe is formally included in the regional planning process and has additional opportunity to provide input on various transportation and associated environmental considerations affecting Tribal interests. TRPA is engaging with the Washoe Tribe to formalize the government to government consultation process through a Memorandum of Understanding (MOU) between TRPA and the Washoe Tribe.

TRPA actively engages with agency partners, key stakeholder groups, and the public on a variety of transportation topics and planning processes. Establishing open communication channels for dialogue through interactive web tools, social media, e-newsletters, workshops, events, and speaker series deepens public understanding of transportation issues and provides continual input for planners.

TRPA continues to improve access to information by making documents and data readily available to the public in both electronic and print versions, including key documents translated to Spanish. The recently updated TRPA transportation website is maintained to provide the latest information.

PREVIOUS WORK

- Adopted the 2019 Public Participation Plan
- Maintained on-going communication with the public through press releases, updates to the web site, and social media on transportation planning activities and concepts

PRODUCTS		COMPLETION DATE
P-1	Quarterly Transportation E-Newsletter	**Quarterly**
P-2	TRPA website and social media updates to promote new programs and news	**Monthly**

TASKS

T-1 **TRPA Board Support and Regional Coordination**

- Development of agendas, staff reports, technical analysis, and related materials for public and board distribution
- Preparation for and participation in local, regional, state, and federal committees, ad hoc meetings, and workshops directly relating to regional transportation planning

T-2 **Tribal Government Coordination, Consultation, and Collaboration**

- Confer with Washoe Tribe of California and Nevada regarding transportation plans and programs via meetings, TTC agendas, direct correspondence, and response to issues raised by the Tribal government
- Formalize government-to-government partnership approach with the Washoe Tribal government

T-3 **Public Participation and Involvement**

- Administer the Public Participation Plan (PPP), including documented public involvement procedures
- Support public outreach strategy for the 2020 Linking Tahoe: RTP/SCS
- Release public notices and other public information to media outlets as appropriate
- Produce maps, brochures, displays, and other visualization tools supporting transportation proposals
- Participate in and hold public meetings and workshops for various transportation planning concepts and issues
- Participate in appropriate regional events to support and promote regional transportation goals and current transportation planning initiatives
- TRPA transportation program web maintenance and content updates
- Produce monthly e-newsletters for regional transportation news and involvement opportunity issues
- Support community participation and education workshops, speaker series, and brown bag presentations (such as Tahoe Talks)
- Participate in the Bi-state Transportation Consultation Group as needed, a cabinet-level working group representing high-level officials from the States of California and Nevada, Federal agencies, Local Government, and private sector partners.

T-4 **Transportation Management Association Coordination**

- Work with SS/TMA and TNT-TMA, local jurisdictions, and other community groups to generate partnerships to support effective and widespread adoption and monitoring of TDM program strategies including Commute Tahoe.
- Coordinate with TTD, Tahoe Chamber, Lodging and Visitor Associations, and Recreation Providers to strategize on various transportation issues (local work force, resource sharing, improved communication, etc.) and generate targeted recommendations and identify opportunities for public/private partnerships.

T-5 **Environmental Justice**

- Preparation for and conduct meetings designed to inform and solicit feedback from minority and low-income populations regarding the transportation planning process and to assess impacts on those communities

T-6 **Civil Rights**

- Title VI, DBE, ADA program management, compliance, monitoring, and reporting

Work Element 103 Budget:

REVENUES		EXPENDITURES	
Direct Costs:		**Direct Costs:**	
FHWA PL (CA)	$22,000	Noticing/Advertising/Meetings	$15,000
-Toll Credits (CA-PL)	$2,523	*Subscriptions/Dues	$12,000
FHWA PL (CA-Carryover)	$20,000	TMA Cooperative Agreements	$27,000
-Toll Credits (CA-Carry)	$2,294		
TRPA General	$12,000	*Not funded by CPG funds*	
Subtotal:	**$54,000**	**Subtotal:**	**$54,000**
TMPO Staff:		**TMPO Staff:**	
FHWA PL (CA)	$120,000		
-Toll Credits (CA-PL)	$13,764		
FHWA PL (CA-Carryover)	$40,834		
-Toll Credits (CA-Carry)	$4,684		
		Wages/Benefits:	**$91,906**
		Est. Indirect Cost:	**$68,928**
Subtotal:	**$160,834**	**Subtotal:**	**$160,834**
Total:	**$214,834**	**Total:**	**$214,834**

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WORK ELEMENT 104: REGIONAL INTERMODAL PLANNING

PURPOSE

To carry out and support the integration of federal, state, and local transportation planning processes; to complete activities and products to satisfy core planning functions, federal metropolitan planning requirements (FAST Act), and California and Nevada requirements; to support transportation policy development and analysis; to consider all modes of transportation in implementing regional transportation goals; to support corridor-level transportation planning; to develop innovative transportation demand management programs; to develop partnerships inside and outside of the Region to further transportation goals.

DISCUSSION

TRPA, in its role as the Metropolitan Planning Organization, supports the established continuing, comprehensive, and *coordinated transportation planning process to establish* a multi-modal transportation system that can adapt to the continually evolving goals and needs of the Lake Tahoe Region and its diverse communities. Transportation staff will develop planning studies in-house, contract for planning services by consultants, conduct public hearings, hold meetings on specific issues with affected public agencies, the general public, and interest groups through various outreach efforts, including community workshops.

The TRPA has committed to an adaptive policy management framework that will provide for coordinated updates of the Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS) every four years, or as otherwise necessary. The Tahoe Region is maximizing the effectiveness of having integrated land use and transportation plans, as supported by federal and state planning guidance. TRPA is underway in the development of the 2020 Linking Tahoe: RTP/SCS. A primary focus of this work element is the development of the new RTP. This RTP/SCS update is a targeted refinement of the transit and funding sections of the 2017 Linking Tahoe: RTP/SCS and will include baseline and forecast analysis (WE105) and environmental review.

TRPA is increasing its focus on coordination with public and private sector entities to share research and increase awareness of existing travel options for residents and visitors. The Transportation Demand Management (TDM) tasks will also include an assessment of existing conditions and strategies to increase awareness of employer transportation options. TRPA will begin focusing on large employers through the Commute Tahoe program with assistance from the TNT-TMA and SS/TMA. TRPA will continue to support the annual Bike Challenge to increase active transportation in the Region.

In addition to the Regional Transportation Plan TRPA also maintains various modal specific plans including the Active Transportation Plan (ATP)-formerly the Bicycle and Pedestrian Plan, and Intelligent Transportation Systems (ITS) Plan. TRPA also supports the transit operators in updating short-range transit plans. TRPA coordinates with local or state led safety, goods movement, aviation, and system management planning efforts. As a recognition of the impact of the visitor market to Lake Tahoe's transportation system, TRPA will continue to increase participation in other Northern California Megaregion planning efforts. The shared interests of surrounding transportation agencies, including Sacramento Area Council of Governments (SACOG), the Washoe County Regional Transportation Commission (Washoe RTC), county and local governments support a partnership approach to identifying inter-regional transportation solutions.

PREVIOUS WORK

- Maintained the Active Transportation Plan
- Initiated Commute Tahoe program activities
- Coordinated local Area Plans and project consistency with *2017 RTP/SCS*
- Convened the Pathway Partnership to coordinate project prioritization, tracking, and programming
- Drafted Lake Tahoe Transit Monitoring Protocol
- Completed White Paper on Emerging Mobility Services
- Completed Technical Memo on existing E-Bike Policies
- Developed Outreach Plan for the 2020 RTP/SCS
- Submitted 2020 RTP/SCS Methodology to CARB

PRODUCTS		**COMPLETION DATE**
P-1	Draft *2020 Linking Tahoe: RTP/SCS* Sections	**August 2020**
P-2	Final *2020 Linking Tahoe: RTP/SCS*	**October 2020**
P-3	Final 2021 Active Transportation Plan	**March 2021**
P-4	Annual Transit Productivity Improvement Report	**May 2021**

TASKS

T-1 **Regional Transportation Plan (Core Planning Function)**

2017 RTP/SCS

- Administration of *2017 RTP/SCS,* including coordinating with state, local, and federal partners to explore funding opportunities to implement the plan
- Process amendments to *2017 RTP/SCS* as necessary
- Participate in public and interagency meetings as a transportation technical resource
- Conduct public outreach on *2020 Linking Tahoe: RTP/SCS* to promote vibrant communities, and improve public health
- Develop special studies as needed for the 2020 Linking Tahoe: RTP/SCS (I.e.: public-private partnerships, transit, freight, aviation, etc.)

Develop Draft and Finalize 2020 Linking Tahoe: RTP/SCS

- Review projects to ensure consistency with established transportation plans and *2020 RTP/SCS* policies

T-2 **Inter-Regional Planning**

- Develop formal planning partnerships with surrounding transportation agencies (Northern California Megaregion – SACOG, MTC, San Joaquin, Washoe RTC, etc.)
- Identify freight movement issues and coordinate with Nevada DOT and Caltrans on State Freight Plans
- Support the Tahoe-Truckee PEV Readiness Plan and coordinate Regional EV strategy

T-3 **Active Transportation Planning**

- Update the *Linking Tahoe: Active Transportation Plan* for approval in 2020
- Monitor and utilize state and federal bicycle and pedestrian planning requirements and other resources
- Support the Pathway Partnership to coordinate regional partners on active transportation policy and planning.

T-4 **Transit Planning**

- Administer Transit Planning MOU between TMPO/TRPA, TTD, and Placer County
- Collect operating data identified by the Transit Planning MOU to support regional performance measures and transit data reporting
- Develop supporting analysis and materials regarding transit for the *2020 Linking Tahoe: RTP/SCS*
- Support the update of Short-Range Transit Plans (next 1-5 years) for TTD and TART services
- Partner with TART and TTD to conduct periodic rider surveys and other outreach to assess current service and provide recommendations based on survey results
- Coordinate transit elements of regional emergency preparedness programs
- Notify transit operators of available funding and grants for transit
- Coordinate with other service providers to plan for inter-regional connections (i.e. Washoe RTC, Carson City RTC, Capitol Corridor JPA, SACOG, SacRT, Etc.)
- Centralize monitoring of regional transit data and utilize www.LakeTahoeinfo.org to share and display data
- Analyze transit system performance, develop recommendations, and document via the Transit Productivity Improvement Program (PIP)

T-5 **Transportation Demand Management (Travel Management)**

- Work with TNT-TMA, SS/TMA and employers to support the Commute Tahoe Program
- Work in partnership with Lake Tahoe Bicycle Coalition and support the annual Tahoe Bike Challenge
- Coordinate the Safe Routes to School Program, active transportation education and community outreach program
- Disseminate educational materials related to Commute Tahoe strategies and programs.
- Update www.linkingtahoe.com website to include information on existing transportation options

T-6 **Intelligent Transportation Systems**

- Maximize efficiency of the existing roadway network through the use of technology
- Encourage the use of Intelligent Transportation Systems (ITS) consistent with the *Lake Tahoe ITS Architecture and Strategic Plan*.
- Coordinate with EDCTC, TMA's, NDOT, Caltrans, and local jurisdictions regarding traveler information, adaptive roadway management, and emergency planning between Sacramento and South Lake Tahoe, through participation on SP & R grant project team and other relevant efforts.
- Continue evaluation and gaining endorsement of a transportation trip planning platform to coordinate and increase awareness of inter-regional and intra-regional travel options and pilot a regional application with a recreation focus.
- Provide recommendations and coordinate with State DOTs and local jurisdictions regarding traffic signalization improvements Region-wide.

T-7 **Aviation/Rail/Freight Planning**

- Coordinate with Caltrans Division of Aeronautics and CSLT on Lake Tahoe Airport ground transportation access, resiliency and reliability planning, and the Lake Tahoe Airport Master Plan
- Encourage connections to Lake Tahoe in State Rail Plans in California and Nevada
- Coordinate with State Freight Plans and associated freight programs

T-8 **Safety Planning**

- Continue to test and refine the Safety Strategy Evaluation Tool
- Support local agency grant applications for safety projects identified in the Safety Strategy
- Support implementation of recommended best practices for safety data collection and reporting
- Gain agreement with regional implementing agencies on project design volumes and best practices for the design of safety improvements.

Work Element 104 Budget:

REVENUES		EXPENDITURES	
Direct Costs:		**Direct Costs:**	
FHWA PL (CA)	$87,880	RTP/SCS Update Support Svcs.	$147,188
-Toll Credits (CA-PL)	$10,080	Transit Planning Support Svcs.	$60,000
FHWA PL (CA-Carryover)	$16,150		
-Toll Credits (CA-Carry)	$1,852		
FTA 5303 (CA)	$79,415		
-Toll Credits (FTA 5303 CA)	$9,109		
FTA 5303 (CA Carryover)	$5,312		
-Toll Credits (CA 5303-Carry)	$609		
TDA Planning	$18,431		
Subtotal:	**$207,188**	**Subtotal:**	**$207,188**
TMPO Staff:		**TMPO Staff:**	
FHWA PL (CA)	$202,548		
-Toll Credits (PL-CA)	$23,232		
FHWA PL (CA-Carryover)	$26,823		
-Toll Credits (CA-Carry)	$3,077		
FHWA PL (NV)	$26,228		
FTA 5303 (NV)	$31,730	**Wages/Benefits:**	**$165,934**
TDA Planning	$3,050	**Est. Indirect Cost:**	**$124,446**
Subtotal:	**$290,380**	**Subtotal:**	**$290,380**
Total:	**$497,568**	**Total:**	**$497,568**

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WORK ELEMENT 105: TRANSPORTATION DATA MANAGEMENT AND FORECASTING

PURPOSE

To administer the regional transportation data collection and modeling efforts of TRPA; to collect the necessary transportation, demographic, and land use information to support transportation planning; to analyze different planning scenarios and impacts of regional land use and transportation proposals; to support data requests from staff, partners, and the general public; to support the refinement of transportation measures that support regional goals; to provide the results of annual monitoring to the public and partners; to coordinate data collection among TRPA, state DOTs, and local agencies to support various data needs.

DISCUSSION

The Lake Tahoe Region continues to develop a centralized regional information website www.laketahoeinfo.org that provides a transparent platform for coordinating and disseminating regional data, project-level details, and information on the transportation performance-based planning framework. Transportation monitoring data is easily accessible on the Transportation Monitoring Dashboard (https://transportation.laketahoeinfo.org/MeasuresDashboard/Index). Another valuable transportation planning and programming tool is the Transportation Tracker (https://transportation.laketahoeinfo.org/) that provides project level funding and performance data that supports the RTP, FTIP and other key transportation planning efforts.

TRPA is responsible for the collection, analysis, and dissemination of transportation data to support the regional transportation planning process. In addition to supporting data needs for recent performance-based planning requirements discussed in Work Element 106, a critical role is travel demand forecasting. Currently TRPA utilizes its travel demand model package (TransCAD) to assess the effect of proposed land use and transportation proposals on various aspects of the region. An on-going transportation data collection program is in place and provides data on levels of use of the system, vehicle delay, and travel mode share. Other data collection, consistent with TRPA's annual transportation data collection program, includes regional travel patterns, bicycle and pedestrian counts, transit performance, and traffic counts at identified locations. Purchased data sets are also an efficient tool to supply difficult to obtain data for analysis. TRPA has utilized the latest data to update primary inputs to the travel demand model to provide the base and forecast analysis for the 2020 RTP/SCS. TRPA convenes a Model Working Group to provide a venue to discuss model updates, new techniques and data availability among various stakeholders and technical users of TRPA's model data.

PREVIOUS WORK

- Maintained Transportation Monitoring Dashboard to include new sources to display up to date transportation data.
- Initiated updates to the travel demand model including new data sources, and functionality
- Convened Model Working Group to share 2020 RTP/SCS model updates and assumptions, including longer term model improvements
- Analysis using new Streetlight Data package

PRODUCTS		COMPLETION DATE
P-1	Publish transportation monitoring data to LakeTahoeinfo.org	**Quarterly**
P-2	Final Forecast Scenarios for 2020 RTP/SCS	**August 2020**

TASKS

T-1 **Data Management**

- Manage and make available various transportation data sources utilized by TRPA
- Develop and manage monitoring programs and data collection through LT Info

T-2 **Performance Measure Data Collection**

- Coordinate data from local jurisdictions, transit operators, and state DOTs in response to established performance measure targets
- Coordinate bicycle/pedestrian monitoring data and reporting in accordance with established monitoring protocol
- Coordinate transit monitoring data and reporting in accordance with established transit monitoring protocol and Transit Productivity Improvement Program (TPIP)

T-3 **Air Quality**

- Conduct necessary air quality technical analysis, and model outputs to support RTP and FTIP

T-5 **Modeling**

- Support Model Working Group
- Refine project scale forecasting capabilities
- Maintain travel demand model as necessary for monitoring and 2020 RTP/SCS including data, functionality and new tools
- Develop and refine modeling scenarios for 2020 RTP
- Continue to utilize Streetlight Data package to improve analysis capabilities

Work Element 105 Budget:

REVENUES		EXPENDITURES	
Direct Costs:		**Direct Costs:**	
FTA 5303 (CA Carryover)	$25,000	Data and Forecasting System Svcs.	$50,000
-Toll Credits (CA 5303-Carry)	$2,868	Data Collection Contract Svcs.	$50,000
TRPA General	$50,000		
Subtotal:	**$100,000**	**Subtotal:**	**$100,000**
TMPO Staff:		**TMPO Staff:**	
FHWA PL (CA)	$45,839		
-Toll Credits (PL-CA)	$5,258		
FHWA PL (CA-Carryover)	$52,793		
-Toll Credits (CA-Carry)	$6,055		
FTA 5303 (CA)	$3,585		
-Toll Credits (FTA 5303 CA)	$411		
FTA 5303 (CA Carryover)	$41,000		
-Toll Credits (CA 5303-Carry)	$4,703		
FHWA PL (NV)	$106,800	**Wages/Benefits:**	**$146,082**
TDA Planning	$5,622	**Est. Indirect Cost:**	**$109,557**
Subtotal:	**$255,639**	**Subtotal:**	**$255,639**
Total:	**$355,639**	**Total:**	**$355,639**
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WORK ELEMENT 106: PROJECT TRACKING AND FINANCIAL MANAGEMENT

PURPOSE

To support the selection of transportation projects for state and federal funding; to document funded projects in the Federal Transportation Improvement Program (FTIP); to support project implementation through identification of available state and federal funds; to provide workshops, training, technical assistance, and information to assist local partners with timely implementation of transportation projects in Lake Tahoe; to distribute and program various federal and state funding sources; to establish a project tracking system to ensure the appropriate funding is available for timely completion of transportation projects.

DESCRIPTION

TRPA, as the MPO is required to adopt and maintain a Transportation Improvement Program intended to coordinate and track federal funds used for transportation projects. As a core MPO planning function, staff will continue maintaining the current 2019 FTIP through administrative modifications and amendments to maintain required financial constraint and accountability. The development of the new 2021 FTIP is underway with a targeted adoption date of December 2020.

TRPA is responsible for project selection and regional distribution of various federal and state funding sources. TRPA administers a Regional Grant Program to conduct project selection for multiple Federal and State funding programs to ensure consistency with regional goals and the RTP/SCS. As funding is awarded to projects in the Lake Tahoe Region it requires project programming, monitoring and tracking to ensure the funds are used in a timely manner. The FAST Act increased the amount of funding allocated by various programs to Lake Tahoe. This increase of funding has required additional resources for TRPA's programming function along with other related activities.

In addition to the FTIP administration TRPA, as the Regional Transportation Planning Agency (RTPA) in California, is required to adopt and maintain a Regional Transportation Improvement Program (RTIP) to track state transportation funding specifically. The RTIP is updated every two years and was last updated in early 2020.

In order to provide public and partner access transparency, the Transportation Project Tracker (transportation.laketahoeinfo.org) displays real-time project tracking and information. The tracker involves significant coordination with local implementation partners and also serves as the transportation project database for both the RTP and FTIP. The Tracker also includes a linkage to TRPA's Performance-Based Planning program (see Work Element 107).

PREVIOUS WORK

- Maintenance of the 2019 FTIP
- Maintenance of the 2018 RTIP
- Adoption of the 2020 RTIP
- Regional Grant Program (RGP) Cycle 3 Administration
- Participation on the California RTPA Working Group
- Participation on the California Federal Programming Group (CFPG)
- Participation on the Nevada statewide STIP/TIP Working Group
- Coordination with California, Nevada, and local agencies in project programming
- FY 19/20 Annual Federal Obligations Report

PRODUCTS		COMPLETION DATE
P-1	Maintenance of 2019 FTIP	**Quarterly**
P-2	Adoption of 2021 FTIP	**December 2020**
P-3	Maintenance of the 2020 RTIP	**Quarterly**
P-4	Annual Federal Obligations Report	**December 2020**

TASKS

T-1 **Federal Transportation Improvement Program (FTIP) (Core MPO Planning Function)**

- Monitor and maintain the current FTIP through administrative modifications and amendments
- Adoption of 2021 FTIP
- Incorporate Federal performance measures in 2021 FTIP
- Maintain California Transportation Improvement Program (CTIP) database and Nevada electronic Statewide Transportation Improvement Program (e-STIP)
- Publish TRPA programming information on www.trpa.org/transportation
- Participate in FHWA-NV/NDOT Planning Executive Group initiatives related to programming
- Participate monthly with CFPG, RTPA Working Group, and Rural Counties Task Force
- Coordination with FHWA CA and NV Division offices, FTA, Caltrans, NDOT, and local agencies on project development and funding

T-2 **Regional Transportation Improvement Program**

- 2020 RTIP document maintenance
- Work with regional stakeholders to prepare the 2022 RTIP

T-3 **Regional Grant Program**

- Manage the Regional Grant Program (RGP) funding cycles (CMAQ, STBG, TAP & ATP)
- Coordinate priority project identification and reporting efforts
- Monitor and update transportation projects in the Transportation Tracker
- Integration of Transportation Tracker projects between EIP, FTIP, and RTP/SCS
- Support development of 2020 RTP/SCS financial element and project list

T-4 **Project Tracking and Statewide Transportation Improvement Program Coordination**

- Monitor and provide guidance on available federal and state funding to project partners
- Track project performance measures and post project consideration in EIP tracker
- Continue to improve the EIP Tracker tool for use in transportation funding allocations, programming, and project tracking
- Coordinate with Caltrans and NDOT regarding STIP consistency with TRPA programming
- Support Caltrans CTIPS database
- Work with NDOT to support Nevada E-STIP tool
- Develop annual list of federal obligated projects

T-5 **FTA**

- Project application review for consistency with FTIP, programming activities necessary to ensure FTA projects are accurately reflected in the FTIP
- Notify transit operators of FTA funding allocations based on the agreed upon process in the Lake Tahoe Region Transit Planning MOU
- Consideration of Transit Asset Management Plan(s) in FTIP

T-6 **Documentation**

- Document public outreach on regional programming activities
- Coordinate distribution of information regarding location and status of funded projects
- Conduct program consistent with TRPA Title VI Plan
- Document continuing, coordinated and comprehensive processes that include traditionally underrepresented and underserved populations and their community leaders (i.e., elderly, disabled, low income, and minorities: Black, Hispanic, Asian American, American Indian/Alaskan Native, and Pacific Islander)

Work Element 106 Budget:

REVENUES		EXPENDITURES	
Direct Costs:		**Direct Costs:**	
Subtotal:	**$0**	**Subtotal:**	**$0**
TMPO Staff:		**TMPO Staff:**	
FHWA PL (CA)	$99,098		
-Toll Credits (PL-CA)	$11,366		
FHWA PL (NV)	$61,500	**Wages/Benefits:**	**$93,621**
TDA Planning	$3,236.84	**Est. Indirect Cost:**	**$70,213**
Subtotal:	**$163,834**	**Subtotal:**	**$163,834**
Total:	**$163,834**	**Total:**	**$163,834**
**Toll Credits are displayed for tracking purposes and are not a form of cash or revenue.			

WORK ELEMENT 107: PERFORMANCE-BASED PLANNING

PURPOSE

To enhance and support TRPA's performance-based planning program; to continue a performance-based planning framework that integrates federal, state and regional requirements; to refine performance measure goals and targets for the transportation system and planning program based on federal, state, and regional requirements for the required Safety (PM1), Pavement and Bridge (PM2), System Performance, Freight and applicable CMAQ (PM3) measures; to refine and monitor RTP performance measures; to enhance linkages between the planning process and project implementation to evaluate progress toward established regional goals; refine the Congestion Management Process as necessary to support regional transportation goals in accordance with federal planning requirements.

DISCUSSION

Performance-based planning defines current performance levels, establishes target performance levels, and identifies strategies for achieving these targets. This approach was strengthened with the passing of MAP-21 and continued with the FAST Act, which requires performance-based plans and programs that establish the foundation and core elements of transportation planning.

In the FAST Act, the Lake Tahoe Region was recognized as a Transportation Management Area (TMA) with a total population of 210,000. Additional TMA requirements include the establishment of a Congestion Management Process (CMP) that evaluates strategies to reduce congestion that do not increase roadway capacity. This CMP requirement aligns well with TRPA's existing mandate to reduce the dependency on the private automobile and the future CMP for TMPO will contribute toward the accomplishment of each DOT targets for the portion of the planning area within each State.

The Lake Tahoe Region continues to enhance the practice of evaluating project effectiveness and monitoring progress toward regional and local goals. This process is intended to provide useful information for decision-making, while fostering program alignment across multiple stakeholders. TRPA's performance-based transportation planning framework integrates Federal performance-based planning requirements outlined in MAP-21 and the FAST Act, TRPA threshold and Regional Plan performance measures, and various state performance metrics.

Performance Management Framework is built into the TMPO work plan including grant project selection outlined in WE106, the core of RTP Implementation in WE104 and the previous work on the Safety Plan Strategy that shapes the planning and programming of projects to support each states PM1 Safety Targets.

PREVIOUS WORK

- Established and provided reporting on performance metrics for Federal Transportation Performance Measures PM-1, PM-2 and PM-3
- Included performance-based planning framework into the Regional Grant Program
- Drafted CMP Documentation

PRODUCTS		COMPLETION DATE
P-1	Maintained Performance-Based Planning Framework	**On-going**
P-2	2021 PM1 Safety Target set with Caltrans and Nevada DOT	**February 2021**

T-1 **Performance-Based Planning**

- Continue Refine the Region's contemporary performance-based planning framework
- Participate in federal workshops on performance-based planning
- Refine the tools within the performance management framework to ensure the project evaluation processes for the regional grant program remains adaptable to regional goals
- Revise Performance-Based Planning as Federal Performance Measures and Targets as necessary based on the annual State target setting process and deadlines
- Stakeholder coordination to improve information sharing that supports the performance system
- Coordinate the performance management process, data gathering, funding programming, project sequencing, etc. with the Transportation Coordination working group

Ensure timely transmittal of data to Caltrans, NDOT, FHWA and FTA

T-2 **Congestion Management Process**

- Track and respond to federal and state sustainability planning guidance, including system resiliency and reliability
- Monitor and refine the CMP as necessary

Work Element 107 Budget:

REVENUES		EXPENDITURES	
Direct Costs:		**Direct Costs:**	
Subtotal:	**$0**	**Subtotal:**	**$0**
TMPO Staff:		**TMPO Staff:**	
FHWA PL (CA)	$12,635		
-Toll Credits (PL-CA)	$1,449		
FTA 5303 (CA)	$10,000		
-Toll Credits (FTA 5303 CA)	$1,147		
FHWA PL (NV)	$66,750	**Wages/Benefits:**	**$53,085**
TDA Planning	$3,513	**Est. Indirect Cost:**	**$39,813**
Subtotal:	**$92,898**	**Subtotal:**	**$92,898**
Total:	**$92,898**	**Total:**	**$92,898**

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WORK ELEMENT 108: SUSTAINABLE COMMUNITIES PLANNING

To further the region's 2017 Linking Tahoe: Regional Transportation Plan/Sustainable Communities Strategy; to contribute to the State's GHG reduction targets through integration of land use and transportation planning; to develop corridor management plans; to collect and analyze necessary corridor level data; to identify roles and responsibilities of multiple partnering agencies; to incorporate public input and needs into decision making; to consider impacts on the constrained transportation system due to increased interregional tourism and visitor traffic; to evaluate and develop project VMT reduction tools and strategies that support the RTP/SCS.

DISCUSSION

TRPA, along with 12 other agencies, has committed to a partner-based planning process that is conducted at a corridor scale. This comprehensive planning approach has shown success on the recreation heavy East and West shores of Lake Tahoe. The Corridor planning approach is lead by a entity with a vested interest in the corridor and typically utilizes a steering committee of other principal entities to drive the process. For purposes of corridor planning, the Region has been divided into six internal corridors and two entry/exit corridors (Link). The corridor planning approach is an organizing framework to support regional transportation policy as well as align and accelerate implementation of various entity's policy documents. For TRPA corridor planning supports the RTP/SCS at a sub-regional scale. This planning approach requires multi agency collaboration, commitments, and resources. The TTD developed the 2017 Linking Tahoe: Corridor Connection Plan (Link), which collected and synthesized large amounts of data for all internal and external corridors. This document provides a foundation for more detailed corridor management plans. Current corridor management plans underway are the SR89 Emerald Bay Recreation Corridor and the US 50 South Shore (Main Street Management Plan). The US50 East Shore Corridor (not funded by this work element), and the SR89/28 Corridor (Resort Triangle Transportation Plan) including connections to Truckee will be completed later in FY 21.

This work element, funded by SB1 Sustainable Communities Formula Funds, highlights the next phase of corridor planning and VMT/GHG reduction activities. The corridor planning effort will be a multi-year program that will be captured in this and subsequent OWPs. Additional tasks supporting the evaluation and development of VMT/GHG reduction strategies and tools to support state requirements will also be included in the work element.

TRPA is working with Placer County to further the RTP/SCS by creating a common set of methodologies, metrics and tools for project impact analysis to better integrate transportation, housing and land use planning to support local and regional Vehicle Miles Traveled (VMT) and greenhouse gas (GHG) reduction goals and to ultimately achieve the State's GHG reduction target in AB32. This VMT/GHG reduction analytical framework will be adapted to other jurisdictions in Lake Tahoe using unique data to determine the most effective strategies for VMT and GHG reduction. TRPA and local jurisdictions will be responsible for data collection as necessary to support VMT/GHG analysis and evaluation going forward. As a follow-up task, TRPA will investigate necessary travel demand model updates and other tools to support the VMT/GHG evaluation and forecasting process.

PREVIOUS WORK

- SR 89 – Emerald Bay Recreation Corridor Management Plan:
  - Adopted Project Charter
  - Draft Corridor Alternative Scenarios
  - Draft SR89/Emerald Bay Corridor Management Plan

- US 50 South Shore - Main Street Management Plan:
  - Established Steering committees and public outreach strategy
  - Secured consultant and initiated contracted support activities
  - Developed and analyzed two alternatives for street design
  - Selected preferred alternative for street design
- VMT/GHG Evaluation Tools:
  - Consultant work initiated (May 2020)

WORK ELEMENT 108.3 (FY 19/20 – RMRA)

PRODUCTS		COMPLETION DATE
P-1	Final Main Street Management Plan	November 2020
P-2	Final SR89 Emerald Bay Recreation Corridor Management Plan	October 2020
P-3	Draft project evaluation and impact analysis	September 2020
P-4	Final project evaluation and impact analysis	December 2021

TASKS

T-1 Main Street Management Plan Development and Outreach

- Circulate Draft MSMP for public and stakeholder review
- Local jurisdiction endorsement of final MSMP
- TRPA and partner agency adoption of final MSMP

T-2 SR 89 Emerald Bay Recreation Corridor Management Plan

- Circulate Draft/Final SR89 Emerald Bay Recreation Corridor Management Plan for public and partner agency review
- TRPA adoption of SR89 Emerald Bay Recreation Corridor Management Plan

T-3 Regional VMT/GHG Evaluation Program

- Research methodology and metric, and set of tools for evaluation and impact analysis to support RTP/SCS
- Work with Placer County on development of local/regional VMT evaluation methodologies
- Develop Draft and Final project evaluation and impact analysis
- Support data needs via purchase/collection

Work Element 108.3 Budget:

WE 108.3			
REVENUES		**EXPENDITURES**	
Direct Costs:		**Direct Costs:**	
TRPA General	$16,028		
CA-RMRA 19/20	$123,707	Sustainable Comm Planning	$139,735
Subtotal:	**$139,735**	**Subtotal:**	**$139,735**
TMPO Staff:		**TMPO Staff:**	
Total:	**$139,735**	**Total:**	**$139,735**

WORK ELEMENT 108.4 (FY 20/21 – RMRA)

PRODUCTS		COMPLETION DATE
P-1	Draft technical memos/products from Regional VMT evaluation and impact analysis	**April 2021**
P-2	Data purchases to support Regional VMT/GHG Evaluation Program	**November 2019**
P-3	TRPA Forecasting Tool Update Technical Services	**January 2021**

TASKS

T-1 Regional VMT/GHG Evaluation Program

- Adapt the project evaluation and impact analysis framework to include other local jurisdiction partners
- Evaluate potential VMT reduction strategies to support regional VMT reduction
- Support data needs via purchase/collection

T-2 Update TRPA analysis and forecasting tools

- Continue to convene Model Working Group to coordinate updates to TRPA's analysis and forecasting tools (travel demand model, VMT analysis, and other related tools)
- Develop RFP for contracted support to update travel demand model and other supporting technical services
- Contract to update TRPA analysis and forecasting tools

Work Element 108.4 Budget:

WE 108.4			
REVENUES		**EXPENDITURES**	
Direct Costs:		**Direct Costs:**	
TRPA General	$20,835		
CA-RMRA 20/21	$160,750	Sustainable Comm Planning	$181,585
Subtotal:	**$181,585**	**Subtotal:**	**$181,585**
TMPO Staff:		**TMPO Staff:**	
FHWA PL (CA)	$0	**Wages/Benefits:**	**$0.00**
-Toll Credits (PL-CA)	$0	**Est. Indirect Cost:**	**$0.00**
Subtotal:	**$0**	**Subtotal:**	**$0**
Total:	**$181,585**	**Total:**	**$181,585**

**Toll Credits are displayed for tracking purposes and are not a form of cash or revenue.

CALTRANS REGIONAL PLANNING ACTIVITIES FOR FY 2020/21

ACTIVITY	DESCRIPTION	PRODUCTS
System Planning	Completion of system planning products used by Caltrans and its transportation partners	Caltrans District 3 System Planning documents consistent with the Caltrans District 3 System Planning Five-Year Work Plan.
Advance Planning	Completion of pre-programming studies (e.g., Project Initiation Documents) so as to be ready to program resources for capital projects	Project Initiation Documents (PIDs), as indicated in the current Two-Year PID Work Plan
Regional Planning	Participate in and assist with various regional planning projects and studies	Participation in the following projects and studies: **Agency Coordination** • Attend TTD Board Meetings • Coordinate Annual Meeting **Studies / PDTs** • SR 89 Corridor Management Plan PDT • US 50 Recreational Travel Management Hot Spot Study
Local Development Review Program	Review of local development proposals potentially impacting the State Highway System	Assistance to lead agencies to ensure the identification and mitigation of local development impacts to the State Highway System that is consistent with the State's smart mobility goals

FY 20/21 FINANCIAL PROGRAM

Table 1 – FY 20/21 TRPA/TMPO Programmed Revenues

Funding Source	FY 2021
Federal	
FHWA PL (CA)	$645,000
FHWA PL (CA-Carryover)	$254,576
FTA 5303 (CA)	$93,000
FTA 5303 (CA Carryover)	$71,312
FHWA PL (NV)	$261,278
FTA 5303 (NV)	$31,730
Federal Subtotal:	**$1,356,896**
Non-Federal	
CA-RMRA 20/21	$160,750
CA-RMRA 19/20 C/O	$123,707
CA-RMRA 18/19 C/O	$0
TRPA General	$118,863
TDA Administration	$48,358
TDA Planning	$35,000
Non-Federal Subtotal:	**486,678**
GRAND TOTAL:	**$1,843,574**

Funding Source Descriptions

FHWA & FTA Planning funds (PL & 5303) California and Nevada (CA and NV)- Current fiscal year allocation of Federal transportation planning (PL & FTA 5303) funds to support metropolitan planning and may be used for transit or highway planning activities. These funds are administered by Caltrans on behalf of Federal Highway Administration (FHWA) and Federal Transit Administration (FTA) via a Consolidated Planning Grant Agreement.

Toll Credits - Toll credits are not revenue or cash, but rather a substitute for local match required by CPG funds. Toll credits provided by the State of California are being utilized as a match for federal FHWA PL and FTA 5303 funds. The FHWA PL and FTA 5303 amounts shown in the Budget Revenue Summary Sheet represent 100% of the total federal participation cost, therefore toll credits are not included in the total revenue amount. Toll credits can be applied to the current year allocation of California CPG funds, and any carryover balance. These are tracked separately and can be found on Table 7.

PL & 5303 Carryover - Carryover balance of funding from prior PL and 5303 allocations. (See above)

CA-RMRA - The California Road Maintenance and Rehabilitation Account (RMRA) was established by Senate Bill 1 in 2017. These funds are part of the Sustainable Transportation Planning formula grants that is aimed at supporting state GHG/VMT reduction goals.

TRPA General Funds – This funding comes directly from the TRPA general budget and is used as a non-federal match to leverage federal planning funds.

TDA (Planning and Administration) – This State of California funding is provided through the California Transportation Development Act (TDA) and can be used for administration of the TDA program, and transportation planning activities.

Table 2 – FY 20/21 Transportation Staffing Costs

TRPA/TMPO Transportation Team	Salary and Wages	Benefits	IDC Rate 75.00%	Total Salary, Benefits and Overhead
Total FY 20/21 Salaries	$504,478	$138,212	$482,018	**$1,124,708**
Total	**$504,478**	**$138,212**	**$482,018**	**$1,124,708**

Table 3 – FY 20/21 Staffing Costs and Revenues

WORK ELEMENTS	Consolidated Planning Grant (CPG)						Toll Credit Match	Toll Credit Match	Toll Credit Match	Toll Credit Match	TDA - ADMIN	TDA - PLNG	TOTAL
	CA-PL	CA PL - Carry	CA 5303	CA 5303 - Carry	NV - PL	NV 5303	CA-PL	CA- PL Carry	CA 5303	CA 5303 Carry Over			
101- Program Administration	55,000	72,976	-	-	-	-	6,309	8,370	-	-	-	-	$ 127,976
102 - Transportation Dev't. Act	-	-	-	-	-	-	-	-	-	-	32,000	1,147	$ 33,147
103 - Public Outreach	120,000	40,834	-	-	-	-	13,764	4,684	-	-	-	-	$ 160,834
104 - Intermodal Planning	202,548	26,823	-	-	26,228	31,730	23,232	3,077	-	-	-	3,050	$ 290,380
105 - Data Collection & Forecasting	45,839	52,793	3,585	41,000	106,800	-	5,258	6,055	411	4,703	-	5,622	$ 255,639
106 - Proj. Tracking + Financial Mgt.	99,098	-	-	-	61,500	-	11,366	-	-	-	-	3,237	$ 163,834
107 - Performance-Based Planning	12,635	-	10,000	-	66,750	-	1,449	-	1,147	-	-	3,513	$ 92,898
108.3 - Sustainable Communities Planning	-	-	-	-	-	-	-	-	-	-	-	-	$ -
108.4 - Sustainable Communities Planning	-	-	-	-	-	-	-	-	-	-	-	-	$ -
TOTAL:	$ 535,120	$ 193,426	$ 13,585	$ 41,000	$ 261,278	$ 31,730	$ 61,378	$ 22,186	$ 1,558	$ 4,703	$ 32,000	$ 16,569	$ 1,124,708

Table 4 – FY 20/21 Direct Costs and Revenues

WORK ELEMENTS	Consolidated Planning Grant (CPG)						Toll Credit Match	Toll Credit Match	Toll Credit Match	Toll Credit Match	TRPA (Local)	CA-RMRA 20/21	CA-RMRA 19/20	TDA Admin	TDA Planning	TOTAL
	CA-PL	CA PL-Carry	CA-5303	CA-5303 Carry	NV-PL	NV-5303	CA-PL	CA-PL Carry	CA-5303	CA-5303 Carry			Carry-over			
101- Program Administration	-	-	-	-	-	-	-	-	-	-	20,000	-	-	-	-	$ 20,000
102 - Transportation Dev't. Act	-	-	-	-	-	-	-	-	-	-	-	-	-	16,358	-	$ 16,358
103 - Public Outreach	22,000	20,000	-	-	-	-	2,523	2,294	-	-	12,000	-	-	-	-	$ 54,000
104 - Intermodal Planning	87,880	16,150	79,415	5,312	-	-	10,080	1,852	9,109	609	-	-	-	-	18,431	$ 207,188
105 - Data Collection & Forecasting	-	25,000	-	25,000	-	-	-	2,868	-	2,868	50,000	-	-	-	-	$ 100,000
106 - Proj. Tracking + Financial Mgt.	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ -
107 - Performance-Based Planning	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	$ -
108.3 - Sustainable Communities Planning	-	-	-	-	-	-	-	-	-	-	16,028	-	123,707	-	-	$ 139,735
108.4 - Sustainable Communities Planning		-	-	-	-	-	-	-	-	-	20,835	160,750	-	-	-	$ 181,585
TOTAL:	$109,880	$ 61,150	$ 79,415	$ 30,312	$ -	$ -	$ 12,603	$ 7,014	$ 9,109	$ 3,477	$ 118,863	$ 160,750	$ 123,707	$ 16,358	$ 18,431	$ 718,866

Table 5 – FY 20/21 Staffing & Direct Costs by Work Element

WORK ELEMENTS	Staff	Direct	Total
101- Program Administration	$ 127,976	$ 20,000	$ 147,976
102 - Transportation Dev't. Act	$ 33,147	$ 16,358	$ 49,505
103 - Public Outreach	$ 160,834	$ 54,000	$ 214,834
104 - Intermodal Planning	$ 290,380	$ 207,188	$ 497,568
105 - Data Collection & Forecasting	$ 255,639	$ 100,000	$ 355,639
106 - Proj. Tracking + Financial Mgt.	$ 163,834	$ -	$ 163,834
107 - Performance-Based Planning	$ 92,898	$ -	$ 92,898
108.3 - Sustainable Communties Planning		$ 139,735	$ 139,735
108.3 - Sustainable Communties Planning	$ -	$ -	$ -
108.4 - Sustainable Communties Planning	$ -	$ 181,585	$ 181,585
TOTAL:	**$1,124,708**	**$ 718,866**	**$1,843,574**

Table 6 – FY 20/21 Staffing Direct Costs by Revenue Source

	Consolidated Planning Grant (CPG)						Toll Credit Match	Toll Credit Match	Toll Credit Match	Toll Credit Match	TRPA (Local)	CA-RMRA 20/21	CA-RMRA 19/20	TDA Admin	TDA Planning	TOTAL
	CA- PL	CA-PL Carry	CA-5303	CA-5303 Carry	NV - PL	NV-5303	CA-PL	CA- PL Carry	CA-5303	CA-5303 Carry			Carry			
Total Staff:	535,120	193,426	13,585	41,000	261,278	31,730	61,378	22,186	1,558	4,703	-	-	-	32,000	16,569	1,124,708
Total Direct:	109,880	61,150	79,415	30,312	-	-	12,603	7,014	9,109	3,477	118,863	160,750	123,707	16,358	18,431	718,866
TOTAL:	$ 645,000	$ 254,576	$ 93,000	$ 71,312	$ 261,278	$ 31,730	$ 73,981	$ 29,200	$ 10,667	$ 8,179	$ 118,863	$ 160,750	$ 123,707	$ 48,358	$ 35,000	$ 1,843,574

Table 7– FY 20/21 Toll Credit Summary

Toll Credits	CA-PL	CA PL-Carry	CA-5303	CA-5303 Carry	TOTAL
Total Staff:	61,378	22,186	1,558	4,703	85,122
Total Direct:	12,603	7,014	9,109	3,477	32,203
TOTALS:	$ 73,981	$ 29,200	$ 10,667	$ 8,179	$ 122,028
** Toll Credits are not a form of cash or revenue, but are in lieu of local matching funds					
in lieu of local matching funds.					

Table 8– FY 20/21 Staff and Direct by Fund

WORK ELEMENTS	Consolidated Planning Grant (CPG)						Toll Credit Match	Toll Credit Match	Toll Credit Match	Toll Credit Match	TRPA (Local)	CA-RMRA 20/21	CA-RMRA 19/20	TDA Admin	TDA Planning	TOTAL
	CA-PL	CA PL-Carry	CA-5303	CA-5303 Carry	NV-PL	NV 5303	CA-PL	CA PL - Carry	CA-5303	CA-5303 Carry						
101- Program Administration	55,000	72,976	-	-	-	-	6,309	8,370	-	-	20,000	-	-	-	-	$ 147,976
102 - Transportation Dev't. Act	-	-	-	-	-	-	-	-	-	-	-	-	-	48,358	1,147	$ 49,505
103 - Public Outreach	142,000	60,834	-	-	-	-	16,287	6,978	-	-	12,000	-	-	-	-	$ 214,834
104 - Intermodal Planning	290,428	42,973	79,415	5,312	26,228	31,730	33,312	4,929	9,109	609	-	-	-	-	21,481	$ 497,568
105 - Data Collection & Forecasting	45,839	77,793	3,585	66,000	106,800	-	5,258	8,923	411	7,570	50,000	-	-	-	5,622	$ 355,639
106 - Proj. Tracking + Financial Mgt.	99,098	-	-	-	61,500	-	11,366	-	-	-	-	-	-	-	3,237	$ 163,834
107 - Performance-Based Planning	12,635	-	10,000	-	66,750	-	1,449	-	1,147	-	-	-	-	-	3,513	$ 92,898
108.3 - Sustainable Communities Planning	-	-	-	-	-	-	-	-	-	-	16,028	-	123,707	-	-	$ 139,735
108.4 - Sustainable Communities Planning	-	-	-	-	-	-	-	-	-	-	20,835	160,750	-	-	-	$ 181,585
TOTAL:	$ 645,000	$ 254,576	$ 93,000	$ 71,312	$ 261,278	$ 31,730	$ 73,981	$ 29,200	$ 10,667	$ 8,179	$ 118,863	$ 160,750	$ 123,707	$ 48,358	$ 35,000	$ 1,843,574

ADOPTING RESOLUTION AND FEDERAL CERTIFICATIONS

- TMPO Adopting Resolution
- FHWA – FTA FY 20/21 Planning Certification
- FTA Debarment and Suspension Certification
- FTA FY 20/21 Certifications and Assurances

TAHOE METROPOLITAN PLANNING ORGANIZATION
TMPO RESOLUTION NO. 2020-__

ADOPTION OF THE TMPO 2021 TRANSPORTATION OVERALL WORK PROGRAM

WHEREAS, the Tahoe Metropolitan Planning Organization (TMPO) has been designated by the Governors of California and Nevada for the preparation of transportation plans and programs under Title 23, CFR 450; and

WHEREAS, each MPO is required to adopt an Overall Work Program (OWP), also referred to as the Unified Planning Work Program (UPWP), describing the planning priorities facing the Region and the planning activities anticipated for the Region over the next year; and

WHEREAS, staff have prepared an OWP that describes the anticipated revenues and expenditures and planning activities and products for transportation and air quality planning purposes over the next year; and

WHEREAS, the Federal Highway Administration, the Federal Transit Administration, Caltrans and the Nevada Department of Transportation have reviewed and commented upon a draft version of the 2021 OWP; and

WHEREAS, the Tahoe Transportation Commission has conducted public meetings at which the 2021 OWP has been an officially noticed item of discussion; and

WHEREAS, staff is requesting that the TMPO Governing Board adopt a final 2021 OWP for submittal to state and federal agencies for approval, and authorize staff to take actions necessary for this approval; and

WHEREAS, the TMPO certifies that the transportation planning process is addressing the major issues in the metropolitan planning area and is being conducted in accordance with all applicable requirements of the federal statutes listed on the MPO Planning Process Certification and Federal Transit Administration certifications included in the 2021 OWP document.

NOW, THEREFORE, BE IT RESOLVED that the Governing Board of the Tahoe Metropolitan Planning Organization adopts this resolution approving the 2021 Tahoe Basin Transportation Overall Work Program.

PASSED AND ADOPTED by the Governing Board of the Tahoe Metropolitan Planning Organization at its regular meeting held on May 27, 2020, by the following vote:

Ayes:

Absent:

_____
William Yeates, Chair
TMPO Governing Board

FY 2020/21 FHWA Metropolitan Transportation Planning Process Self-Certification

In accordance with 23 CFR part 450, the California Department of Transportation and Tahoe Regional Planning Agency, the designated Metropolitan Planning Organization for the Lake Tahoe urbanized area hereby certify that the transportation planning process is addressing the major issues in the metropolitan planning area and is being carried out in accordance with all applicable requirements including:

(1) 23 U.S.C. 134, 49 U.S.C. 5303, and subpart C of 23 CFR part 450;

(2) In nonattainment and maintenance areas, sections 174 and 176(c) and (d) of the Clean Air Act, as amended (42 U.S.C. 7504, 7506(c) and (d)) and 40 CFR part 93;

(3) Title VI of the Civil Rights Act of 1964, as amended (42 U.S.C. 2000d–1) and 49 CFR part 21;

(4) 49 U.S.C. 5332, prohibiting discrimination on the basis of race, color, creed, national origin, sex, or age in employment or business opportunity;

(5) Section 1101(b) of the FAST Act (Pub. L. 114-94) and 49 CFR part 26 regarding the involvement of disadvantaged business enterprises in USDOT funded projects;

(6) 23 CFR part 230, regarding the implementation of an equal employment opportunity program on Federal and Federal-aid highway construction contracts;

(7) The provisions of the Americans with Disabilities Act of 1990 (42 U.S.C. 12101 et seq.) and 49 CFR parts 27, 37, and 38;

(8) The Older Americans Act, as amended (42 U.S.C. 6101), prohibiting discrimination on the basis of age in programs or activities receiving Federal financial assistance;

(9) Section 324 of title 23 U.S.C. regarding the prohibition of discrimination based on gender; and

(10) Section 504 of the Rehabilitation Act of 1973 (29 U.S.C. 794) and 49 CFR part 27 regarding discrimination against individuals with disabilities.

_____	_____
MPO Authorizing Signature	Caltrans District 3 Approval Signature
_Executive Director_____	_____
Title	Title
_____	_____
Date	Date

Department of Transportation
Debarment and Suspension Certification for Fiscal Year 2020/21

As required by U.S. DOT regulations on government-wide Debarment and Suspension (Nonprocurement), 49 CFR 29.100:

1) The Applicant certifies, to the best of its knowledge and belief, that it and its contractors, subcontractors and subrecipients:
    a) Are not presently debarred, suspended, proposed for debarment, declared ineligible, or voluntarily excluded from covered transactions by any Federal department or agency;
    b) Have not, within the three (3) year period preceding this certification, been convicted of or had a civil judgment rendered against them for commission of fraud or a criminal offense in connection with obtaining, attempting to obtain, or performing a public (Federal, state, or local) transaction or contract under a public transaction, violation of Federal or state antitrust statutes, or commission of embezzlement, theft, forgery, bribery, falsification or destruction of records, making false statements, or receiving stolen property;
    c) Are not presently indicted for or otherwise criminally or civilly charged by a governmental entity (Federal, state, or local) with commission of any of the offenses listed in subparagraph (1)(b) of this certification; and
    d) Have not, within the three (3) year period preceding this certification, had one or more public transactions (Federal, state, and local) terminated for cause or default.
2) The Applicant also certifies that, if Applicant later becomes aware of any information contradicting the statements of paragraph (1) above, it will promptly provide that information to the State.
3) If the Applicant is unable to certify to all statements in paragraphs (1) and (2) of this certification, through those means available to Applicant, including the General Services Administration's ***Excluded Parties List System (EPLS)***, Applicant shall indicate so in its applications, or in the transmittal letter or message accompanying its annual certifications and assurances, and will provide a written explanation to the State.

DEPARTMENT OF TRANSPORTATION
DEBARMENT AND SUSPENSION CERTIFICATION
FISCAL YEAR 2020/21

SIGNATURE PAGE

In signing this document, I declare under penalties of perjury that the foregoing certifications and assurances, and any other statements made by me on behalf of the Applicant are true and correct.

Signature_____ Date:_____

Printed Name: __Joanne S. Marchetta, Executive Director

As the undersigned Attorney for the above named Applicant, I hereby affirm to the Applicant that it has the authority under state and local law to make and comply with the certifications and assurances as indicated on the foregoing pages. I further affirm that, in my opinion, these certifications and assurances have been legally made and constitute legal and binding obligations of the Applicant.

I further affirm to the Applicant that, to the best of my knowledge, there is no legislation or litigation pending or imminent that might adversely affect the validity of these certifications and assurances or of the performance of the described project.

AFFIRMATION OF APPLICANT'S ATTORNEY

For: _Tahoe Metropolitan Planning Organization_____

Signature:_____ Date: _____

Printed Name of Applicant's Attorney: _____John L. Marshall_____

FEDERAL FISCAL YEAR 2020 CERTIFICATIONS AND ASSURANCES FOR FEDERAL TRANSIT ADMINISTRATION ASSISTANCE PROGRAMS

Name of Applicant: ____Tahoe Metropolitan Planning Organization__

The Applicant agrees to comply with applicable requirements of Categories 01 - 21. _**X**__

OR

The Applicant agrees to comply with the applicable requirements of the following Categories it has selected:

Category	Description	
01.	Required Certifications and Assurances for Each Applicant	_____
02.	Lobbying	_____
03.	Private Sector Protections	_____
04.	Rolling Stock Reviews and Bus Testing	_____
05.	Demand Responsive Service	_____
06.	Intelligent Transportation Systems	_____
07.	Interest and Financing Cots and Acquisition of Capital Asset by Lease	_____
08.	Transit Asset Management Plan, Public Transportation Agency Safety Plan, and State Safety Oversight Requirements	_____
09.	Alcohol and Controlled Substances Testing	_____
10.	Fixed Guideway Capital Investment Grants Program (New Starts, Small Starts, and Core Capacity Improvement)	_____
11.	State of Good Repair Program	_____
12.	Grants for Buses and Bus Facilities and Low or No Emission Vehicle Deployment Grant Programs	_____
13.	Urbanized Area Formula Grants Programs and Passenger Ferry Grant Program	_____
14.	Enhanced Mobility of Seniors and Individuals with Disabilities Programs	_____
15.	Rural Areas and Appalachian Development Program	_____
16.	Tribal Transit Programs (Public Transportation on Indian Reservations Programs)	_____
17.	State Safety Oversight Grant Program	_____
18.	Public Transportation Emergency Relief Program	_____

19. Expedited Project Delivery Pilot Program _____

20. Infrastructure Finance Programs _____

21. Construction Hiring Preferences _____

FEDERAL FISCAL YEAR 2020 FTA CERTIFICATIONS AND ASSURANCES SIGNATURE PAGE

(Required of all Applicants for FTA assistance and all FTA Grantees with an active capital or formula project)

AFFIRMATION OF APPLICANT

Name of Applicant: **Tahoe Metropolitan Planning Organization**

Name and Relationship of Authorized Representative: **Joanne S. Marchetta, Executive Director**

BY SIGNING BELOW, on behalf of the Applicant, I declare that the Applicant has duly authorized me to make these certifications and assurances and bind its compliance. Thus, it agrees to comply with all federal laws, regulations, and requirements, follow applicable Federal guidance, and comply with the certifications and assurances as indicated on the foregoing page applicable to each application its Authorized Representative makes to the Federal Transit Administration (FTA) in Federal Fiscal Year 2021, irrespective of whether the individual acted on his or her Applicant's behalf continues to represent it.

FTA intends that the Certifications and Assurances the Applicant selects on the other side of this document should apply to each Award for which it now seeks, or may later seek federal assistance to be awarded by FTA during federal fiscal year 2021.

The Applicant affirms the truthfulness and accuracy of the Certifications and Assurances it has selected in the statements submitted with this document and any other submission made to FTA, and acknowledges that the Program Fraud Civil Remedies Act of 1986, 31 U.S.C. § 3801 et seq., and implementing U.S. DOT regulations, "Program Fraud Civil Remedies," 49 CFR part 31, apply to any certification, assurance or submission made to FTA. The criminal provisions of 18 U.S.C. § 1001 apply to any certification, assurance, or submission made in connection with a federal public transportation program authorized by 49 U.S.C. chapter 53 or any other statute.

In signing this document, I declare under penalties of perjury that the foregoing Certifications and Assurances, and any other statements made by me on behalf of the Applicant are true and accurate.

Signature_____

Date: _____

Name: Joanne S. Marchetta, Executive Director

AFFIRMATION OF APPLICANT'S ATTORNEY

For (Name of Applicant): **Tahoe Metropolitan Planning Organization**

As the undersigned Attorney for the above named Applicant, I hereby affirm to the Applicant that it has authority under state, local, or tribal government law, as applicable, to make and comply with the Certifications and Assurances as indicated on the foregoing pages. I further affirm that, in my opinion, the Certifications and Assurances have been legally made and constitute legal and binding obligations on it.

I further affirm that, to the best of my knowledge, there is no legislation or litigation pending or imminent that might adversely affect the validity of these Certifications and Assurances, or of the performance of its FTA assisted Award.

Signature_____

Date: _____

Name: John L. Marshall

Attorney for Applicant

Each Applicant for federal assistance to be awarded by FTA and each FTA Recipient with an active Capital or Formula Project or Award must provide an Affirmation of Applicant's Attorney pertaining to the Applicant's legal capacity. The Applicant may enter its electronic signature in lieu of the Attorney's signature within FTA's electronic award and management system, provided the Applicant has on file and uploaded to FTA's electronic award and management system this hard-copy Affirmation, signed by the attorney and dated this federal fiscal year.

Tahoe Transportation DISTRICT

Connecting our communities

MEMORANDUM

Date: May 4, 2020

To: Tahoe Transportation District (TTD) Board of Directors

From: TTD Staff

Subject: Review and Acceptance of the District's Financial Statement of Operations through February 2020

Action Requested:
It is requested the Board accept the Financial Statement of Operations for the first eight months of fiscal year 2020 (FY20) ending February 29, 2020.

Fiscal Analysis:
TTD is in good financial standing with one area remaining a concern, which is the continued use of General Funds for non-reimbursable, non-transit operation expenses, since the agency does not have a dedicated general fund source. Staff continues its efforts to minimize General Fund costs where possible and find other funding sources that can be used for such expenses.

Background:
Staff has completed analyzing financial information for the eight months of FY20, ending February 29, 2020. The presentation of the financial information will highlight FY20 January and February activity and continues to detail the District's funds: General, Capital Improvement Program (CIP), Transit Operations, and Parking Systems (See Attachment A).

Discussion:
General Fund –
Overall, the District ended with an increase of $43,471 for January and February activity. The increase can be summarized as follows:

District Operations Revenues		District Operations Expenses	
Rental Car Mitigation Fees (RCMF)	$6,622	Salaries & Benefits	$45,671
Administrative Support	$74,325	TRPA Services (Rent, Utilities,	
Contributions	$58,334	Supplies)	$8,077
Administrative Fees	$0	Professional Services	$6,401
Interest	$17	N. Shore Transit Mgmt	$20,000
		Legal	$2,260
		Leases (Copier, Storage)	$1,366
		Insurance	$3,587
		Telephone	$2,175
		Transfer – Grant Match	$5,244
		Other	$1,046
Total Revenue	$139,298	Total Expenses	$95,827

JS/ja AGENDA ITEM: VII.A.

The increase was expected as the contribution of $50,000 from Lake Tahoe Community College was received in February. TTD incurred the annual contribution to TNT-TMA for the North Shore transit management of $20,000 in January and there were three payrolls in January.

Enterprise Leasing Company has requested that their first quarter 2020 Rental Car Mitigation Fee payment of $7,672 be deferred until July, due to the COVID-19 circumstances. TTD and TRPA agreed to this request, however TTD will acknowledge the revenue in March knowing that the resulting receivable balance will carry forward until payment is received next fiscal year.

The General fund will incur $4,000 in professional services for the update of the October 2017 SR28 Corridor Improvements Benefit Cost Analysis needed to apply for the BUILD grant application in May.

Legal costs continue to be incurred higher than budgeted and is mainly attributed to Board attendance, the District Manager's review, and normal contract/document review. Staff is estimating the budget line over-run to be $8,000 by June.

Overall, staff is projecting the General fund to break even at the end of FY20, pending the impact resulting from reductions in RCMF. As that picture becomes clearer, staff will continue to update.

The net result increased the General Fund's overall fund balance to $715,930, which is $30,043 more than at the start of the fiscal year.

CIP Fund –
January and February activity ended in an increase of $16, resulting from interest earned on project advances. Below is a brief recap of January and February activity for the CIP Fund.

Funding Source	Expenditures	Grant Balance
Caltrans		
Active Transportation Program	$102,179	$1,140,877
Federal Transit Administration		
NDOT Value Pricing Pilot Program (VPPP)	$4,669	$60,807
FTA 5310 (ADA)	$36,635	$85,921
Surface Transportation Block Grant		
Caltrans – US 50	$126,249	$489,177
NDOT – Rec Travel	$99,644	$265,502
General Fund Transfer (Match)	$5,244	$13,974
Caltrans – Rec Travel	$90,129	$26,874
Contributions		
Mariner AQMF (VPPP Match)	$0	$84,685
Tahoe Fund	$0	$0
IVGID	$0	$0
TCPUD	$0	$19,000
TMPO		
SR 89 Corridor Management	$1,809	$6,584
LCTOP		
FY16-17 (Bijou Shelter/LTCC Mobility Hub)	$0	$31,445
FY19-20 (LTCC Mobility Hub)	$0	$0
Prop 1B		
PTMISEA – Engine Replacements	$29,127	$95,206

JS/ja AGENDA ITEM: VII.A.

PTMISEA – Transit System Modernization	$24,996	$0
PTMISEA – LTCC Mobility Hub	$0	$6,190
TSSSDRA – Fleet & Facility Safety	$0	$34,976
Recreation Trails		
Shoreline	$0	$3,616
CTC		
Climate Adaptation Study	$532	$0
Caltrans Yard Study	$51,140	$179,015
Washoe County		
Bond Sale	$1,167	$414,867
Total Expenditures	$573,520	

TTD transferred $36,635 from the CIP fund to the TO fund for the purchase of a wheelchair assembly, ramp and lift from an FTA 5310 grant. The match was made using toll credits.

TTD transferred $24,996 from the CIP fund to the TO fund for the purchase of a power washer to be used on facilities, including bus shelters. Funding was provided by the Prop 1B PTMISEA Transit System Modernization grant. The grant has now been fully exhausted and staff will begin the close-out process.

TTD transferred $29,127 from the CIP fund to the TO fund for the first installment on the engine replacement on bus 3313. The funding was provided by a Prop 1B PTMISEA grant.

TTD and the TMPO amended their agreement on the SR89 Corridor Management Plan, increasing the funding amount by $7,500 and extending the agreement through September 2020.

TTD completed their agreement with the CTC on the climate adaptation study on January 28, 2020. Staff is following up on additional TTD support that the CTC may need and the possibility of a new agreement.

The net result increased CIP's overall fund balance to $2,169, which is $162 more than at the start of the fiscal year.

Transit Fund -

Overall, the District ended with a decrease of $193,545 for January and February activity. The decrease can be summarized as follows:

	South Shore Ops including SR28
Revenue Detail	
FTA 5307 (Fast Act)	$110,217
NDOT	
FTA 5311	$287,892
NV State Parks	$0
Contributions	
STPUD	$41,051
Transportation Development Act TDA)	
Local Transportation Fund (LTF)	$186,709
State Transit Assistance (STA)	$101,981
State Transit Assistance (SGR)	$14
Farebox Revenue	$72,349

JS/ja AGENDA ITEM: VII.A.

	South Shore Ops including SR28
Pass Sales	$22,910
Miscellaneous	$15
Advertising Revenue	$0
Sale of Fixed Asset	$0
Interest	$44
Total Revenues	**$823,181**

Expense Detail

Personnel	$667,454
Fuel/Fuel Tax	$41,344
Insurance	$35,383
Repairs/Maintenance	$84,026
Professional Services/Contracts	$47,570
Facility Rent/Utilities/Phone	$39,798
Supplies	$5,646
ICAP	$67,709
Depreciation	$109,972
Loss on Disposals	$0
Capital Outlay	($90,758)
Other Expenses	$8,582
Total Expenses	**$1,016,726**
Increase/(Decrease)	($193,545)

Staff recorded $27,561 of STA-SGR revenue in March for January expenses.

As mentioned above, the CIP Fund transferred $61,631 to the Transit Fund Fixed Assets for the wheelchair assembly, ramp and lift ($36,635) and the pressure washer ($24,996). The CIP fund also transferred to the Transit Fund asset "Work In Progress" for the engine replacement on bus 3313 ($29,127).

Currently, TDA funds are recognized in equal monthly installments based on the allocation letter provided by the TMPO in August. Staff is expecting decreases to these amounts and will continue to monitor and update as information is provided. TDA funds are utilized for match towards FTA 5311 and FTA 5307 grants. With the federal government passing the Coronavirus Aid, Relief, and Economic Security Act (CARES Act), any shortfalls resulting from a decrease in TDA will be covered using CARES Act funds; and in fact, NDOT will begin reimbursing the District 100% of eligible expenses beginning on the March invoices that will be submitted this month.

The net result decreased Transit's overall fund balance for the year to $4,977,679, which is $96,292 more than at the start of the fiscal year. As of February 29, 2020, the Transit Fund, excluding depreciation, disposals and transfers from the CIP Fund, increased by $87,489 in FY20.

Parking System (PS) Fund-
The PS fund decreased by $2,370 during January and February The recap is as follows: parking revenues totaled $166, bank/credit card fees $39 and depreciation of $2,497.

JS/ja AGENDA ITEM: VII.A.

The net result decreased Parking System's overall fund balance for the year to $44,936, which is $10,206 less than at the start of the fiscal year.

Balance Sheet-
The detailed balance sheet as of February 29, 2020 is attached (Attachment A).

The fixed asset balances, net of depreciation, include $2,534,021 in Transit funds, $0 in the Government-wide funds, and $28,448 in the Parking System funds of federalized/state obligations. Should the District choose to liquidate a federalized asset, permission from the governmental agency is required and their obligation takes priority.

Additional Information:
If you have any questions or comments regarding this item, please contact Joanie Schmitt at (775) 589-5507 or jschmitt@tahoetransportation.org.

Attachment:
A. February Financial Statement

JS/ja AGENDA ITEM: VII.A.

Tahoe Transportation District
Balance Sheet
As of February 29, 2020

	TOTAL	General	CIP	Transit	PS	GFA
ASSETS						
Cash & Equivalents	1,683,905	663,348	(138,408)	1,151,534	7,430	
Accounts Receivable	2,451,481	6,039	763,629	1,681,813		
Prepaids	116,083	51,013		65,069		
Inventory	246,441			237,142	9,299	
*Capital Assets, Net Depreciation	2,731,084			2,695,524	35,560	2,199
TOTAL ASSETS	**7,228,994**	**720,401**	**625,221**	**5,831,084**	**52,289**	**2,199**
LIABILITIES						
Accounts Payable	469,825	304	370,348	99,173		
Deferred Revenues	863,712	4,166	252,704	599,488	7,353	
Nevada State Bank - LOC						
Insurance Payable	(50,000)			(50,000)		
EE Compensated Absences	104,743			104,743		38,724
TOTAL LIABILITIES	**1,488,280**	**4,470**	**623,052**	**853,405**	**7,353**	**38,724**
NET POSITION						
Invested in Capital Assets	2,732,571			2,686,721	45,849	3,783
Unrestricted	2,846,452	640,487	2,007	2,194,665	9,292	(41,510)
Assigned	45,000	45,000				
SUB TOTAL NET POSITION BALANCES	5,624,022	685,487	2,007	4,881,387	55,142	(37,728)
FY 20 Increase/(Decrease) to Fund Balance	**116,691**	**30,443**	**162**	**96,292**	**(10,206)**	**1,203**
TOTAL NET POSITION	**5,740,714**	**715,930**	**2,169**	**4,977,679**	**44,936**	**(36,525)**
TOTAL LIABILITIES & NET POSITION	**7,228,994**	**720,401**	**625,221**	**5,831,084**	**52,289**	**2,199**

* The fixed asset balances, net of depreciation, include $2,534,021 in transit funds, $0 in the governmental-wide fund account and $28,448 in parking system funds of federalized obligations. Should the District choose to liquidate a federalized asset, permission from the governmental agency is required and their obligation takes priority.

Tahoe Transportation District
Statement of Operations
July 1, 2019 through February 29, 2020

	TOTAL	General	CIP	Transit	PS	GFA
Revenues						
Federal Grants	3,265,636		1,287,286	1,978,350		
State Funding	1,917,540		618,401	1,298,992	147	
Contributions	153,115	83,334	28,731	41,051		
General Revenues	256,309	256,255		54		
Charges for Services	457,784	78,145		379,471	168	
Special Items	8,912	211	221	8,479	0	
TOTAL REVENUES	**6,059,296**	**417,945**	**1,934,639**	**3,706,397**	**315**	
Expenses						
Personnel	2,641,080	178,597	240,020	2,222,463		
Personnel - Compensated Absences	4,942			4,942		(2,786)
Contracts	1,207,027		1,207,027			
Fuel	179,159			179,159		
Depreciation	430,931			420,642	10,289	1,583
Other Operating	1,217,830	191,054	48,855	977,689	232	
ICAP - 10%	256,255		21,600	234,655		
Capital Outlay	4,524			4,524		
Interest	857	857				
Other Funding Sources		16,994	416,975	(433,969)		
TOTAL EXPENSES	**5,942,605**	**387,502**	**1,934,477**	**3,610,105**	**10,521**	**(1,203)**
FY 20 Increase / (Decrease) to Net Position	**116,691**	**30,443**	**162**	**96,292**	**(10,206)**	**1,203**

Tahoe Transportation District
General Fund
Statement of Operations
July 1, 2019 through February 29, 2020

			General Fund Activity			Actual vs Budget			Program YTD
	1st Qtr	2nd Qtr	Jan	Feb	3rd Qtr	YEAR TO DATE	Board Approved Budget	Var %	District Ops
Revenues									
General Revenues									
Admin Support	88,996	92,934	44,821	29,504	74,325	256,255	503,110	50.93%	256,255
Miscellaneous								100.00%	
Contributions	12,500	12,500	4,167	54,167	58,334	83,334		-100.00%	83,334
Total General Revenues	**101,496**	**105,434**	**48,988**	**83,671**	**132,659**	**339,589**	**503,110**	**67.50%**	**339,589**
Charges for Services									
Administrative Fees	5,182					5,182	10,000	51.82%	5,182
Rental Car Mitigation Fees	46,965	19,377	2,503	4,120	6,622	72,963	100,000	72.96%	72,963
Total Charges for Services	**52,146**	**19,377**	**2,503**	**4,120**	**6,622**	**78,145**	**110,000**	**71.04%**	**78,145**
Special Items									
Sale of Fixed Assets									
Interest Revenue	158	36	10	7	17	211	120	175.92%	211
Total Special Revenues	**158**	**36**	**10**	**7**	**17**	**211**	**120**	**175.92%**	**211**
TOTAL REVENUES	**153,800**	**124,847**	**51,501**	**87,798**	**139,298**	**417,945**	**613,230**	**68.15%**	**417,945**
Expenses									
Operating									
Personnel	66,440	66,486	25,433	20,237	45,671	178,597	270,125	66.12%	178,597
Repairs & Maintenance							1,000	0.00%	
Insurance	5,381	5,380	1,793	1,794	3,587	14,348	22,200	64.63%	14,348
Facility Rent	10,425	10,474	3,466	3,466	6,932	27,832	48,635	57.23%	27,832
Facility Utilities	921	921	307	307	614	2,456	3,660	67.10%	2,456
Telephone	3,914	3,313	1,087	1,087	2,175	9,402	15,000	62.68%	9,402
Supplies	3,286	3,046	948	948	1,896	8,228	17,600	46.75%	8,228
Advertising & Public Relations	250	50				300	1,200	25.00%	300
Reproduction & Printing		258				258	1,350	19.14%	258
Postage	4		356		356	360	1,800	20.00%	360
Dues, Subscriptions & Publications	4,458	729	126	102	228	5,415	8,800	61.53%	5,415
License & Permits							300	0.00%	
Professional Services	10,401	40,587	3,123	3,279	6,401	57,389	77,650	73.91%	57,389
Legal Services	6,745	5,041		2,260	2,260	14,046	12,000	117.05%	14,046
Auditing Services	13,575	7,990				21,565	35,000	61.61%	21,565
Bank Fee / CC Fees	400					400	3,000	13.33%	400
Transit Management - No Shore			20,000		20,000	20,000	20,000	100.00%	20,000
Training							8,500	0.00%	
Travel	1,323	492	199	50	249	2,064	18,700	11.04%	2,064
Events	61	368				430	3,575	12.02%	430
Taxes	2,726	2,327				5,053	8,000	63.16%	5,053
Miscellaneous Expenses	366	929	107	107	214	1,509	5,000	30.18%	1,509
Total Operating	**130,676**	**148,393**	**56,945**	**33,637**	**90,582**	**369,651**	**583,095**	**63.39%**	**369,651**

Tahoe Transportation District
General Fund
Statement of Operations
July 1, 2019 through February 29, 2020

			General Fund Activity			Actual vs Budget			Program YTD
	1st Qtr	2nd Qtr	Jan	Feb	3rd Qtr	YEAR TO DATE	Board Approved Budget	Var %	District Ops
Capital Outlay									
Office & Equipment over $5000									
Office & Equipment under $5000							10,500	0.00%	
CIP over $5000									
Reimbursed Capital Expenses									
Total Capital Outlay	**0**	**0**	**0**	**0**	**0**	**0**	**10,500**	**0.00%**	**0**
Interest									
Interest Expense	857					857	7,500	11.43%	857
Total Interest Expense	**857**	**0**	**0**	**0**	**0**	**857**	**7,500**	**11.43%**	**857**
Other Financing Sources									
Preventive Maint (In)									
Capital Outlay (In) Out									
Transfer (In) Out	7,442	4,307	2,531	2,713	5,244	16,994	33,197	51.19%	16,994
Total Other Financing Sources	**7,442**	**4,307**	**2,531**	**2,713**	**5,244**	**16,994**	**33,197**	**51.19%**	**16,994**
TOTAL EXPENSES	138,976	152,700	59,477	36,350	95,827	387,502	634,292	61.09%	387,502
Increase/(Decrease) to Net Position	**14,825**	**(27,853)**	**(7,976)**	**51,448**	**43,471**	**30,443**	**(21,062)**	**-144.54%**	**30,443**

Tahoe Transportation District
CIP Fund
Statement of Operations
July 1, 2019 through February 29, 2020

	CIP Fund					Actual vs Budget			Program YTD							
	1st Qtr	2nd Qtr	Jan	Feb	3rd Qtr	YEAR TO DATE	Board Approved Budget	Var %	US 50	Rec Travel	Bikeway / Parking / VPPP	Transit Ops Projects	Meeks / SR 89 (Fanny(	Corridor Mgmt	Other Projects	Program Total
Revenues																
Capital Grant & Contributions																
Surface Transportation Program (STP)	295,603	475,125	220,118	95,903	316,022	1,086,750	3,701,638	29.36%	564,310	522,440						1,086,750
Active Transportation Program (ATP)	11,067	8,478	3,883	98,297	102,179	121,724	6,091	1998.42%					121,724			121,724
Congestive Mitigation & Air Quality (CMAQ)							1,041,000	0.00%								
Federal Transportation Administration			14,760	21,874	36,635	36,635	273,778	13.38%				36,635				36,635
Federal Highways - Recreational Trails	16,285	4,400				20,685	2,272	910.43%			20,685					20,685
US Forest Service							9,610	0.00%								
Office of Emergency Services (CalOES)							259,400	0.00%								
Transportation Alternative Programs (TAP)							260,693	0.00%								
Value Pricing Pilot Program (VVVP)	5,744	2,127	4,091	577	4,669	12,539	27,063	46.33%			12,539					12,539
State Planning							100,000	0.00%								
Prop 1B	49,769	197,513		54,124	54,124	301,405	176,500	170.77%				301,405				301,405
Low Carbon Transit Operations		126,677				126,677	126,677	100.00%				126,677				126,677
Washoe County	12,131	19,093	1,023	144	1,167	32,391	109,637	29.54%			32,391					32,391
Douglas County							86,531	0.00%								
Conservancy	29,402	76,853	50,542	1,130	51,672	157,928	351,336	44.95%							157,928	157,928
TMPO	4,330	2,815	503	1,306	1,809	8,954	2,882	310.68%						8,954		8,954
Contributions	28,731					28,731	21,434	134.04%			28,731					28,731
Total Capital Grants & Contributions	**453,061**	**913,080**	**294,921**	**273,355**	**568,276**	**1,934,418**	**6,556,542**	29.50%	**564,310**	**522,440**	**94,346**	**464,717**	**121,724**	**8,954**	**157,928**	**1,934,418**
Special Items																
Interest Revenue	167	39	9	6	16	221	600	36.91%			140	78			4	221
Total Special Items	**167**	**39**	**9**	**6**	**16**	**221**	**600**	36.91%			**140**	**78**			**4**	**221**
TOTAL REVENUES	**453,227**	**913,120**	**294,930**	**273,362**	**568,292**	**1,934,639**	**6,557,142**	**29.50%**	**564,310**	**522,440**	**94,486**	**464,795**	**121,724**	**8,954**	**157,931**	**1,934,639**
Expenses																
Personnel	82,000	83,699	46,170	28,151	74,321	240,020	514,166	46.68%	148,135	45,878	9,438		10,177	8,112	18,279	240,020
Contract Services	313,106	493,245	232,288	168,388	400,676	1,207,027	5,510,712	21.90%	395,513	487,965	74,024		110,356		139,170	1,207,027
Reproduction & Printing	230					230		-100.00%			230					230
Rent Meeting Room							9,000	0.00%								
Supplies	48					48	2,950	1.64%		48						48
License & Permits		30	168	63	231	261		-100.00%	30	231						261
Advertising / Outreach	45	68	23	23	45	158	9,000	1.75%					158			158
Postage							400	0.00%								
Professional Services	17,040	20,290		661	661	37,991	97,703	38.88%	1,571		5,420	30,808			193	37,991
Administrative Fees	5,182					5,182		-100.00%			5,182					5,182
Training	400	175		25	25	600	1,500	40.00%	600							600
Travel - Per Diem	628	985				1,614	2,750	58.69%	1,272	342						1,614
Travel - Commercial Air	296	1,042				1,338	4,000	33.45%	1,042	296						1,338

Tahoe Transportation District
CIP Fund
Statement of Operations
July 1, 2019 through February 29, 2020

			CIP Fund			Actual vs Budget			Program YTD							
	1st Qtr	2nd Qtr	Jan	Feb	3rd Qtr	YEAR TO DATE	Board Approved Budget	Var %	US 50	Rec Travel	Bikeway / Parking / VPPP	Transit Ops Projects	Meeks / SR 89 (Fanny(	Corridor Mgmt	Other Projects	Program Total
Expenses Continued																
Travel - Auto	693	505	25	161	186	1,384	3,450	40.10%	895	123	52			28	285	1,384
Dues & Subscriptions	50					50		-100.00%	50							50
ICAP - 10%	7,174	7,809	4,018	2,598	6,617	21,600	80,069	26.98%	15,202	4,550			1,033	814		21,600
Total Operating	**426,892**	**607,848**	**282,692**	**200,070**	**482,763**	**1,517,502**	**6,235,700**	**24.34%**	**564,310**	**539,433**	**94,346**	**30,808**	**121,724**	**8,954**	**157,928**	**1,517,502**
Capital Outlay																
Equipment over $5000	33,611	309,600	14,760	75,998	90,758	433,969	516,194	84.07%				433,969				433,969
Equipment under $5000							1,500	0.00%								
CIP Over $5000								100.00%								
Reimb Capital Expenses	(33,611)	(309,600)	(14,760)	(75,998)	(90,758)	(433,969)	(517,694)	83.83%				(433,969)				(433,969)
Total Capital Outlay	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**100.00%**	**0**	**0**	**0**	**0**	**0**	**0**	**0**	**0**
Other Financing Sources																
Preventive Maint (In)																
Capital Outlay (In) Out	33,611	309,600	14,760	75,998	90,758	433,969	517,694	83.83%				433,969				433,969
Transfer (In) Out	(7,442)	(4,307)	(2,531)	(2,713)	(5,244)	(16,994)	(196,852)	8.63%		(16,994)						(16,994)
Total Other Financing Sources	**26,168**	**305,293**	**12,229**	**73,285**	**85,514**	**416,975**	**320,842**	**129.96%**		**(16,994)**		**433,969**				**416,975**
TOTAL EXPENSES	**453,061**	**913,140**	**294,921**	**273,355**	**568,276**	**1,934,477**	**6,556,542**	**29.50%**	**564,310**	**522,440**	**94,346**	**464,776**	**121,724**	**8,954**	**157,928**	**1,934,477**
Increase / (Decrease) to Fund Balance	**167**	**(20)**	**9**	**6**	**16**	**162**	**600**	**26.96%**	**0**	**0**	**140**	**18**	**0**	**0**	**4**	**162**

Tahoe Transportation District
Transit Fund
Statement of Operations
July 1, 2019 through February 29, 2020

			TO Fund Activity			Actual vs Budget			Program YTD		
	1st Qtr	2nd Qtr	Jan	Feb	3rd Qtr	YEAR TO DATE	Board Approved Budget	Var %	S. Shore Ops	SR28 Incline	Program Total
Revenues											
Grants & Contributions											
FTA 5311	322,547	391,045	165,895	121,997	287,892	1,001,484	1,779,456	56.28%	1,001,484		1,001,484
FTA 5307	580,936	85,713		110,217	110,217	776,866	1,859,817	41.77%	765,480	11,386	776,866
CMAQ - 5307		200,000				200,000	200,000	100.00%	200,000		200,000
TDA - LTF	276,049	276,127	92,043	94,666	186,709	738,885	1,095,673	67.44%	736,262	2,623	738,885
TDA - STA	152,819	152,819	51,041	50,940	101,981	407,619	665,548	61.25%	407,619		407,619
TDA - SGR		67,475	14		14	67,488	92,719	72.79%	67,488		67,488
NV State Parks	85,000					85,000	85,000	100.00%		85,000	85,000
Contributions				41,051	41,051	41,051	120,000	34.21%	40,919	131	41,051
Total Grants & Contributions	**1,417,351**	**1,173,179**	**308,993**	**418,871**	**727,864**	**3,318,393**	**5,898,213**	**56.26%**	**3,219,253**	**99,140**	**3,318,393**
Charges for Services											
FareBox Revenue	149,060	81,222	40,818	31,531	72,349	302,630	585,000	51.73%	238,964	63,666	302,630
Pass Sales	28,335	25,450	11,690	11,220	22,910	76,695	100,000	76.70%	76,695		76,695
Advertising Revenue	145					145	0	-100.00%		145	145
Total Charges for Services	**177,540**	**106,672**	**52,508**	**42,751**	**95,259**	**379,471**	**685,000**	**55.40%**	**315,659**	**63,812**	**379,471**
Special Items											
Sale of Fixed Assets	7,368	636				8,004		-100.00%	8,004		8,004
Miscellaneous	21	18	9	6	15	54	0	-100.00%	50	4	54
Insurance Claim Revenues											
Interest Revenue	359	73	22	21	44	476	500	95.11%	476		476
Total Special Items	**7,747**	**727**	**31**	**27**	**59**	**8,533**	**500**	**1706.64%**	**8,530**	**4**	**8,533**
TOTAL REVENUES	**1,602,639**	**1,280,577**	**361,532**	**461,649**	**823,181**	**3,706,397**	**6,583,713**	**56.30%**	**3,543,441**	**162,956**	**3,706,397**
Expenses											
Operating											
Personnel	797,739	762,212	404,748	262,706	667,454	2,227,404	3,989,739	55.83%	2,112,938	114,466	2,227,404
Vehicle Fuel	76,312	61,502	22,136	19,208	41,344	179,159	350,000	51.19%	166,851	12,308	179,159
Sales Tax on Fuel	208	156				364	2,000	18.20%	364		364
Repair and Maintenance	187,828	146,783	41,071	42,954	84,026	418,636	702,360	59.60%	418,636		418,636
Insurance	55,718	54,479	17,559	17,825	35,383	145,580	325,000	44.79%	138,568	7,013	145,580
Reproduction & Printing	4,853	5,143	305	156	461	10,458	24,500	42.68%	9,637	821	10,458
Facility Rent	43,853	33,841	12,031	12,109	24,140	101,834	152,200	66.91%	91,878	9,956	101,834
Facility Utilities	13,338	19,709	5,615	5,749	11,364	44,411	66,000	67.29%	43,589	822	44,411
Telephone	7,285	8,422	2,079	2,215	4,294	20,001	26,200	76.34%	20,001		20,001

Tahoe Transportation District
Transit Fund
Statement of Operations
July 1, 2019 through February 29, 2020

			TO Fund Activity			Actual vs Budget			Program YTD		
	1st Qtr	2nd Qtr	Jan	Feb	3rd Qtr	YEAR TO DATE	Board Approved Budget	Var %	S. Shore Ops	SR28 Incline	Program Total
Expenses Continued											
Supplies	9,317	12,764	4,001	1,645	5,646	27,727	60,650	45.72%	27,314	413	27,727
Advertising & Public Relations	1,252	1,432	262	255	517	3,202	9,800	32.67%	3,202		3,202
License & Permits	550	685				1,235	5,000	24.70%	1,235		1,235
Dues, Subscriptions and Publications	3,234	231	517	319	836	4,301	500	860.22%	4,301		4,301
Professional Services	68,752	60,642	29,110	18,460	47,570	176,964	364,160	48.60%	174,881	2,082	176,964
Bank Fees	1,596	1,207	437	414	851	3,654	6,400	57.09%	3,522	132	3,654
Training	945		2,195		2,195	3,140	10,000	31.40%	3,140		3,140
Travel	5,326	4,335	847	1,341	2,188	11,849	19,500	60.77%	11,708	141	11,849
Reimbursed Travel		798		(798)	(798)			-100.00%			
Miscellaneous Expenses		2,001	(21)	80	59	2,060	35,000	5.89%	2,060		2,060
Grant Match											
ICAP - 10%	81,822	85,125	40,803	26,906	67,709	234,655	397,011	59.11%	219,853	14,802	234,655
Depreciation Expense	147,009	163,661	55,639	54,333	109,972	420,642	720,000	58.42%	420,642		420,642
Total Operating	**1,506,937**	**1,425,128**	**639,335**	**465,877**	**1,105,212**	**4,037,277**	**7,266,020**	**55.56%**	**3,874,321**	**162,956**	**4,037,277**
Capital Outlay											
Equipment under $5000			2,273		2,273	2,273	1,500	151.52%	2,273		2,273
Disposal of Fixed Assets		4,524				4,524	37,500	0.00%	4,524		4,524
Reimbursed Capital Expenses											
Total Capital Outlay	**0**	**4,524**	**2,273**	**0**	**2,273**	**6,797**	**39,000**	**17.43%**	**6,797**	**0**	**6,797**
Other Financing Sources											
Capital Outlay (In) Out	(33,611)	(309,600)	(14,760)	(75,998)	(90,758)	(433,969)	(517,694)	83.83%	(433,969)		(433,969)
Transfer (In) Out							163,655	0.00%			
Total Other Financing Sources	**(33,611)**	**(309,600)**	**(14,760)**	**(75,998)**	**(90,758)**	**(433,969)**	**(354,039)**	**122.58%**	**(433,969)**	**0**	**(433,969)**
TOTAL EXPENSES	**1,473,326**	**1,120,052**	**626,848**	**389,879**	**1,016,726**	**3,610,105**	**6,950,981**	**51.94%**	**3,447,149**	**162,956**	**3,610,105**
Increase / Decrease) to Fund Balance	**129,313**	**160,525**	**(265,315)**	**71,770**	**(193,545)**	**96,292**	**(367,268)**	**-26.22%**	**96,292**	**0**	**96,292**

Tahoe Transportation District
Parking Systems Fund
Statement of Operations
July 1, 2019 through February 29, 2020

			Parking System Activity			Actual vs Budget			Program YTD
	1st Qtr	2nd Qtr	Jan	Feb	3rd Qtr	YEAR TO DATE	Board Approved Budget	Var %	Parking System
Revenues									
General Revenues									
Contributions							0	100.00%	
Washoe County	147					147	5,000	2.93%	147
Total General Revenues	147					147	5,000	2.93%	147
Charges for Services									
Parking Revenue		3	42	123	166	168	260,300	0.06%	168
Total Charges for Services		**3**	**42**	**123**	**166**	**168**	**260,300**	0.06%	**168**
Special Items									
Interest Revenue	0	0	0	0	0	0	500	0.00%	0
Total Special Revenues	**0**	**0**	**0**	**0**	**0**	**0**	**500**	0.00%	**0**
TOTAL REVENUES	**147**	**3**	**42**	**123**	**166**	**315**	**265,800**	**0.12%**	**315**
Expenses									
Personnel							37,027	**0.00%**	
Contracts							123,050	**0.00%**	
Professional Services							5,300	**0.00%**	
Rent / Lease							12,000	**0.00%**	
Advertising / Outrech							2,000	**0.00%**	
Supplies	147					147	1,500	**9.77%**	147
Repairs & Maintenance							3,000	**0.00%**	
ICAP							26,030	0.00%	
Travel - Auto							500	0.00%	
Bank / CC Fees	28	19	15	23	39	85	5,200	1.64%	85
Misc Fees							7,914	0.00%	
Depreciation	3,875	3,918	1,292	1,205	2,497	10,289	5,000	205.78%	10,289
TOTAL OPERATING EXPENSES	4,049	3,936	1,307	1,229	2,536	10,521	228,521	4.60%	10,521
Capital Outlay									
Equipment over $5000								100.00%	
Equipment under $5000								100.00%	
Total Capital Outlay	**0**	**0**	**0**	**0**	**0**	**0**	**0**	100.00%	**0**
Other Funding Sources - Revenues									
Revenues									
Capital (In) Out								**100.00%**	
Transfers (In) Out								100.00%	
Total Other Financing Sources	**0**	**0**	**0**	**0**	**0**	**0**	**0**	100.00%	**0**
Total Expenses and Other Funding Sources	4,049	3,936	1,307	1,229	2,536	10,521	228,521	5%	10,521
Increase /(Decrease) to Fund Balance	**(3,902)**	**(3,934)**	**(1,264)**	**(1,106)**	**(2,370)**	**(10,206)**	**32,279**	**-31.62%**	**(10,206)**

Tahoe Transportation District
Transit Fund
Operations Schedule
July 1, 2019 through February 29, 2020

			TO Fund Activity			Actual vs Budget		Program YTD		
	1st Qtr	2nd Qtr	Jan	Feb	3rd Qtr	YEAR TO DATE	Board Approved Budget	S. Shore Ops	SR28 Incline	Program Total
TOTAL REVENUES	1,602,639	1,280,577	361,532	461,649	823,181	3,706,397	6,583,713	3,543,441	162,956	3,706,397
TOTAL OPERATING EXPENSES	1,506,937	1,425,128	639,335	465,877	1,105,212	4,037,277	7,266,020	3,874,321	162,956	4,037,277
Equip not transferred	0	0	2,273	0	2,273	2,273	0	2,273	0	2,273
LESS DEPRECIATION	(147,009)	(163,661)	(55,639)	(54,333)	(109,972)	(420,642)	(720,000)	(420,642)	0	(420,642)
PLUS LTCC Mobility Hub Match Transfer							163,655			
CASH INCREASE / (DECREASE)	**242,711**	**19,110**	**(224,437)**	**50,105**	**(174,331)**	**87,489**	**(125,962)**	**87,489**	**0**	**87,489**

Tahoe Transportation DISTRICT

Connecting our communities

MEMORANDUM

Date: May 4, 2020

To: Tahoe Transportation District (TTD) Board of Directors

From: TTD Staff

Subject: Ratification of Agreement Amendment #2 for Exploration Services Inc. for Outreach Services for US 50 South Shore Community Revitalization Project through the End of Fiscal Year 2020

Action Requested:
It is requested the Board ratify the Agreement Amendment #2 (Attachment A) through the current fiscal year with Exploration Services Inc. (ESI) for outreach services for the US 50 South Shore Community Revitalization Project.

Fiscal Analysis:
The contract expenses are reimbursed from the Surface Transportation Block Grant (STBG) funds. The extension for this contract brings the total contract amount for the fiscal year through June to $135,000. Staff will be releasing a request for proposal for project outreach services for next fiscal year.

Work Program Analysis:
Staff augments work hour capacity through professional service contracts in lieu of additional staff positions. Staff time for oversight and coordination with outside consultants is included in the work program for the project.

Background:
TTD has utilized outside professional services in lieu of specialized staff positions since 2009. The use of contract professional services for certain areas of specialty has been used to keep agency staff levels to a competent core group for developing and managing agency business given its limited operational revenue certainty, which for projects, is in the form of discretionary grants.

Outreach services for projects includes on the ground liaison community contact and tracking, social media tracking and posting, strategy development monitoring and adjustment, press release development and media public relations, and consultation with staff for project management. This type of project management requires a contract team that is knowledgeable of the project, is embedded with the full staff and consultant team as if they were staff, which they are by extension.

Discussion:
Outreach service is critical to project development and implementation. ESI has been providing this resource for the last five years. It is time to refresh the procurement. That procurement has

been rescheduled for the next fiscal year due to workload and program challenges through the current fiscal year. With the realization that the delay compromised the work for the year, the District Manager authorized a contract extension beyond staff contract authority to maintain work program capacity and is seeking Board ratification for the contract extension.

Staff recommends that the Board take an action of ratifying the contract extension through the fiscal year.

Additional Information:

If you have any questions or comments regarding this item, please contact Carl Hasty at (775) 589-5501 or chasty@tahoetransportation.org.

Attachment:

A. Agreement Amendment #2

CH/ja AGENDA ITEM: VII.B.

AGREEMENT FOR SERVICES BETWEEN TAHOE TRANSPORTATION DISTRICT AND EXPLORATION SERVICES, INC. AGMT #19-07

AMENDMENT #2

This amendment to Agreement for Services #AGMT 19-07 ("Agreement") is dated and effective as of February 28, 2020. The Agreement is by and between the Tahoe Transportation District ("District"), a bi-state special purpose district created by the Tahoe Regional Planning Compact, and Exploration Services, Inc. ("Consultant"), a corporation duly qualified to conduct business in the State of Nevada, whose principal place of business is 390 S. Sutro Terrace, Carson City, NV 89706.

The Agreement is hereby amended as shown below. All other provisions in the Agreement shall remain in effect.

SECTION I. TERM OF AGREEMENT
This Agreement became effective on October 1, 2019 and shall expire on June 30, 2020.

SECTION 4(a). COMPENSATION AND METHOD OF PAYMENT
The total compensation, including reimbursement for actual expenses, shall not exceed ONE HUNDRED AND THIRTY-FIVE THOUSAND DOLLARS ($135,000).

TAHOE TRANSPORTATION DISTRICT

By: _____
Carl Hasty
District Manager

EXPLORATION SERVICES, INC.

By: _____
Kathy Jordan
Corporate President

CH/ja

AGENDA ITEM: VII.B.

Tahoe Transportation DISTRICT

Connecting our communities

MEMORANDUM

Date: May 4, 2020

To: Tahoe Transportation District (TTD) Board of Directors

From: TTD Staff

Subject: Authorize Issuance of a Contract Award to Flyers Energy for the Provision of Card-Based Fueling Services for Transit Operations

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Action Requested:
Staff requests the Board authorize the award of a contract to Flyers Energy for the provision of card-based fuel services for transit operations.

Fiscal Impact:
Fiscal Year (FY) 2021 operating expenditures associated with this item are accounted for in the proposed budget.

Work Program Impact:
All work associated with this effort is captured under respective elements of the existing Work Program and corresponding allotted staff time necessary for administration of the budget and operations.

Background:
TTD has contracted with Flyers Energy and their predecessor company, Western Energentix, for fuel since 2010. The Federal Transit Administration's best practices recommend periodic re-competition of contracts to preserve competition and keep prices competitive. Without periodic competition, the incumbent will not have the pressures of a competitive market to keep prices reasonable.

Discussion:
On March 24, 2020, Staff issued a Request for Proposals (RFP) for the procurement of card-based fueling services. Staff posted the RFP on TTD's website and directly contacted eleven vendors. Six companies declined to bid and stated reasons why, including they did not have locations in the area and there is not adequate rate on return in the area. Four companies did not respond when TTD inquired why they did not submit a proposal.

Staff received one proposal in response to the RFP. The proposal was from the incumbent, Flyers Energy. The proposal was reviewed against the selection criteria and found responsive. The pricing structure proposed is $0.01-$0.02 lower than the existing fuel contract, depending

on the contract year. The overall Oil Price Information Service (OPIS) mark-up increases by $0.01 per gallon in the second option year (FY 24/25) in both markets (CA & NV).

Staff acknowledges competition to be adequate as the reasons for the single proposal are caused by conditions beyond TTD's control. Staff is recommending a single proposal procurement for this contract and that Board accept Flyers Energy's proposal and enter into a 36-month initial contract period, with two one-year options with Flyers Energy, not to exceed the rates identified in Flyers Energy's card-based fueling services proposal (Attachment A) or the annual budgeted amount for fuel. For the current fiscal year (FY21), TTD budgeted $328,720 for fuel.

Additional Information:

If you have any questions or comments regarding this item, please contact Tara Styer at (775) 589-5509 or tstyer@tahoetransportation.org.

Attachment:

A. Draft Agreement

TS/ja AGENDA ITEM: VII.C.

AGREEMENT FOR GOODS AND SERVICES BETWEEN TAHOE TRANSPORTATION DISTRICT AND FLYERS ENERGY

This Agreement ("Agreement") is entered into as of this ____ day of 2020 by and between Tahoe Transportation District, a bi-state special purpose district created by the Tahoe Regional Planning Compact, ("District") and Flyers Energy ("Contractor"). District and Contractor are sometimes hereinafter individually referred to as "Party" and hereinafter collectively referred to as the "Parties."

RECITALS

A. District has sought, by Request for Proposals the performance of the services and goods defined and described particularly in Section 2 of this Agreement.

B. Contractor, following submission of a proposal for the performance of the services and goods defined and described particularly in Section 2 of this Agreement, was selected by the District to perform those services and supply the goods.

C. District has authority to enter into this Agreement and the District's General Manager has authority to execute this Agreement.

D. The Parties desire to formalize the selection of Contractor for performance of those services and goods defined and described particularly in Section 2 of this Agreement and desire that the terms of that performance be as particularly defined and described herein.

OPERATIVE PROVISIONS

NOW, THEREFORE, in consideration of the mutual promises and covenants made by the Parties and contained here and other consideration, the value and adequacy of which are hereby acknowledged, the Parties agree as follows:

SECTION 1. TERM OF AGREEMENT.

Subject to the provisions of Section 20 "Termination of Agreement" of this Agreement, the Term of this Agreement is July 1, 2020 to June 30, 2023, with two one-year option periods ending on June 30, 2024 and June 30, 2025, respectively.

SECTION 2. SCOPE OF SERVICES & SCHEDULE OF PERFORMANCE.

(a) Scope of Services. Contractor agrees to perform the services and provide fuel as set forth in Exhibit "A" "Scope of Services" (hereinafter, the "Services") and made a part of this Agreement by this reference.

(b) Schedule of Performance. The Services and provision of fuel shall be completed pursuant to the schedule specified in Exhibit "A." Should the Services not be completed pursuant to that schedule, the Contractor shall be deemed to be in Default of this Agreement. The District, in its sole discretion, may choose not to enforce the Default provisions of this Agreement and may instead allow Contractor to continue performing the Services.

SECTION 3. ADDITIONAL SERVICES.

Contractor shall not be compensated for any work rendered in connection with its performance of this Agreement that are in addition to or outside of the Services unless such additional services are authorized in advance and in writing in accordance with Section 26 "Administration and Implementation" or Section 27 "Amendment" of this Agreement. If and when such additional work is authorized, such additional work shall be deemed to be part of the Services.

SECTION 4. COMPENSATION AND METHOD OF PAYMENT.

(a) Subject to any limitations set forth in this Agreement, District agrees to pay Contractor pursuant to the pricing and fee schedules specified in Exhibit "B" "Compensation" and made a part of this Agreement by this reference.

(b) Each month Contractor shall furnish to District an original invoice for used during the preceding month. The invoice shall detail charges by the following categories: vehicle number, date/time, fuel type, itemized list of application taxes, odometer, miles per gallon, gallons pumped, price per gallon, and total sales. Invoice shall also include a summary for each vehicle showing total fuel pumped during the month and average miles per gallon, and a summary of the total gallons of each fuel type used each month and for the fiscal year (July 1 through June 30). If the compensation set forth in subsection (a) and Exhibit "B" include payment of labor on an hourly basis (as opposed to labor and materials being paid as a lump sum), the labor category in each invoice shall include detailed descriptions of task performed and the amount of time incurred for or allocated to that task. District shall independently review each invoice submitted by the Contractor to determine whether the work performed and expenses incurred are in compliance with the provisions of this Agreement. In the event that no charges or expenses are disputed, the invoice shall be approved and paid according to the terms set forth in subsection (c). In the event any charges or expenses are disputed by District, the original invoice shall be returned by District to Contractor for correction and resubmission.

(c) Except as to any charges for work performed or expenses incurred by Contractor which are disputed by District, District will use its best efforts to cause Contractor to be paid within forty-five (45) days of receipt of Contractor's correct and undisputed invoice.

(d) Payment to Contractor for work performed pursuant to this Agreement shall not be deemed to waive any defects in work performed by Contractor.

SECTION 5. INSPECTION AND FINAL ACCEPTANCE.

District may inspect and accept or reject any of Contractor's work under this Agreement, either during performance or when completed. District shall reject or finally accept Contractor's work within sixty (60) days after submitted to District. District shall reject work by a timely written explanation, otherwise Contractor's work shall be deemed to have been accepted. District's acceptance shall be conclusive as to such work except with respect to latent defects, fraud and such gross mistakes as amount to fraud. Acceptance of any of Contractor's work by District shall not constitute a waiver of any of the provisions of this Agreement including, but not limited to, Section 16 "Indemnification" and Section 17 "Insurance."

SECTION 6. OWNERSHIP OF DOCUMENTS.

All original maps, models, designs, drawings, photographs, studies, surveys, reports, data, notes, computer files, files and other documents prepared, developed or discovered by Contractor in the course of providing the Services pursuant to this Agreement shall become the sole property of District and may be used, reused or otherwise disposed of by District without the permission of the Contractor. Upon completion, expiration or termination of this Agreement, Contractor shall turn over to District all such original maps, models, designs, drawings, photographs, studies, surveys, reports, data, notes, computer files, files and other documents.

If and to the extent that District utilizes for any purpose not related to this Agreement any maps, models, designs, drawings, photographs, studies, surveys, reports, data, notes, computer files, files or other documents prepared, developed or discovered by Contractor in the course of providing the Services pursuant to this Agreement, Contractor's guarantees and warranties in Section 9 "Standard of Performance" of this Agreement shall not extend to such use of the maps, models, designs, drawings, photographs, studies, surveys, reports, data, notes, computer files, files or other documents.

SECTION 7. CONTRACTOR'S BOOKS AND RECORDS.

(a) Contractor shall maintain any and all documents and records demonstrating or relating to Contractor's performance of the Services. Contractor shall maintain any and all ledgers, books of account, invoices, vouchers, canceled checks, or other documents or records evidencing or relating to work, services, expenditures and disbursements charged to District pursuant to this Agreement. Any and all such documents or records shall be maintained in accordance with generally accepted accounting principles and shall be sufficiently complete and detailed so as to permit an accurate evaluation of the services provided by Contractor pursuant to this Agreement. Any and all such documents or records shall be maintained for three (3) years from the date of execution of this Agreement and to the extent required by laws relating to audits of public agencies and their expenditures.

(b) Any and all records or documents required to be maintained pursuant to this section shall be made available for inspection, audit and copying, at any time during regular business hours, upon request by District or its designated representative. Copies of such documents or records shall be provided directly to the District for inspection, audit and copying when it is practical to do so; otherwise, unless an alternative is mutually agreed

upon, such documents and records shall be made available at Contractor's address indicated for receipt of notices in this Agreement.

(c) Where District has reason to believe that any of the documents or records required to be maintained pursuant to this section may be lost or discarded due to dissolution or termination of Contractor's business, District may, by written request, require that custody of such documents or records be given to the District. Access to such documents and records shall be granted to District, as well as to its successors-in-interest and authorized representatives.

SECTION 8. INDEPENDENT CONTRACTOR.

(a) Contractor is and shall at all times remain a wholly independent contractor and not an officer, employee or agent of District. Contractor shall have no authority to bind District in any manner, nor to incur any obligation, debt or liability of any kind on behalf of or against District, whether by contract or otherwise, unless such authority is expressly conferred under this Agreement or is otherwise expressly conferred in writing by District.

(b) The personnel performing the Services under this Agreement on behalf of Contractor shall at all times be under Contractor's exclusive direction and control. Neither District, nor any elected or appointed boards, officers, officials, employees or agents of District, shall have control over the conduct of Contractor or any of Contractor's officers, employees, or agents except as set forth in this Agreement. Contractor shall not at any time or in any manner represent that Contractor or any of Contractor's officers, employees, or agents are in any manner officials, officers, employees or agents of District.

(c) Neither Contractor, nor any of Contractor's officers, employees or agents, shall obtain any rights to retirement, health care or any other benefits which may otherwise accrue to District's employees. Contractor expressly waives any claim Contractor may have to any such rights.

SECTION 9. STANDARD OF PERFORMANCE.

Contractor represents and warrants that it has the qualifications, experience and facilities necessary to properly perform the Services required under this Agreement in a thorough, competent and professional manner. Contractor shall at all times faithfully, competently and to the best of its ability, experience and talent, perform all Services. In meeting its obligations under this Agreement, Contractor shall employ, at a minimum, generally accepted standards and practices utilized by persons engaged in providing services similar to the Services required of Contractor under this Agreement. In addition to the general standards of performance set forth this section, additional specific standards of performance and performance criteria may be set forth in Exhibit "A" "Scope of Work" that shall also be applicable to Contractor's work under this Agreement. Where there is a conflict between a general and a specific standard of performance or performance criteria, the specific standard or criteria shall prevail over the general.

SECTION 10. COMPLIANCE WITH APPLICABLE LAWS; PERMITS AND LICENSES.

Contractor shall keep itself informed of and comply with all applicable federal, state and local laws, statutes, codes, ordinances, regulations and rules in effect during the term of this Agreement. Contractor shall obtain any and all licenses, permits and authorizations necessary to perform the Services set forth in this Agreement. Neither District, nor any elected or appointed boards, officers, officials, employees or agents of District, shall be liable, at law or in equity, as a result of any failure of Contractor to comply with this section.

SECTION 11. PREVAILING WAGE LAWS.

Contractor understands, acknowledges and agrees to comply with any and all applicable state and federal laws requiring payment of prevailing wages for work performed on in connection with publicly-funded projects. Contractor and any subcontractors shall comply with all applicable state and federal prevailing wage rates, statutes, rules and regulations then in effect if required by state or federal laws or regulations. In the event of conflict between applicable federal and state provisions, the higher prevailing wage rate will apply.

SECTION 12. NONDISCRIMINATION.

Contractor shall not discriminate, in any way, against any person on the basis of race, color, religious creed, national origin, ancestry, sex, age, physical handicap, medical condition or marital status in connection with or related to the performance of this Agreement.

SECTION 13. UNAUTHORIZED ALIENS.

Contractor hereby promises and agrees to comply with all of the provisions of the Federal Immigration and Nationality Act, 8 U.S.C.A. §§ 1101, et seq., as amended, and in connection therewith, shall not employ unauthorized aliens as defined therein. Should Contractor so employ such unauthorized aliens for the performance of the Services, and should the any liability or sanctions be imposed against District for such use of unauthorized aliens, Contractor hereby agrees to and shall reimburse District for the cost of all such liabilities or sanctions imposed, together with any and all costs, including attorneys' fees, incurred by District.

SECTION 14. CONFLICTS OF INTEREST.

(a) Contractor covenants that neither it, nor any officer or principal of its firm, has or shall acquire any interest, directly or indirectly, which would conflict in any manner with the interests of District or which would in any way hinder Contractor's performance of the Services. Contractor further covenants that in the performance of this Agreement, no person having any such interest shall be employed by it as an officer, employee, agent or subcontractor without the express written consent of the General Manager. Contractor agrees to at all times avoid conflicts of interest or the appearance of any conflicts of interest with the interests of District in the performance of this Agreement.

(b) District understands and acknowledges that Contractor is, as of the date of execution of this Agreement, independently involved in the performance of non-related services for other governmental agencies and private parties. Contractor is unaware of any stated position of District relative to such projects. Any future position of District on such projects shall not be considered a conflict of interest for purposes of this section.

(c) District understands and acknowledges that Contractor will perform non-related services for other governmental agencies and private Parties following the completion of the Services under this Agreement. Any such future service shall not be considered a conflict of interest for purposes of this section.

SECTION 15. CONFIDENTIAL INFORMATION; RELEASE OF INFORMATION.

(a) All information gained or work product produced by Contractor in performance of this Agreement shall be considered confidential, unless such information is in the public domain or already known to Contractor. Contractor shall not release or disclose any such information or work product to persons or entities other than District without prior written authorization from the General Manager, except as may be required by law.

(b) Contractor, its officers, employees, agents or subcontractors, shall not, without prior written authorization from the General Manager or unless requested by the District Attorney of District, voluntarily provide declarations, letters of support, testimony at depositions, response to interrogatories or other information concerning the work performed under this Agreement. Response to a subpoena or court order shall not be considered "voluntary" provided Contractor gives District notice of such court order or subpoena.

(c) If Contractor, or any officer, employee, agent or subcontractor of Contractor, provides any information or work product in violation of this Agreement, then District shall have the right to reimbursement and indemnity from Contractor for any damages, costs and fees, including attorney's fees, caused by or incurred as a result of Contractor's conduct.

(d) Contractor shall promptly notify District should Contractor, its officers, employees, agents or subcontractors, be served with any summons, complaint, subpoena, notice of deposition, request for documents, interrogatories, request for admissions or other discovery request, court order or subpoena from any party regarding this Agreement and the work performed thereunder. District retains the right, but has no obligation, to represent Contractor or be present at any deposition, hearing or similar proceeding. Contractor agrees to cooperate fully with District and to provide District with the opportunity to review any response to discovery requests provided by Contractor. However, this right to review any such response does not imply or mean the right by District to control, direct, or rewrite said response.

SECTION 16. INDEMNIFICATION.

(a) <u>Indemnification for Professional Liability.</u> Where the law establishes a professional standard of care for Contractor's services, to the fullest extent permitted by law, Contractor shall indemnify, protect, defend and hold harmless District and any and all of its officials, employees and agents ("Indemnified Parties") from and against any and all liability (including liability for claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, whether actual,

alleged or threatened, including attorney's fees and costs, court costs, interest, defense costs, and expert witness fees) arise out of, are a consequence of, or are in any way attributable to, in whole or in part, any negligent or wrongful act, error or omission of Contractor, or by any individual or entity for which Contractor is legally liable, including but not limited to officers, agents, employees or sub-contractors of Contractor, in the performance of professional services under this Agreement.

(b) Indemnification for Other than Professional Liability. Other than in the performance of professional services and to the full extent permitted by law, Contractor shall indemnify, protect, defend and hold harmless District, and any and all of its employees, officials and agents from and against any liability (including liability for claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs of any kind, whether actual, alleged or threatened, including attorney's fees and costs, court costs, interest, defense costs, and expert witness fees), where the same arise out of, are a consequence of, or are in any way attributable to, in whole or in part, the performance of this Agreement by Contractor, or by any individual or entity for which Contractor is legally liable, including but not limited to officers, agents, employees or sub-contractors of Contractor.

(c) Indemnification from Subcontractors. Contractor agrees to obtain executed indemnity agreements with provisions identical to those set forth in this section from each and every subcontractor or any other person or entity involved by, for, with or on behalf of Contractor in the performance of this Agreement naming the Indemnified Parties as additional indemnitees. In the event Contractor fails to obtain such indemnity obligations from others as required herein, Contractor agrees to be fully responsible according to the terms of this section. Failure of District to monitor compliance with these requirements imposes no additional obligations on District and will in no way act as a waiver of any rights hereunder. This obligation to indemnify and defend District as set forth herein is binding on the successors, assigns or heirs of Contractor and shall survive the termination of this Agreement or this section.

(d) Limitation of Indemnification. Notwithstanding any provision of this section to the contrary, in California design professionals are required to defend and indemnify the District only to the extent permitted by California Civil Code Section 2782.8, which limits the liability of a design professional to claims, suits, actions, arbitration proceedings, administrative proceedings, regulatory proceedings, losses, expenses or costs that arise out of, pertain to, or relate to the negligence, recklessness, or willful misconduct of the design professional. The term "design professional," as defined in Section 2782.8, is limited to licensed architects, licensed landscape architects, registered professional engineers, professional land surveyors, and the business entities that offer such services in accordance with the applicable provisions of the California Business and Professions Code. To the extent that California Civil Code Section 2782.8 applies to this Agreement, the indemnification obligations of Contractor shall be limited in accordance with that section.

(e) District's Negligence. The provisions of this section do not apply to claims occurring as a result of District's sole negligence. The provisions of this section shall not release District from liability arising from gross negligence or willful acts or omissions of District or any and all of its officials, employees and agents.

SECTION 17. INSURANCE.

Contractor agrees to obtain and maintain in full force and effect during the term of this Agreement the insurance policies set forth in Exhibit "C" "Insurance" and made a part of this Agreement. All insurance policies shall be subject to approval by District as to form and content. These requirements are subject to amendment or waiver if so, approved in writing by the General Manager. Contractor agrees to provide District with copies of required policies upon request.

SECTION 18. ASSIGNMENT.

The expertise and experience of Contractor are material considerations for this Agreement. District has an interest in the qualifications and capability of the persons and entities who will fulfill the duties and obligations imposed upon Contractor under this Agreement. In recognition of that interest, Contractor shall not assign or transfer this Agreement or any portion of this Agreement or the performance of any of Contractor's duties or obligations under this Agreement without the prior written consent of the District. Any attempted assignment shall be ineffective, null and void, and shall constitute a material breach of this Agreement entitling District to any and all remedies at law or in equity, including termination of this Agreement pursuant to Section 20 "Termination of Agreement." District acknowledges, however, that Contractor, in the performance of its duties pursuant to this Agreement, may utilize sub-contractors.

SECTION 19. CONTINUITY OF PERSONNEL.

Contractor shall make every reasonable effort to maintain the stability and continuity of Contractor's staff and subcontractors, if any, assigned to perform the Services. Contractor shall notify District of any changes in Contractor's staff and subcontractors, if any, assigned to perform the Services prior to and during any such performance.

SECTION 20. TERMINATION OF AGREEMENT.

(a) Termination for Convenience. District may terminate this Agreement, in whole or in part, at any time by giving written notice of termination to Contractor if District determines that termination is in its best interest. In the event such notice is given, Contractor shall cease immediately all work in progress. Contractor shall be paid its costs, including contract close-out costs, on work performed up to the time of termination.

(b) Termination for Cause. If District notifies Contractor of a default under Section 21 "Default" and Contractor fails to cure the default within the time frame provided, District may terminate this Agreement immediately. Contractor will only be paid for Services performed in accordance with the manner of performance set forth in this Agreement.

(c) Property of District. Upon termination of this Agreement by either Contractor or District, all property belonging exclusively to District which is in Contractor's possession shall be returned to District. Contractor shall furnish to District a final invoice for work performed and expenses incurred by Contractor, prepared as set forth in Section 4 "Compensation and Method of Payment" of this Agreement. This final invoice shall be reviewed and paid in the same manner as set forth in Section 4 "Compensation and Method of Payment" of this Agreement.

SECTION 21. DEFAULT.

In the event that Contractor is in default under the terms of this Agreement, the District may give notice to Contractor specifying the nature of the default and providing the Contractor a timeframe to cure the default. The District may hold all invoices until the default is cured. If Contractor does not cure the default to District's satisfaction in the timeframe given, the District may take necessary steps to terminate this Agreement under Section 20 "Termination of Agreement." Any failure on the part of the District to give notice of the Contractor's default shall not be deemed to result in a waiver of the District's legal rights or any rights arising out of any provision of this Agreement.

SECTION 22. EXCUSABLE DELAYS.

Contractor shall not be liable for damages, including liquidated damages, if any, caused by delay in performance or failure to perform due to causes beyond the control of Contractor. Such causes include, but are not limited to, acts of God, acts of the public enemy, acts of federal, state or local governments, acts of District, court orders, fires, floods, epidemics, strikes, embargoes, and unusually severe weather. The term and price of this Agreement shall be equitably adjusted for any delays due to such causes.

SECTION 23. COOPERATION BY DISTRICT.

All public information, data, reports, records, and maps as are existing and available to District as public records, and which are necessary for carrying out the Services shall be furnished to Contractor in every reasonable way to facilitate, without undue delay, the Services to be performed under this Agreement.

SECTION 24. NOTICES.

All notices required or permitted to be given under this Agreement shall be in writing and shall be personally delivered, or sent by telecopier or certified mail, postage prepaid and return receipt requested, addressed as follows:

To District: Tahoe Transportation District
Attn: George Fink, TSPM
P.O Box 499
Zephyr Cove, NV 89449

To Contractor: _____
_____
_____
_____

Notice shall be deemed effective on the date personally delivered or transmitted by facsimile or, if mailed, three (3) days after deposit of the same in the custody of the United States Postal Service.

SECTION 25. AUTHORITY TO EXECUTE.

The person or persons executing this Agreement on behalf of Contractor represents and warrants that he/she/they has/have the authority to so execute this Agreement and to bind Contractor to the performance of its obligations hereunder.

SECTION 26. ADMINISTRATION AND IMPLEMENTATION.

This Agreement shall be administered and executed by the General Manager or his or her designated representative. The General Manager shall have the authority to issue interpretations and to make amendments to this Agreement, including amendments that commit additional funds, consistent with Section 27 "Amendment" and the General Manager's contracting authority under District's ordinances, rules and regulations.

SECTION 27. AMENDMENT.

No amendment to or modification of this Agreement shall be valid unless made in writing and approved by the Contractor and by the District. The General Manager shall have the authority to approve any amendment to this Agreement if the total compensation under this Agreement, as amended, would not exceed the General Manager's contracting authority under the District's ordinances, rules and regulations. All other amendments shall be approved by the District's Board. The Parties agree that the requirement for written modifications cannot be waived and that any attempted waiver shall be void.

By written notice or order, District may, from time to time, order work suspension or make changes to the Services to be provided by Contractor. If any such work suspension or change causes an increase or decrease in the price of this Agreement or in the time required for its performance, or otherwise necessitates an amendment to this Agreement, Contractor shall promptly notify District thereof within ten (10) days after the change or work suspension is ordered, and an amendment to this Agreement shall be negotiated. However, nothing in this clause shall excuse Contractor from complying immediately with the notice or order issued by District.

SECTION 28. BINDING EFFECT.

This Agreement shall be binding upon the heirs, executors, administrators, successors and assigns of the Parties.

SECTION 29. FEDERAL PROVISIONS.

District will be using money received from the federal government to pay all or a part of the compensation to Contractor for the Services. The federal government requires certain clauses to be included in contracts where federal money will be used in the contract. Contractor agrees to adhere to the federally-required provisions included in Exhibit "D" hereto and incorporated herein by reference. If there is a conflict between any provision in Exhibit "D" and the body of this Agreement, Exhibit "D" shall control. In addition, the Federal Highway Administration's Required Contract Clauses for Federal Aid Construction Projects (FHWA Form 1273, revised May 1, 2012; https://www.fhwa.dot.gov/programadmin/contracts/1273/1273.pdf) is incorporated by reference herein.

SECTION 30. WAIVER.

Waiver by any Party to this Agreement of any term, condition, or covenant of this Agreement shall not constitute a waiver of any other term, condition, or covenant. Waiver by any Party of any breach of the provisions of this Agreement shall not constitute a waiver of any other provision nor a waiver of any subsequent breach or violation of any provision of this Agreement. Acceptance by District of any work or services by Contractor shall not constitute a waiver of any of the provisions of this Agreement.

SECTION 31. LAW TO GOVERN; VENUE.

In the event of litigation between the Parties, venue in state trial courts shall lie exclusively in the County of El Dorado, California where the dispute arises from Services performed in California, or shall lie exclusively in the County of Douglas, Nevada where the dispute arises from Services performed in Nevada. In the event of litigation in a U.S. District Court, venue shall lie exclusively in the Eastern District of California for Services performed in California, or in the District of Nevada for Services performed in Nevada.

SECTION 32. ATTORNEYS FEES, COSTS AND EXPENSES.

In the event litigation or other proceeding is required to enforce or interpret any provision of this Agreement, the prevailing Party in such litigation or other proceeding shall be entitled to an award of reasonable attorney's fees, costs and expenses, in addition to any other relief to which it may be entitled.

SECTION 33. ENTIRE AGREEMENT.

This Agreement, including the attached Exhibits, is the entire, complete, final and exclusive expression of the Parties with respect to the matters addressed therein and supersedes all other agreements or understandings, whether oral or written, or entered into between Contractor and District prior to the execution of this Agreement. No statements, representations or other agreements, whether oral or written, made by any Party which are not embodied herein shall be valid and binding.

SECTION 34. SEVERABILITY.

If any term, condition or covenant of this Agreement is declared or determined by any court of competent jurisdiction to be invalid, void or unenforceable, the remaining provisions of this Agreement shall not be affected thereby and the Agreement shall be read and construed without the invalid, void or unenforceable provision(s).

SECTION 35. CONFLICTING TERMS.

Except as otherwise stated herein, if the terms of this Agreement conflict with the terms of any Exhibit hereto, or with the terms of any document incorporated by reference into this Agreement, the terms of this Agreement shall control.

DRAFT

IN WITNESS WHEREOF, the Parties hereto have executed this Agreement on the date and year first-above written.

DRAFT

TAHOE TRANSPORTATION DISTRICT

_____
Carl Hasty
District Manager

ATTEST:

_____
Judi Allen
Clerk of the Board

APPROVED AS TO FORM

_____
Nira Doherty
Interim General Counsel

By: _____ By: _____

_____ _____

Its: _____ Its: _____

DRAFT

EXHIBIT "A"
SCOPE OF SERVICES

A. Scope of the Work to be Performed

FACILITY SPECIFICATIONS AND TESTING
Listed locations meet the facility specifications and offer 24-hour site access. In the event fuel dispensers will be inaccessible due to testing or maintenance, Flyers will notify TTD at least three days in advance, providing alternate fueling sites.

CARD ADMINISTRATION
TTD currently has 87 valid cards issued by Flyers Energy for all authorized vehicles including spare cards. Flyers continues to provide additional or replacement cards at no extra charge to TTD. New card requests are processed same-day and delivered 72 hours of receipt of request, typically within 48 hours.

TAXES
All applicable taxes are identified and itemized on the invoice.

COMMUNICATION
Flyers is prepared to assist TTD with card or account-related issues via the following methods of communication:

Email:	customerservice@flyersenergy.com
Telephone:	800-899-2376 (During Regular and After-Hours)
Online (Live chat):	www.flyersenergy.com

REPORTS
Flyers Energy provides several report options in import-ready format for MS Excel and Adobe PDF format. User access to reporting is also available via online customer portal. An electronic file to include all applicable card or transaction information can be provided to TTD upon request. The proposer must be able to provide reports to TTD in an importable format, such as Microsoft Excel spreadsheet in addition to a PDF.

Flyers Energy acknowledges and agrees that the following information shall be available for all fuel card numbers and pin numbers on a quarterly basis, with the following information:

- Date of Transaction
- Time of Transaction
- Card Number
- Location
- Product
- Vehicle Number

- Odometer
- Miles per gallon
- Units
- OPIS Rack Price
- Mark-up
- Unit Price
- Amount
- Cumulative fuel mileage for all vehicles

INVOICING

Flyers Energy invoices twice monthly for fuel used. Invoice sort by vehicle number is available and includes full detailed fuel transaction information. Invoices include a summary of the total gallons of each fuel type used for each invoice period. Monthly and yearly summaries can be furnished upon request.

INSURANCE AND INDEMNIFICATION

Flyers Energy satisfies the insurance and indemnification requirements identified in the form agreement for services and goods.

LICENSES AND PERMITS

Flyers Energy, LLC possesses all federal, state and local licenses and permits necessary to provide the goods and services required.

FUELING LOCATIONS LISTING

Flyers Energy is proposing to offer fuel cards on the Commercial Fueling Network (CFN), which can be used at any location on the network. A partial list of relevant locations for TTD is below.

Site Name	Owner	Address	City	State	ZIP
South Lake Tahoe - CA	Flyers Energy, LLC	2070 James Ave	South Lake Tahoe	CA	96150
Minden – NV	Flyers Energy, LLC	1571 Hwy 395	Minden	NV	89423
Gardnerville - NV	Flyers Energy, LLC	1357 Hwy 395 S	Gardnerville	NV	89423
Carson City - NV	Flyers Energy, LLC	915 Mica Drive	E. Carson City	NV	89705
Carson City - NV	Flyers Energy, LLC	1700 N. Carson St	Carson City	NV	89701
Carson City - NV	Flyers Energy, LLC	5907 US Hwy 50 East	Carson City	NV	89701
Carson City - NV	Carson Valley Oil	1462 S. Carson St	Carson City	NV	89701
Carson City - NV	Carson Valley Oil	4551 Goni Road	Carson City	NV	89706
Carson City - NV	Fuel 2001 LLC	35 Hwy 341	Mound House	NV	89706

EXHIBIT "B"
COMPENSATION

South Lake Tahoe, CA Locations

Initial Period – July 1, 2020 to June 30, 2023

Unleaded Fuel (not less than 87 octane)

OPIS + $ 0.210 per gallon

Ultra Low Sulfur Diesel

OPIS + $ 0.210 per gallon

First Option Year – July 1, 2023 to June 30, 2024

Unleaded Fuel (not less than 87 octane)

OPIS + $ 0.210 per gallon

Ultra Low Sulfur Diesel

OPIS + $ 0.210 per gallon

Second Option Year - July 1, 2024 to June 30, 2025

Unleaded Fuel (not less than 87 octane)

OPIS + $ 0.220 per gallon

Ultra Low Sulfur Diesel

OPIS + $ 0.220 per gallon

DRAFT

Nevada Locations

Initial Period – July 1, 2020 to June 30, 2023

Unleaded Fuel (not less than 87 octane)

OPIS + $ 0.160 per gallon

Ultra Low Sulfur Diesel

OPIS + $ 0.160 per gallon

First Option Year – July 1, 2023 to June 30, 2024

Unleaded Fuel (not less than 87 octane)

OPIS + $ 0.160 per gallon

Ultra Low Sulfur Diesel

OPIS + $ 0.160 per gallon

Second Option Year - July 1, 2024 to June 30, 2025

Unleaded Fuel (not less than 87 octane)

OPIS + $ 0.170 per gallon

Ultra Low Sulfur Diesel

OPIS + $ 0.170 per gallon

EXHIBIT "C"
INSURANCE

A. Insurance Coverages. Contractor shall provide and maintain insurance, acceptable to the District, in full force and effect throughout the term of this Agreement, against claims for injuries to persons or damages to property which may arise from or in connection with the performance of the Services by Contractor, its agents, representatives or employees. Contractor shall procure and maintain the following scope and limits of insurance:

Only the following "marked" requirements are applicable:

__X__ **Commercial General Liability (CGL):** Insurance written on an occurrence basis to protect Contractor and District against liability or claims of liability which may arise out of this Agreement in the amount of one million dollars ($1,000,000) per occurrence and subject to an annual aggregate of two million dollars ($2,000,000). Coverage shall be at least as broad as Insurance Services Office form Commercial General Liability coverage (Occurrence Form CG 0001). There shall be no endorsement or modification of the CGL limiting the scope of coverage for either insured vs. additional insured claims or contractual liability. All defense costs shall be outside the limits of the policy.

__X__ **Vehicle Liability Insurance:** Vehicle liability insurance in an amount not less than $1,000,000 for injuries, including accidental death, to any one person, and subject to the same minimum for each person, in an amount not less than one million dollars ($1,000,000) for each accident, and property damage insurance in an amount of not less than one million dollars ($1,000,000). A combined single limit policy with aggregate limits in an amount of not less than $1,000,000 shall be considered equivalent to the said required minimum limits. Coverage shall be at least as broad as Insurance Services Office form number CA 0001 covering Automobile Liability, including code 1 "any auto" and endorsement CA 0025, or equivalent forms subject to the approval of the District.

__X__ **Workers' Compensation Insurance:** Workers' Compensation insurance as required by the State of California and/or Nevada and a minimum of one million dollars ($1,000,000) of employers' liability coverage. Contractor shall provide an endorsement that the insurer waives the right of subrogation against the District and its respective elected officials, officers, employees, agents and representatives. In the event a claim under the provisions of the California Workers' Compensation Act is filed against District by a bona fide employee of Contractor participating under this Agreement, Contractor is to defend and indemnify the District from such claim.

_____ **Professional Liability Insurance:** Professional liability insurance appropriate to the Contractor's profession in an amount not less than one million dollars $1,000,000 per occurrence. This coverage may be written on a "claims made" basis, and must include coverage for contractual liability. The professional liability insurance required by this Agreement must be endorsed to be applicable to claims based upon, arising out of or related to Services performed under this Agreement. The insurance must be maintained for at least three (3) consecutive years following the completion of Contractor's services or the termination of this Agreement. During this additional three (3) year period, Contractor shall annually and upon request of the District submit written evidence of this continuous coverage.

B. Other Provisions. Insurance policies required by this Agreement shall contain the following provisions:

1. All Coverages.

a. Each insurance policy required by this Agreement shall be endorsed and state the coverage shall not be suspended, voided, cancelled by the insurer or either Party to this Agreement, reduced in coverage or in limits except after 30 days' prior written notice by certified mail, return receipt requested, has been given to District.

b. Insurance is to be placed with insurers with a current A.M. Best's rating of no less than A:VII.

2. Commercial General Liability and Automobile Liability Coverages.

a. District, and its respective elected and appointed officers, officials, and employees and volunteers are to be covered as additional insureds as respects: liability arising out of activities Contractor performs; products and completed operations of Contractor; premises owned, occupied or used by Contractor; or automobiles owned, leased, hired or borrowed by Contractor. The coverage shall contain no special limitations on the scope of protection afforded to District, and their respective elected and appointed officers, officials, or employees.

b. Contractor's insurance coverage shall be primary insurance with respect to District, and its respective elected and appointed, its officers, officials, employees and volunteers. Any insurance or self-insurance maintained by District, and its respective elected and appointed officers, officials, employees or volunteers, shall apply in excess of, and not contribute with, Contractor's insurance.

c. Contractor's insurance shall apply separately to each insured against whom claim is made or suit is brought, except with respect to the limits of the insurer's liability.

d. Any failure to comply with the reporting or other provisions of the insurance policies, including breaches of warranties, shall not affect coverage provided to District, and its respective elected and appointed officers, officials, employees or volunteers.

e. The insurer waives all rights of subrogation against the District, its elected or appointed officers, officials, employees or agents.

3. Workers' Compensation Coverage. Unless the District Manager otherwise agrees in writing, the insurer shall agree to waive all rights of subrogation against District, and its respective elected and appointed officers, officials, employees and agents for losses arising from work performed by Contractor.

C. Other Requirements. Contractor agrees to deposit with District, at or before the effective date of this Agreement, certificates of insurance necessary to satisfy District that the insurance provisions of this contract have been complied with. The District may require that Contractor furnish District with copies of original endorsements effecting coverage required by this Exhibit "C". The certificates and endorsements are to be signed by a person authorized by that insurer to bind coverage on its behalf. District reserves the right to inspect complete, certified copies of all required insurance policies, at any time.

1. Contractor shall furnish certificates and endorsements from each subcontractor identical to those Contractor provides.

2. Any deductibles or self-insured retentions must be declared to and approved by District. At the option of District, either the insurer shall reduce or eliminate such deductibles or self-insured retentions as respects District or its respective elected or appointed officers, officials, employees and volunteers, or the Contractor shall procure a bond guaranteeing payment of losses and related investigations, claim administration, defense expenses and claims.

3. The procuring of such required policy or policies of insurance shall not be construed to limit Contractor's liability hereunder nor to fulfill the indemnification provisions and requirements of this Agreement.

EXHIBIT "D"
FEDERAL PROVISIONS

1. Incorporation of FTA Terms - The following provisions include, in part, certain Standard Terms and Conditions required by DOT, whether or not expressly set forth in the preceding contract provisions. All contractual provisions required by DOT, as set forth in FTA Circular 4220.1F are hereby incorporated by reference. Anything to the contrary herein notwithstanding, all FTA mandated terms shall be deemed to control in the event of a conflict with other provisions contained in this Agreement. The Contractor shall not perform any act, fail to perform any act, or refuse to comply with any District requests which would cause District to be in violation of the FTA terms and conditions.

2. Access to Records. The following access to records requirements apply to this Agreement:
    a. Where the District is the FTA Recipient or a subgrantee of the FTA Recipient in accordance with 49 C. F. R. 18.36(i), the Contractor agrees to provide the District, the FTA Administrator, the Comptroller General of the United States or any of their authorized representatives access to any books, documents, papers and records of the Contractor which are directly pertinent to this contract for the purposes of making audits, examinations, excerpts and transcriptions. Contractor also agrees, pursuant to 49 C. F. R. 633.17 to provide the FTA Administrator or his authorized representatives including any PMO Contractor access to Contractor's records and construction sites pertaining to a major capital project, defined at 49 U.S.C. 5302(a)1, which is receiving federal financial assistance through the programs described at 49 U.S.C. 5307, 5309 or 5311.
    b. The Contractor agrees to permit any of the foregoing parties to reproduce by any means whatsoever or to copy excerpts and transcriptions as reasonably needed.
    c. The Contractor agrees to maintain all books, records, accounts and reports required under this contract for a period of not less than three years after the date of termination or expiration of this contract, except in the event of litigation or settlement of claims arising from the performance of this contract, in which case Contractor agrees to maintain same until the District, the FTA Administrator, the Comptroller General, or any of their duly authorized representatives, have disposed of all such litigation, appeals, claims or exceptions related thereto. Reference 49 CFR 18.39(i)(11).

3. Civil Rights.
    a. *Nondiscrimination* - In accordance with Title VI of the Civil Rights Act, as amended, 42 U.S.C. § 2000d, section 303 of the Age Discrimination Act of

1975, as amended, 42 U.S.C. § 6102, section 202 of the Americans with Disabilities Act of 1990, 42 U.S.C. § 12132, and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees that it will not discriminate against any employee or applicant for employment because of race, color, creed, national origin, sex, age, or disability. In addition, the Contractor agrees to comply with applicable Federal implementing regulations and other implementing requirements FTA may issue.

b. *Equal Employment Opportunity* - The following equal employment opportunity requirements apply to the Agreement:
    i. Race, Color, Creed, National Origin, Sex - In accordance with Title VII of the Civil Rights Act, as amended, 42 U.S.C. § 2000e, and Federal transit laws at 49 U.S.C. § 5332, the Contractor agrees to comply with all applicable equal employment opportunity requirements of U.S. Department of Labor (U.S. DOL) regulations, "Office of Federal Contract Compliance Programs, Equal Employment Opportunity, Department of Labor," 41 C.F.R. Parts 60 et seq ., (which implement Executive Order No. 11246, "Equal Employment Opportunity," as amended by Executive Order No. 11375, "Amending Executive Order 11246 Relating to Equal Employment Opportunity," 42 U.S.C. § 2000e note), and with any applicable Federal statutes, executive orders, regulations, and Federal policies that may in the future affect construction activities undertaken in the course of the Project. The Contractor agrees to take affirmative action to ensure that applicants are employed, and that employees are treated during employment, without regard to their race, color, creed, national origin, sex, or age. Such action shall include, but not be limited to, the following: employment, upgrading, demotion or transfer, recruitment or recruitment advertising, layoff or termination; rates of pay or other forms of compensation; and selection for training, including apprenticeship. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
    ii. Age - In accordance with section 4 of the Age Discrimination in Employment Act of 1967, as amended, 29 U.S.C. § § 623 and Federal transit law at 49 U.S.C. § 5332, the Contractor agrees to refrain from discrimination against present and prospective employees for reason of age. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.
    iii. Disabilities - In accordance with section 102 of the Americans with Disabilities Act, as amended, 42 U.S.C. § 12112, the Contractor agrees that it will comply with the requirements of U.S. Equal Employment Opportunity Commission, "Regulations to Implement the Equal Employment Provisions of the Americans with Disabilities Act," 29 C.F.R. Part 1630, pertaining to employment of persons

with disabilities. In addition, the Contractor agrees to comply with any implementing requirements FTA may issue.

c. The Contractor also agrees to include these requirements in each subcontract financed in whole or in part with Federal assistance provided by FTA, modified only if necessary to identify the affected parties.

4. Disadvantaged Business Enterprises.
   a. This Agreement is subject to the requirements of Title 49, Code of Federal Regulations, Part 26, Participation by Disadvantaged Business Enterprises in Department of Transportation Financial Assistance Programs. The national goal for participation of Disadvantaged Business Enterprises (DBE) is 10%. The District's overall goal for DBE participation is 2.1 %. A separate goal has not been established for this procurement.
   b. The Contractor shall not discriminate on the basis of race, color, national origin, or sex in the performance of this Agreement. The Contractor shall carry out applicable requirements of 49 CFR Part 26 in the award and administration of this DOT-assisted contract. Failure by the Contractor to carry out these requirements is a material breach of this Agreement, which may result in the termination of this Agreement or such other remedy as District deems appropriate. Each subcontract the contractor signs with a subcontractor must include the assurance in this paragraph (see 49 CFR 26.13(b)).
      i.
   c. Contractor will be required to report its DBE participation obtained through race-neutral means throughout the period of performance of this Agreement.
   d. Contractor is required to pay its subcontractors performing work related to this Agreement for satisfactory performance of that work no later than 30 days after the Contractor's receipt of payment for that work from the District. In addition, the Contractor is required to return any retainage payments to those subcontractors within 30 days after the subcontractor's work related to this contract is satisfactorily completed.
   e. The Contractor must promptly notify District whenever a DBE subcontractor performing work related to this Agreement is terminated or fails to complete its work, and must make good faith efforts to engage another DBE subcontractor to perform at least the same amount of work. The Contractor may not terminate any DBE subcontractor and perform that work through its own forces or those of an affiliate without prior written consent of District.

5. Energy Conservation - The Contractor agrees to comply with mandatory standards and policies relating to energy efficiency which are contained in the state energy conservation plan issued in compliance with the Energy Policy and Conservation Act.

6. Federal Changes – Contractor shall at all times comply with all applicable FTA regulations, policies, procedures and directives, including without limitation those listed directly or by reference in the Master Agreement between District and FTA, as they may be amended or promulgated from time to time during the term of this contract. Contractor's failure to so comply shall constitute a material breach of this Agreement.

7. No Obligation By The Federal Government
    a. The District and Contractor acknowledge and agree that, notwithstanding any concurrence by the Federal Government in or approval of the solicitation or award of the Agreement, absent the express written consent by the Federal Government, the Federal Government is not a party to this Agreement and shall not be subject to any obligations or liabilities to the District, Contractor, or any other party (whether or not a party to that Agreement) pertaining to any matter resulting from the Agreement.
    b. The Contractor agrees to include the above clause in each subcontract financed in whole or in part with Federal assistance provided by FTA. It is further agreed that the clause shall not be modified, except to identify the subcontractor who will be subject to its provisions.

8. Program Fraud and False or Fraudulent Statements or Related Acts.
    a. The Contractor acknowledges that the provisions of the Program Fraud Civil Remedies Act of 1986, as amended, 31 U.S.C. § § 3801 et seq . and U.S. DOT regulations, "Program Fraud Civil Remedies," 49 C.F.R. Part 31, apply to its actions pertaining to this Project. Upon execution of the Agreement, the Contractor certifies or affirms the truthfulness and accuracy of any statement it has made, it makes, it may make, or causes to be made, pertaining to the Agreement or the FTA assisted project for which the Services are being performed. In addition to other penalties that may be applicable, the Contractor further acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification, the Federal Government reserves the right to impose the penalties of the Program Fraud Civil Remedies Act of 1986 on the Contractor to the extent the Federal Government deems appropriate.
    b. The Contractor also acknowledges that if it makes, or causes to be made, a false, fictitious, or fraudulent claim, statement, submission, or certification to the Federal Government under a contract connected with a project that is financed in whole or in part with Federal assistance originally awarded by FTA under the authority of 49 U.S.C. § 5307, the Government reserves the right to impose the penalties of 18 U.S.C. § 1001 and 49 U.S.C. § 5307(n)(1) on the Contractor, to the extent the Federal Government deems appropriate.
    c. The Contractor agrees to include the above two clauses in each subcontract financed in whole or in part with Federal assistance provided

by FTA. It is further agreed that the clauses shall not be modified, except to identify the subcontractor who will be subject to the provisions.

9. Veterans Employment. As provided by 49 U.S.C. § 5325(k):

a. To the extent practicable, Contractor agrees that it:

1. Will give a hiring preference to veterans (as defined in 5 U.S.C. § 2108), who have the skills and abilities required to perform construction work required under a third party contract in connection with a capital project supported with funds made available or appropriated for 49 U.S.C. chapter 53, and

2. Will not require an employer to give a preference to any veteran over any equally qualified applicant who is a member of any racial or ethnic minority, female, an individual with a disability, or a former employee, and

b. Contractor also assures that its sub-contractor will:

1. Will give a hiring preference to veterans (as defined in 5 U.S.C. § 2108), who have the skills and abilities required to perform construction work required under a third party contract in connection with a capital project supported with funds made available or appropriated for 49 U.S.C. chapter 53, to the extent practicable, and

2. Will not require an employer to give a preference to any veteran over any equally qualified applicant who is a member of any racial or ethnic minority, female, an individual with a disability, or a former employee.

10. Suspension and Debarment

a. This Agreement is a covered transaction for purposes of 49 CFR Part 29. As such, the Contractor is required to verify that none of the Contractor, its principals, as defined at 49 CFR 29.995, or affiliates, as defined at 49 CFR 29.905, are excluded or disqualified as defined at 49 CFR 29.940 and 29.945.
b. The Contractor is required to comply with 49 CFR 29, Subpart C and must include the requirement to comply with 49 CFR 29, Subpart C in any lower tier covered transaction it enters into.
c. By signing this Agreement, the Contractor certifies as follows: The certification in this clause is a material representation of fact relied upon by District. If it is later determined that the Contractor knowingly rendered an erroneous certification, in addition to remedies available to District, the

Federal Government may pursue available remedies, including but not limited to suspension and/or debarment. The Contractor agrees to comply with the requirements of 49 CFR 29, Subpart C while this offer is valid and throughout the term of this Agreement. The Contractor further agrees to include a provision requiring such compliance in its lower tier covered transactions.

11. Clean Air - The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Clean Air Act, as amended, 42 U.S.C. §§ 7401 et seq. The Contractor agrees to report each violation to the District and understands and agrees that the District will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office. The Contractor also agrees to include these requirements in each subcontract exceeding $100,000 financed in whole or in part with Federal assistance provided by FTA.

12. Clean Water - The Contractor agrees to comply with all applicable standards, orders or regulations issued pursuant to the Federal Water Pollution Control Act, as amended, 33 U.S.C. 1251 et seq The Contractor agrees to report each violation to the District and understands and agrees that the District will, in turn, report each violation as required to assure notification to FTA and the appropriate EPA Regional Office. The Contractor also agrees to include these requirements in each subcontract exceeding $100,000 financed in whole or in part with Federal assistance provided by FTA.

13. Lobbying – Contractor shall file the certification required by 49 CFR part 20, "New Restrictions on Lobbying." Each tier certifies to the tier above that it will not and has not used Federal appropriated funds to pay any person or organization for influencing or attempting to influence an officer or employee of any District, a member of Congress, officer or employee of Congress, or an employee of a member of Congress in connection with obtaining any Federal contract, grant or any other award covered by 31 U.S.C. 1352. Each tier shall also disclose the name of any registrant under the Lobbying Disclosure Act of 1995 who has made lobbying contacts on its behalf with non-Federal funds with respect to that Federal contract, grant or award covered by 31 U.S.C. 1352. Such disclosures are forwarded from tier to tier up to the recipient.

14. Recovered Materials - The Contractor agrees to comply with all the requirements of Section 6002 of the Resource Conservation and Recovery Act (RCRA), as amended (42 U.S.C. 6962), including but not limited to the regulatory provisions of 40 CFR Part 247, and Executive Order 12873, as they apply to the procurement of the items designated in Subpart B of 40 CFR Part 247.

Tahoe Transportation DISTRICT

Connecting our communities

MEMORANDUM

Date: May 4, 2020

To: Tahoe Transportation District (TTD) Board of Directors

From: TTD Staff

Subject: Review and Acceptance of the Quarterly Transit Report for the Second Quarter of Fiscal Year 2020

Action Requested:
It is requested the Board review and accept the quarterly transit report for the second quarter of fiscal year 2020 (FY20).

Background:
This report summarizes the quarterly status and efforts of TTD's transit program from October 2019 through December 2019.

Highlights:
- ✓ Transit stop closures persist as a result of Highway 50 construction
- ✓ Signs of leveling in ridership declines are upheld
- ✓ In-service Operator rate increased to $18.00 an hour
- ✓ Wage differential approved for Operators
- ✓ Proterra battery electric bus delays
- ✓ Maintenance performance challenged by the condition and size of TTD's leased facility
- ✓ Website redesign continues
- ✓ Enhanced Operator trainings continue

Transit Operations Report:
The second quarter of FY 2020 marks the first complete quarter reflecting concurrent year-over-year comparisons of both the new fare policy and the 2019 Transit Plan service changes. Overall transit ridership stabilized even further from the prior quarter and is down just 11% over the previous year (FY 2019). An average daily ridership figure emerged for the quarter reflecting an average of 655 unlinked passenger trips per day on TTD's overall system.

Community connections stabilized with a decrease of just two percent. Route 19x (regional connections) experienced an increase of eight percent, while Route 22 was down 55 percent. The notable downturn reflected a change in policy with the Ridge Resorts, where guests are no longer given complementary transport as part of an expired agreement. Paratransit ridership also remained fairly stable with a minor decrease of only three percent.

TF/ja AGENDA ITEM: VII.D.

System Ridership Q2 FY 2020										
		OCTOBER		NOVEMBER		DECEMBER		Q2 TOTALS		
Route		2019	2018	2019	2018	2019	2018	FY 2020	FY 2019	% +/- vs. Q2 2020
SLT	50	8,434	9,071	8,669	8,198	13,112	13,212	30,215	30,481	-1%
SLT*	55	5,910	7,958	5,474	4,942	6,752	6,002	18,136	18,902	-4%
Community Connections		**14,344**	**17,029**	**14,143**	**13,140**	**19,864**	**19,214**	**48,351**	**49,383**	-2%
Minden/Carson	19X	892	670	875	783	783	905	2,550	2,358	8%
SLT/Kingsbury/Minden (Hybrid)**	22	1,710	6,009	1,756	3,034	2,062	3,217	5,528	12,260	-55%
Regional Connections		**2,602**	**6,679**	**2,631**	**3,817**	**2,845**	**4,122**	**8,078**	**14,618**	-45%
Paratransit		1,411	1,332	1,093	1,219	1,327	1,417	3,831	3,968	-3%
System Total		**18,357**	**25,040**	**17,867**	**18,176**	**24,036**	**24,753**	**60,260**	**67,969**	-11%
Average Daily Trips by Month		592	808	596	606	775	798	655	739	
Farebox		**$33,320**	**$45,737**	**$29,926**	**$45,123**	**$43,426**	**$46,654**	**$106,672**	**$137,514**	-22%

*Reflects route changes effective November 1, 2018. Former Route 53 ridership from October 2018 is listed with Route 55.

**Reflects route changes effective November 1, 2018. Former Route 23 ridership from October 2018 is listed with Route 22.

Road construction on Highway 50 continued through the fall resulting in the closure of an average of five transit stop at any given time.

Fleet & Facilities:

Maintenance Technicians completed 522 work orders this quarter and responded to 131 road calls for service. Though fleet reliability is steadily improving, challenges to fleet maintenance will continue until a new Maintenance and Administration Facility is constructed. A new Maintenance and Administration Facility will enable TTD to utilize staff more effectively and improve repair times, especially during the winter months when outdoor maintenance is not practical. These improvements will lead to a more reliable experience for passengers, which has a direct correlation to transit ridership. TTD's capacity for funding capital assets remains limited without the availability of competitive local match source.

Recruitment and Retention:

Competition for commercial drivers and employees in general remains fierce. In an effort towards improved recruitment and retention results, the in-service Operator rate was raised to $18.00 an hour, along with the introduction of a wage differential. Both actions received positive feedback. However, TTD continues to experience a shortage of Operators. An average of three full-time and seven part-time Operator positions remained unfilled throughout the second quarter, with the number of actual vacant positions fluctuating. This equates to roughly 210 hours of service throughout the quarter that must be staffed by Road Supervisors, Dispatchers, or through overtime.

Website Redesign:

Redesign of TTD's website continued throughout the second quarter as scheduled. The project aims to highlight TTD's transit services through trip planning and the use of interactive route maps to encourage one-click access to transit information and services on the site from wherever TTD's

passengers feel most safe and secure. Capital projects will remain a key function of the website. The project timeline remains on track for completion by June 2020.

Training:
Monthly safety trainings continued. Winter driving and chain installation training was offered in October. Both wheelchair securement training and daily vehicle inspection training were offered in November. Sexual harassment prevention training was provided in December.

Additional Information:
If you have any questions or comments regarding this item, please contact Tara Frank at (775) 589-5508 or tfrank@tahoetransportation.org.

TF/ja AGENDA ITEM: VII.D.

Tahoe Transportation DISTRICT

Connecting our communities

MEMORANDUM

Date: May 4, 2020

To: Tahoe Transportation District (TTD) Board of Directors

From: TTD Staff

Subject: Review and Acceptance of the Quarterly Transit Report for the Third Quarter of Fiscal Year 2020

Action Requested:
It is requested the Board review and accept the quarterly transit report for the third quarter of fiscal year 2020 (FY20).

Background:
This report summarizes the quarterly status and efforts of TTD's transit program from January 1 through March 2020.

Highlights:
- ✓ Notable ridership increases in January and February
- ✓ COVID-19 significantly affects last two weeks of quarter's operations
- ✓ Increase to Utility Workers hourly wage
- ✓ CBA negotiations begin
- ✓ Proterra delivery deferred to 2021
- ✓ Website redesign nears completion
- ✓ Enhanced Operator trainings continue

Transit Operations Report:
Winter operations were in full swing. With a mild winter, only minor delays related to weather and road conditions occasionally affected service. Shared use at TTD's Transit Centers created some user conflicts between various transit operators. Right of Entry Agreements proved useful in clarifying path of travel and reducing confusion regarding transit operator access between various user groups, such as Heavenly and All West (Sierra-at-Tahoe's contractor).

Overall transit ridership was strong in the first two months of the quarter, stabilizing beyond last quarter's improvement. By the end of the third quarter, overall ridership was down just six percent. This is noteworthy, given the sharp downturn in ridership in the last two weeks of the quarter with the onset of the COVID-19 pandemic. Prior to its effect on ridership, an average daily ridership figure was emerging for the quarter that was looking to reflect an average of about 850 unlinked passenger trips per day on TTD's overall system—potentially up 200 riders per day from the previous quarter.

TF/ja AGENDA ITEM: VII.E.

Community connections stabilized with a decrease of just one percent. Regional connections down 28 percent. This downturn reflected a combination of both the swift drop in ridership with the close of Heavenly and the casinos in the last two weeks of March and mediocre numbers on Route 22 in the beginning of the quarter, which were a result of the mild winter and weaker than usual tourism to the area. Paratransit also experienced some increasing ridership until late March.

System Ridership Q3 FY 2020										
		JANUARY		FEBRUARY		MARCH		Q3 TOTALS		
Route		2020	2019	2020	2019	2020	2019	FY 2020	FY 2019	% +/- vs. Q3 2020
SLT	50	14,536	15,059	14,307	11,542	9,574	13,094	38,417	39,695	-3%
SLT*	55	7,884	6,534	7,096	5,769	5,005	7,200	19,985	19,503	2%
Community Connections		**22,420**	**21,593**	**21,403**	**17,311**	**14,579**	**20,294**	**58,402**	**59,198**	-1%
Minden/Carson	19X	816	972	779	620	612	892	2,207	2,484	-11%
SLT/Kingsbury/Minden (Hybrid)**	22	2,160	2,885	1,820	2,280	1,285	2,777	5,265	7,942	-34%
Regional Connections		**2,976**	**3,857**	**2,599**	**2,900**	**1,897**	**3,669**	**7,472**	**10,426**	-28%
Paratransit		1,439	1,475	1,333	1,113	904	1,471	3,676	4,059	-9%
System Total		**26,835**	**26,925**	**25,335**	**21,324**	**17,380**	**25,434**	**69,550**	**73,683**	-6%
Average Daily Trips by Month		866	869	845	711	561	820	756	801	
Farebox		**$52,508**	**$64,767**	**$42,751**	**$47,349**	**$31,034**	**$42,279**	**$126,293**	**$154,395**	-18%

*Reflects route changes effective November 1, 2018. Former Route 53 ridership from October 2018 is listed with Route 55.

**Reflects route changes effective November 1, 2018. Former Route 23 ridership from October 2018 is listed with Route 22.

With the onset of COVID-19, Heavenly closed its doors to the public on Sunday, March 15, 2020, with other resorts soon to follow. Nevada Governor Sisolak called for a statewide shelter-in-place order on Tuesday, March 17. Both El Dorado County and California Governor Newscom called for countywide and statewide shelter-in-place orders, respectively, within hours of each other on Thursday, March 19. With these orders in place, most commercial activity began to rapidly shut down, including all five casinos directly adjacent to Stateline Transit Center, serving a large majority of the Route 22 service. By the second half of March, ridership was down about 60 percent in the second half of the month as only essential workers, individuals seeking essential needs, and those charged with closing operations at major employers in the area were utilizing the service at this point.

Similarly, ridership on community connections and paratransit services dropped significantly with the onset of the pandemic. Medical services began altering their services with a conservative approach to scheduling early in March 2020. By the second half of March, paratransit service demand was down to roughly 10 passengers per day versus 45 to 55 prior to COVID-19.

Lastly, collective bargaining agreement (CBA) negotiations began between TTD's management team and the Teamsters Union No. 533.

TF/ja AGENDA ITEM: VII.E.

Fleet & Facilities:
Maintenance Technicians completed 588 work orders this quarter and responded to 145 road calls for service. Though fleet reliability is steadily improving, challenges to fleet maintenance will continue until a new Maintenance and Administration Facility is constructed. A new Maintenance and Administration Facility will enable TTD to utilize staff more effectively and improve repair times, especially during the winter months when outdoor maintenance is not practical. These improvements will lead to a more reliable experience for passengers, which has a direct correlation to transit ridership. TTD's capacity for funding capital assets remains limited without the availability of competitive local match source.

Proterra met with TTD staff to report a change in technology and a resulting delay in delivery of Tahoe's first electric buses scheduled to enter regular service. When Proterra was engineering their second-generation battery electric bus, two different charging technologies were offered to prospective buyers: 1) bus-up pantograph; and 2) inverted pantograph. As orders came in, the inverted pantograph was the clear favorite, and nationwide, only three small-order agencies opted for the bus-up pantograph. TTD was one of these three agencies. Proterra met with TTD; explained they would no longer pursue engineering the bus-up pantograph option; and communicated that manufacturing of the 35-foot variant of their second-generation buses would not start as scheduled. The resulting delay would defer delivery of the buses into early 2021. Staff asked to postpone the deliveries until spring so the electrical equipment could be installed and commissioned without the challenges of winter weather. While this development is disappointing, it is understandable and TTD's commitment to zero emission battery electric buses from Proterra and the partnership with Lake Tahoe Community College for charging remain strong!

Recruitment and Retention:
Competition for commercial drivers and employees in general remains fierce. The Utility Workers' hourly wage was increased in an effort towards improved recruitment and retention results. Mild winter conditions helped relieve staffing challenges. However, the statewide shelter-in-place orders resulted in the closure of California's Department of Motor Vehicles, halting CDL testing and impeding in recruitment of any operator who is not fully licensed.

Website Redesign:
Redesign of TTD's website continued throughout the second quarter as scheduled. The project aims to highlight TTD's transit services through trip planning and the use of interactive route maps to encourage one-click access to transit information and services on the site from wherever TTD's passengers feel most safe and secure. Capital projects will remain a key function of the website. The project team is now in the final stage of editing the site's content prior to its final review and launch. The project timeline remains on track for completion by June 2020.

Training:
Monthly safety trainings continued. El Dorado County's Public Health Department offered smoking and alcohol consumption cessation training to staff in January. Title VI nondiscrimination and professionalism trainings were provided during March.

Additional Information:
If you have any questions or comments regarding this item, please contact Tara Frank at (775) 589-5508 or tfrank@tahoetransportation.org.

TF/ja AGENDA ITEM: VII.E.

Tahoe Transportation DISTRICT

Connecting our communities

MEMORANDUM

Date: May 4, 2020

To: Tahoe Transportation District (TTD) Board of Directors

From: TTD Staff

Subject: Adopt Resolution 2020-004 Authorizing the Execution of the 2019/20 Fiscal Year Allocation of the Low Carbon Transit Operations Program Funds for the Fare Free Transit Program

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Action Requested:
It is requested the Board adopt Resolution 2020-004 authorizing the execution of the California Department of Transportation's (Caltrans) Low Carbon Transit Operations Program (LCTOP) project for TTD's Fare Free Transit Program.

Fiscal Analysis:
All expenditures associated with this item will be included in the Fiscal Year 2020/21 (FY21) Work Program and associated budget. Eligible dollars:

PUC 99313	$193,768
PUC 99314	$7,884
Total	$201,652

Work Program Analysis:
This project and all work associated with it will be captured under the respective elements of the FY21 Work Program.

Background:
LCTOP is part of the Transit, Affordable Housing, and Sustainable Communities Program, established by the California Legislature in 2014 by Senate Bill 862. The program was created to provide operating and capital assistance for transit agencies to reduce greenhouse gas (GHG) emissions and improve mobility. The funding is distributed by a formula based on prior use of State Transit Assistance funds.

This program is administered by Caltrans in coordination with the Air Resource Board (ARB) and the State Controller's Office (SCO). Caltrans is responsible for ensuring the statutory requirements of the program are met in terms of project eligibility, greenhouse reduction, disadvantaged community benefit, and other requirements of the law. Approved projects in LCTOP will support new or expanded bus or rail services, expand intermodal transit facilities, and may include equipment acquisition, fueling, maintenance and other costs to operate those services or facilities, with each project reducing GHG emissions. Free or reduced transit fare is an eligible project type.

TF/ja AGENDA ITEM: VII.F.

Caltrans requires a resolution from the Board to disburse LCTOP funds approved for the project.

Discussion:
The Tahoe Regional Planning Agency, as the Regional Transportation Planning Agency in California, has been allocated $201,652 in LCTOP funds for El Dorado and Placer Counties. Placer County chose to forgo their allocation this year, electing to surrender their funds to TTD with an understanding that TTD would do the same next year—potentially alternating allocation years for the foreseeable future in an effort to simplify allocation requests.

The LCTOP funds will be used to contribute to TTD's Fare Free Transit Program. The funds will support local routes 50 and 55 and paratransit services, specifically. The program is expected to commence in August 2020 and continue for approximately nine months, based on the average fares of local fixed-route and paratransit services during the same period of the prior year, as part of TTD's overall Fare Free Transit Program. Congestion Mitigation Air Quality funds will support TTD routes outside of the project area (Routes 50, 55, and paratransit services) during the project period and will continue to provide funding for fare free operations beyond the project period.

TTD will encourage residents, commuters, and visitors to utilize the bus as a free alternative. Transportation cost is a known barrier to accessing the area's essential needs, such as employment, education, and medical and social services. The project area is located within five of the census tracts identified as a low-income communities on the South Shore: 6017030402, 6017030301, 6017030302, 6017030200, and 6017031600. Paratransit services and Routes 50 and 55 each serve the project area and travel through all five of these low-income communities. Additionally, there are four other transit-dependent populations within the project site's census tract whose densities are over 10 percent according to the American Communities Survey: youth under 18, individuals with disabilities, senior citizens ages 65 and over, and zero-vehicle households. Eliminating fares will remove transportation cost as a barrier to accessing jobs, education, and other essential needs for households within the region.

Free fare programs have proven successful over the years whenever implemented. Improved transportation access through an elimination of transit fares will encourage transit ridership, consequently reducing Vehicle Miles Traveled (VMT) and emissions as people choose transit as a cheaper alternative to their personal vehicles.

Additional Information:
If you have any questions or comments regarding this item, please contact Tara Frank at tfrank@tahoetransportation.org or (775) 589-5508.

Attachment:
A. Resolution 2020-004

TF/ja AGENDA ITEM: VII.F.

TAHOE TRANSPORTATION DISTRICT
RESOLUTION NO. 2020-004

A RESOLUTION AUTHORIZING THE EXECUTION OF THE CERTIFICATIONS AND ASSURANCES AND AUTHORIZED AGENT FORMS FOR THE 2019-2020 FISCAL YEAR ALLOCATION OF THE LOW CARBON TRANSIT OPERATIONS PROGRAM FUNDS OF $201,652 FOR TAHOE TRANSPORTATION DISTRICT'S FARE FREE TRANSIT PROGRAM PROJECT

WHEREAS, the Tahoe Transportation District (TTD) is an eligible project sponsor and may receive state funding from the Low Carbon Transit Operations Program (LCTOP) for transit projects; and

WHEREAS, the statutes related to state-funded transit projects require a local or regional implementing agency to abide by various regulations; and

WHEREAS, Senate Bill 862 (2014) named the California Department of Transportation (Department) as the administrative agency for the LCTOP; and

WHEREAS, the Department has developed guidelines for the purpose of administering and distributing LCTOP funds to eligible project sponsors (local agencies); and

WHEREAS, TTD wishes to delegate authorization to execute these documents and any amendments thereto to the District Manager; and

WHEREAS, TTD wishes to implement the LCTOP project listed above,

NOW, THEREFORE, BE IT RESOLVED by the TTD Board of Directors as follows:

1. That the fund recipient agrees to comply with all conditions and requirements set forth in the Certification and Assurances and the Authorized Agent documents and applicable statutes, regulations and guidelines for all LCTOP funded transit projects.
2. That the District Manager is authorized to execute all required documents of the LCTOP program and any Amendments thereto with the Department.
3. That the Board of Directors hereby authorizes the submittal of the following project nomination and allocation request of FY 2019-20 LCTOP funds to the Department for:

   Project Name: TTD Fare Free Transit Program
   Amount of LCTOP funds requested: $201,652
   Short description of project: The program will support fare free operations on local fixed-route and paratransit services.
   Benefit to a Priority Population: The project eliminates cost as a barrier to transportation for our transit dependent populations in the South Shore, including all five low-income community census tracts located within the project area.
   Contributing Sponsor: Tahoe Regional Planning Agency

PASSED AND ADOPTED by the TTD Board of Directors at its regular meeting held on May 8, 2020 by the following vote:

Ayes:

Nays:

Abstain:

Absent:

_____
Steve Teshara
Chairman

Tahoe Transportation DISTRICT

Connecting our communities

MEMORANDUM

Date: May 4, 2020

To: Tahoe Transportation District (TTD) Board of Directors

From: TTD Staff

Subject: Proposed Fiscal Year 2021 Budget and Work Program for Review and Possible Action

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Action Requested:
It is requested the Board hear the item, discuss the proposed budget and work program for Fiscal Year 2021 (FY 21), and provide direction, including possible adoption.

Fiscal Analysis:
Staff has accessed work and available revenues that, barring delays or other unforeseen changes, will be used for transit operations, capital projects, and general uses. Transit funding from Coronavirus Aid, Relief, and Economic Security Act (CARES Act) from the Section 5307 and 5311 programs are included in this budget, as is California's latest projection for Transportation Development Act (TDA) funds. TDA projections do not yet reflect the anticipated decrease that will be recognized later for the balance of the current fiscal year and for FY 21. Any decrease in TDA is expected to be offset with CARES Act funds The overall budget for the fiscal year is $17.89 million (see Attachment A).

Contained within this budget are anticipated increases for represented staff of 3.5%, but it should be noted that negotiations for the new collective bargaining agreement are not yet complete. Also included is a cost of living adjustment for non-represented staff (4%), the last of which was made was in 2014.

The budget also includes expenditures of fund investment for moving the One Tahoe initiative forward from the limited General Fund account in an amount up to $200,000 or less when an anticipated federal grant is awarded and available to continue the work on the political process to change TTD's funding authorization in state legislation. Staff recommends this expenditure as an investment seeking the return of establishing a long-term sustainable funding source for transportation services and improvements in the region.

Work Program Analysis:
The work program staff positions and hours have been adjusted in this year's budget, at 60 full-time (39 represented) and 13 part-time (9 represented) employees for a total of 73 at 141,247 work hours for the fiscal year. The work program will focus on transit operations and facilities, the two major projects underway on the SR 28 corridor and at the south state line area on US 50, the revenue initiative of One Tahoe, and the pursuit of additional discretionary grants for project development for the passenger ferry project and communication system improvements.

CH/ja AGENDA ITEM: VIII.A.

Background:
Project development and advancement at Lake Tahoe often takes a very long time. Progress on this front has slowed these last four years as primary funding shifted from earmark dollars to traditional transportation sources, whose administrative processes significantly slow fund utilization. Other factors come into play that assist the delay, including additional public process, lack of matching funds, and changes in partner staffing to name a few.

For transit operations, the challenge is to maintain service levels while working hard to be proactive and finding ways of advancing or improving the operation, including its facilities. An advantage transit has over capital projects is formula funding versus discretionary funding, but it is not immune to the need for discretionary sources, something Tahoe's transportation program as a whole is heavily dependent on to achieve its goals.

The FY 21 budget and work program reflect what is available to TTD, while reaching for strategic change to infuse the transportation program with a self-help finance mechanism like so many regions have already done throughout the nation. Like Tahoe, it will have to be a unique fix as it does not fit the norm.

Discussion:
The project work plan was briefly described in the work program above. Because of COVID-19 and the CARES Act, the transit operation advanced its plan for no-fare policy to begin in the current fiscal year, and it will continue through the coming fiscal year based on current projections.

With reauthorization of the federal transportation bill due in FY 21 and the economic downturn generating political discussions of economic recovery and stimulus in FY 21, TTD must be ready for any opportunity that presents itself in regard to transportation goals. Transportation investments are valuable economic recovery investments. Similarly, positioning the basin for effective future revenue sources as identified in the One Tahoe effort, set the stage for future success and sustained investment leveraging all other existing sources.

Attachment A includes the detail for each fund account and the budget overall. Staff recommends the Board provide direction or move for adoption.

Additional Information:
If you have any questions or comments regarding this item, please contact Joanie Schmitt at (775) 589-5507 or jschmitt@tahoetransportation.org, or Carl Hasty at (775) 589-5501 or chasty@tahoetransportation.org.

Attachment:
A. Draft FY 21 Budget

CH/ja AGENDA ITEM: VIII.A.

Tahoe Transportation District
Proposed FY21 Budget
By Fund Type

	TOTAL	GENERAL	CIP	TO	Parking System (PS)	GFA
Revenues						
Federal Grants	$ 19,382,104	$ -	$ 14,254,640	$ 5,127,464	$ -	$ -
State / Local	3,181,238		630,139	2,551,099		
Contributions	901,828	100,000	751,154	43,674	7,000	
General Revenues	60,000	60,000				
Charges for Services	716,166	506,166			210,000	
Special Items	4,410	120		4,290		
TOTAL REVENUES	**$ 24,245,746**	**$ 666,286**	**$ 15,635,933**	**$ 7,726,527**	**$ 217,000**	**$ -**
Expenses						
Personnel	$ 4,854,597	$ 338,462	$ 333,204	$ 4,164,263	$ 18,668	$ 6,000
Admin Support (ICAP)	456,166		35,166	400,000	21,000	
Contracts	7,788,926	113,584	7,585,912		89,430	
Fuel	328,720			328,720		
Grant Match	631,114			631,114		
Other Operating	2,769,399	325,846	215,520	2,196,119	31,914	
* Depreciation & Disposal of Fixed Assets	915,010			873,580	41,430	1,398
Capital Outlay	129,000			129,000		
Taxes and Interest	14,450	14,450				
TOTAL EXPENSES	**$ 17,887,382**	**$ 792,342**	**$ 8,169,802**	**$ 8,722,796**	**$ 202,442**	**$ 7,398**
Other Funding Sources						
In (Revenues)	$ (7,471,137)	$ -	$ (2,503)	$ (7,468,634)	$ -	$ -
** Reserves	(128,559)	(128,559)				
Out Expenses	7,471,137	2,503	7,468,634			
TOTAL OTHER FUNDING SOURCES	$ (128,559)	$ (126,056)	$ 7,466,131	$ (7,468,634)	$ -	$ -
Increase / (Decrease) to Fund Balance	**$ 6,486,923**	**$ -**	**$ -**	**$ 6,472,365**	**$ 14,558**	**$ - $ (7,398)**

* Note Depreciation and Disposals totaling $915,010 are non-cash expenses.

** Reserves used for illustration purposes only and will not be a line item on financial statements.

Tahoe Transportation District
Proposed FY21 Budget
Personnel Costs

FY 21 Budget	TO Tops	US 50	Rec Travel	Stateline to Stateline Bikeway incl VPPP	SR 89 Corridors	Fanny Bridge	US 50 East	Facility Plan	STS - Funding Alternatives	CIP Total
PERSONNEL										
Salaries & Wages	$ 2,611,087	$ 110,080	$ 28,741	$ 42,863	$ 2,469	$ 3,917	$ 8,938	$ 20,547	$ 5,145	$ 222,700
Admin/Vac/Sick	390,885	16,449	4,295	6,403	369	585	1,336	3,070	769	33,276
Medicare	43,529	1,835	479	715	41	65	149	342	86	3,712
SUTA	24,770	557	146	217	13	20	45	104	26	1,128
ETT	419									
Mass Mutual - SSRP	87,083	10,122	2,642	3,942	227	360	822	1,890	473	20,478
FICA	118,634									
Mass Mutual - Retirement	69,337	5,062	1,321	1,970	113	180	411	944	237	10,238
Health Insurance	472,516	17,629	4,602	6,867	395	627	1,431	3,291	824	35,666
Dental Insurance	11,737	1,220	318	476	28	43	99	227	57	2,468
Life/STD Insurance	3,167	319	83	125	7	11	26	59	15	645
Vision Care Insurance	2,467	243	65	88	5	11	20	47	12	491
Workers Compensation	258,913	1,187	310	464	26	42	96	222	55	2,402
EE Compensated Absences	25,000									
Contingency	44,719									
Total Personnel	$ 4,164,263	$ 164,703	$ 43,002	$ 64,130	$ 3,693	$ 5,861	$ 13,373	$ 30,743	$ 7,699	$ 333,204

FY 21 Budget	Parking System	General	TOTAL
PERSONNEL			
Salaries & Wages	$ 12,834	$ 226,215	$ 3,072,836
Admin/Vac/Sick	1,918	33,802	459,881
Medicare	214	3,770	51,225
SUTA	377	1,146	27,421
ETT	7	0	426
Mass Mutual - SSRP	591	20,801	128,953
FICA	456	0	119,090
Mass Mutual - Retirement	296	10,401	90,272
Health Insurance	1,030	36,228	545,440
Dental Insurance	71	2,507	16,783
Life/STD Insurance	19	655	4,486
Vision Care Insurance	14	497	3,469
Workers Compensation	841	2,440	264,596
EE Compensated Absences			25,000
Contingency			44,719
Total Personnel	$ 18,668	$ 338,462	$ 4,854,597

Baseline Assumptions

Transit Operations Represented EE's receiving a 3.5% increase

All Non-Represented Employees are budgeted with a Cost of Living Allowance of 4% and not a Merit Increase. Last COLA increase was FY14
Results in an increase of $73,942 and broken down by:
$11,146 in General Fund, $11,063 in CIP Fund, $50,500 in TO Fund
and $1,203 in Parking Systems Fund.

No New Hires

Represented Employees Health calculated six months at current rates and six months with a 6% increase

Non-Represented Employees Health calculated five months at current rates and seven months with a 18% increase.

Workers Compensation based on a .5% increase.

Budgeted contingency of $44,719 for TO in case funding sources are not turned on timely in the CIP fund

Tahoe Transportation District
Proposed FY21 Budget
Non-Represented Salary Table

Fiscal Year 2021 Salary Table

TTD Positions - Non Represented

Grades 1 - 13 Non Exempt, Grades 14 - 19 Exempt			4%	3.8%	3.8%	3.5%	3.5%	3.2%	3.3%
Grade	**Position**	**Step 1**	**Step 2**	**Step 3**	**Step 4**	**Step 5**	**Step 6**	**Step 7**	**Step 8**
1		25,956	26,995	28,034	29,071	30,109	31,149	32,187	33,225
2	**Transit Info Officer; Parking Attendant; Transit Data Technician**	28,034	29,155	30,276	31,398	32,520	33,642	34,764	35,886
3		30,276	31,489	32,698	33,909	35,121	36,331	37,542	38,754
4	**Accounting Clerk**	32,698	34,006	35,299	36,640	37,922	39,250	40,506	41,842
5		35,299	36,727	38,139	39,551	40,965	42,377	43,789	45,202
6		38,139	39,666	41,191	42,716	44,242	45,767	47,292	48,819
7	**Operations Specialist**	41,191	42,837	44,485	46,133	47,782	49,429	51,076	52,723
8	**Road Supervisor**	44,485	46,265	48,044	49,824	51,603	53,383	55,162	56,941
9	**Procurement/Contract Analyst; Payroll Specialist**	48,044	49,966	51,865	53,836	55,720	57,670	59,516	61,480
10	**Project Coordinator**	51,865	53,939	55,989	58,061	60,190	62,265	64,341	66,416
11	**Transit Accountant; Mobility Mgr; Safety, Security, & Training Coordinator; Payroll Accountant**	55,989	58,229	60,523	62,764	65,004	67,247	69,488	71,729
12	**Transit Planner/Analyst; Sr Road Supervisor; Exec Asst/Clerk of Board; Ops Supv (Exempt); Fleet & Facilities Supv (Exempt)**	60,523	62,943	65,363	67,784	70,205	72,627	75,047	77,468
13	**Controller; Sr. Planner**	65,363	67,978	70,561	73,242	75,806	78,459	81,048	83,723
14	**Fleet & Facilities Mgr; Capital Program Specialist; Transit Ops Mgr**	70,561	73,416	76,240	79,065	81,888	84,711	87,535	90,359
15	**HR/Risk Manager**	76,240	79,290	82,339	85,390	88,439	91,489	94,538	97,588
16	**Chief Financial Officer; Transportation Project Manager**	82,339	85,632	88,926	92,221	95,514	98,807	102,100	105,395
17	**Capital Program Mgr; Transit System Program Manager; Engineer 1**	88,926	92,483	96,040	99,597	103,154	106,711	110,268	113,826
18	**Legal Counsel**	96,040	99,882	103,725	107,566	111,406	115,249	119,091	122,932
19	**Sr. Engineer**	103,724	107,873	111,973	116,227	120,296	124,506	128,490	132,731

Tahoe Transportation District
Proposed FY21 Budget
General Fund

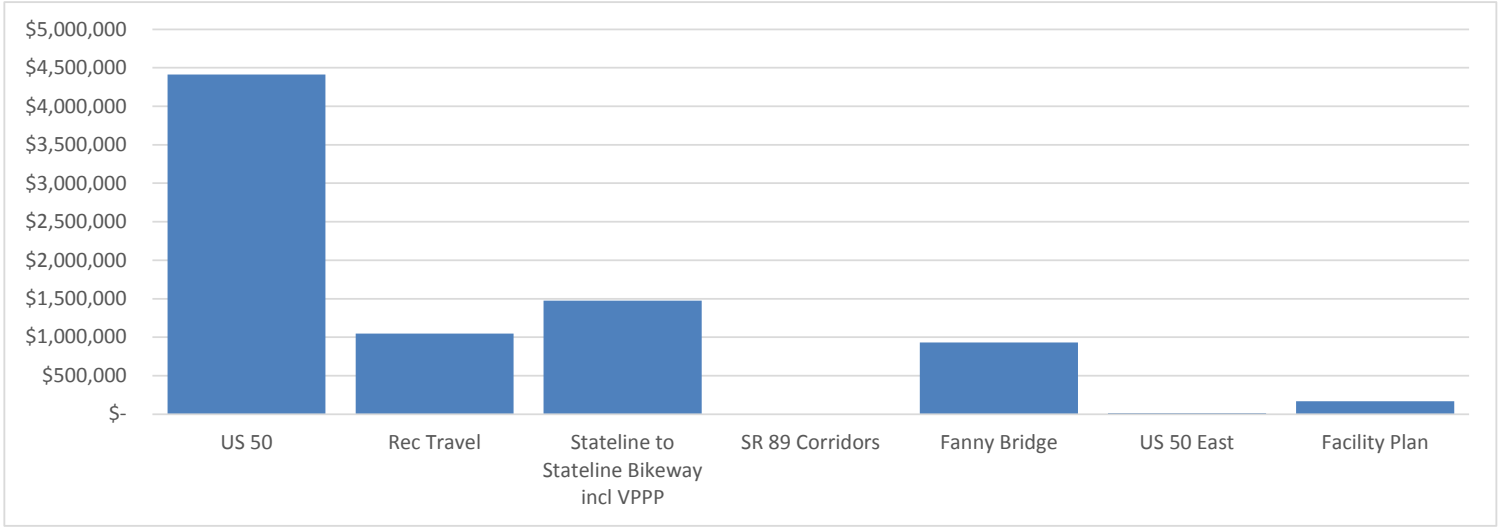
			Notes
Revenues			
Contributions	$	100,000	LTCC $50,000, Douglas Cty $50,000
General Revenues			
Rental Car Mitigation Fees	$	60,000	Reduced 40% to factor in COVID-19
Charges for Services			
Administrative Fees	$	50,000	WC1 Bond Sale Grant estimated to be completed in Dec 2020
Admin Support Fees		456,166	Transit Ops $400,000, CIP $35,166 and PS $21,000
Total Charges for Services	$	506,166	
Special Items			
Interest Revenue	$	120	Interest on Savings
Total Revenues	**$**	**666,286**	
Expenses			
Personnel	$	338,462	Includes $86,416 One Tahoe wages programmed Jan - Dec and hopeful to move to STSFA grant
Contracts		113,584	One Tahoe services between July thru Sept before STSFA grant eligibility on October 1
Other Operating Expenses			
Professional Services		47,590	Includes NAV Support and Upgrade to Cloud $21,290, Board Governance Training $5,000, IT Support $6,200, Raymond James $5,500, Kronos Timekeeping Support $4,200, Background Checks $1,000, Other Misc Services $4,400
Legal		45,000	
Audit		35,000	
Facility Rent		48,593	TRPA $36,000, Copier $6,755, Storage Unit $1,838, Incline Office $3,000, Meeting Rooms $1,000
Facility Utilities		3,708	
Telephone		13,560	
Supplies Incl Electronics		23,519	Supplies $17,519, 3 Computers $6,000
Insurance		22,434	Caltip ERISA $18,000, Crime $1,098, Cyber $3,336
Advertising & Public Relations		2,100	
Reproduction & Printing		1,184	
Postage		375	
Dues, Subscriptions & Publications		26,865	Includes NAV Cloud Fees $19,800, Calcog Membership $2,900, Google Subscription $1,500, Various Other Memberships $2,665 incl Tahoe Chamber, Government Finance Officers Association, Payroll Memberships and others

Tahoe Transportation District
Proposed FY21 Budget
General Fund

			Notes
Other Expenses Continued			
Transit Management - N. Shore		20,000	Staff decreased RCMF Projection 40% due to COVID 19 but did not reduce Annual Contribution to N. Shore
Training		10,800	
Travel		12,960	Includes Airfare $2,000, Per Diem $8,500 and Auto $2,460 incl District Manager going to DC two times
Events		3,575	
Repairs & Maintenance		500	
Miscellaneous Expenses		8,083	Board Members mandatory NV Workers Comp $1,336, $1,000 for HR appreciations, etc., TBD $5,747
Total Other Operating	$	325,846	
Taxes and Interest			
Modified Business Tax	$	12,000	
Interest		2,450	LOC Interest
Total Taxes and Interest	$	14,450	
Total Expenses	$	792,342	
Other Funding Sources - Revenues			
Revenues			
Capital (In) Out			
** Reserve Revenue	$	(128,559)	Reserves used for illustration purposes only and will not be a line item on financial statements
Transfers (In) Out		2,503	Match for NDOT Rec Travel Grant
Total Other Financing Sources	**$**	**(126,056)**	
Total Expenses and Other Funding Sources	**$**	**666,286**	
Increase /(Decrease) to Fund Balance	**$**	**-**	

Tahoe Transportation District
Proposed FY21 Budget
Capital Improvement Program Fund by Project

Funding Source	Total	US 50	Rec Travel	Stateline to Stateline Bikeway incl VPPP	SR 89 Corridors	Fanny Bridge	US 50 East	Facility Plan	TO Capital Projects
Revenues									
Capital Grant & Contributions									
Surface Transportation Block Grant	$ 4,167,367	$ 2,909,208	$ 47,550	$ 1,036,426			$ 13,974	$ 160,209	
Highway Infrastructure Program (HIP)	561,961	$ 561,961							
STS - Funding Alternatives	1,000,000		$ 1,000,000						
Active Transportation Program	913,947					913,947			
Congestive Mitigation and Air Quality	771,000	771,000							
Contributions/Grant Match	751,154			101,040		19,000			631,114
Transportation Alternatives Program	239,212			239,212					
Washoe County - Bond	388,406			83,500				4,906	300,000
Douglas County	176,039	171,777					736	3,526	
Value Pricing Pilot Program	15,715			15,715					
CA Conservancy	0								
TMPO	4,062				4,062				
Prop 1B	61,632								61,632
Low Carbon Transit Ops Program	0								
FTA 5307 - CMAQ	1,479,997								1,479,997
FTA 5339	5,072,686								5,072,686
FTA 5310	32,755								32,755
Total Capital Grants & Contributions	**$ 15,635,933**	**$ 4,413,946**	**$ 1,047,550**	**$ 1,475,893**	**$ 4,062**	**$ 932,947**	**$ 14,710**	**$ 168,641**	**$ 7,578,184**
	100.00%	28.23%	6.70%	9.44%	0.03%	5.97%	0.09%	1.08%	48.47%



Tahoe Transportation District
Proposed FY21 Budget
Capital Improvement Program Fund by Project

Funding Source	Total	US 50	Rec Travel	Stateline to Stateline Bikeway incl VPPP	SR 89 Corridors	Fanny Bridge	US 50 East	Facility Plan	TO Capital Projects
Expenses									
Operating									
Personnel	$ 333,204	$ 164,703	$ 50,701	$ 64,130	$ 3,693	$ 5,861	$ 13,373	$ 30,743	$ -
Contract Services	7,585,912	4,201,038	893,931	1,349,620		926,500		134,823	80,000
Reproduction & Printing	500	500							
Rent Meeting Room	4,300	800	2,000	1,500					
Supplies	1,550	250	700	600					
Advertising / Outreach	5,650	2,400	2,000	1,250					
Subscript / Publications / Dues	500	500							
Professional Services	123,120		95,970	2,500					24,650
Legal Services	18,200	18,200							
Administrative Fees	50,000			50,000					
Training	1,500	1,500							
Travel - Per Diem	6,100	2,500							3,600
Travel - Commercial Air	2,000	1,000							1,000
Travel - Auto	2,100	1,200	200	400					300
Admin Support (ICAP)	35,166	19,355	4,551	5,893	369	586	1,337	3,075	
Total Operating Expenses	**$ 8,169,802**	**$ 4,413,946**	**$ 1,050,053**	**$ 1,475,893**	**$ 4,062**	**$ 932,947**	**$ 14,710**	**$ 168,641**	**$ 109,550**
Capital Outlay									
Over $5000	$ 7,339,634	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ 7,339,634
Under $5000	129,000								129,000
Reimb Capital Expenses	(7,468,634)								(7,468,634)
Total Capital Outlay	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**
Other Financing Sources (Rev) Exp									
Transfer (In) Out	$ (2,503)	$ -	$ (2,503)	$ -	$ -	$ -	$ -	$ -	$ -
Capital Outlay (In) Out	7,468,634								7,468,634
Total Other Financing Sources	**$ 7,466,131**	**$ -**	**$ (2,503)**	**$ -**	**$ -**	**$ -**	**$ -**	**$ -**	**$ 7,468,634**
Total Expenses, Outlay and Other Financing Sources	**$ 15,635,933**	**$ 4,413,946**	**$ 1,047,550**	**$ 1,475,893**	**$ 4,062**	**$ 932,947**	**$ 14,710**	**$ 168,641**	**$ 7,578,184**
Increase / (Decrease) to Fund Balance	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -	$ -

Tahoe Transportation District
Proposed FY21 Budget
Transit Capital Purchases and Transfers

Transit Capital Purchases	Funding Source Detail	Transfer to TO
Washoe School Acquisition	$ 2,440,000	$ 2,350,000
NDOT - FTA 5339	1,952,000	
Washoe County Bond	300,000	
TDA Funding from Transit Ops	188,000	
3 Proterra Bus Purchases	$ 2,430,029	$ 2,425,129
FTA 5307 (Orig CMAQ)	1,479,997	
FTA 5339 © - FY 17	850,000	
FTA 5339 UZA - FY 18	100,032	
Charging Equipment - Proterra	$ 1,078,830	$ 1,078,830
FTA 5339 © - FY 18	635,716	
FTA 5339 © - FY 19	400,000	
** Hybrid Voucher Incentive Pgm	43,114	
Equipment - FTA 5339 UZA FY 19	$ 227,509	$ 227,509
* Nest Cameras	4,000	
Hybrid or Electric (RS/Relief Vehicle)	30,000	
Electric Fork Lift	50,000	
Service Truck Upgrades	25,000	
Replacement Cutaway Bus	118,509	
Total CIP for Transit and Transfer	**$ 7,578,184**	**$ 7,468,634**

* Transfer to Expense Under $5K	$ 129,000
Transfer to Fixed Assets	$ 7,339,634

Transit Capital Purchases	Funding Source Detail	Transfer to TO
Engine Remodification	$ 61,632	$ 46,982
Prop 1B PTMISEA	61,632	
Wheelchair Lifts	$ 32,755	$ 32,755
FTA 5310	32,755	.
4 Phoenix Bus Purchases	$ 1,117,566	$ 1,117,566
FTA 5339 © - FY 19	600,000	
FTA 5339 UZA - FY 17	117,566	
** Sac Emergency Clean Air Transp Pgm	400,000	
Charging Equipment - Phoenix	$ 14,850	$ 14,850
FTA 5339 UZA - FY 17	14,850	
Equipment - FTA 5339 UZA FY 18	$ 125,000	$ 125,000
* Street Furniture (Benches Etc)	45,000	
* Bus Stop Lights	80,000	
Equipment - FTA 5339 UZA FY 17	$ 50,013	$ 50,013
Misc Bus Equipment	50,013	

** Contribution from Transit Ops (Grant Match)	$ 631,114

Tahoe Transportation District
Proposed FY21 Budget -
Transit Fund

	Operations	
Revenues		
Federal Grants		
		NDOT reimburses expenses 100% Jul - Sept due to COVID-19 and the resulting Coronavirus Aid, Relief , and Economic Security Act (CARES).
FTA 5311	$ 2,265,311	Revenues may increase if this continues into FFY21
FTA 5307 CARES	2,412,153	Match provided by TDA first then CARES
FTA 5307 orig CMAQ	450,000	Converted to 5307 funds for Zero Fares Program
Total Federal Grants	$ 5,127,464	
State Funding		
NV State Parks	$ 85,000	SR28
Sac Emergency Clean Air Transp (SECAT)	400,000	Phoenix Bus Voucher Revenue
Hybrid Voucher Incentive Pgm (HVIP)	43,114	Proterra Charging Equipment Voucher Revenue
Low Carbon Transportaton Ops Pgm (LCTOP)	201,652	Farebox Replacement Grant from CA
TDA - LTF	1,157,358	Per Allocation from TMPO dated 4-10-20
TDA - STA	572,403	Per Allocation from TMPO dated 4-10-20
TDA - STA - SGR	91,572	Per Allocation from TMPO dated 4-10-20
Total State Funding	$ 2,551,099	
Contributions	$ 43,674	STPUD based on FY20 Contribution
Charges for Services		
Farebox Revenue	$ -	FY 21 Zero Fares
Pass Sales		
Total Charges for Services	$ -	
Special Items		
Sale of Fixed Asset	$ 2,500	
Interest Revenue	1,790	
Total Special Items	$ 4,290	
TOTAL REVENUES	**$ 7,726,527**	
Operating Expenses		
Personnel	$ 4,164,263	See TO Personnel Detail

Tahoe Transportation District
Proposed FY21 Budget -
Transit Fund

	Operations	
Admin Support (ICAP)	$ 400,000	
Fuel	$ 328,720	May be less if gas prices continue as is.
Grant Match	$ 631,114	Washoe School $188K, Phx Bus $400K, Proterra Equip $43,114
Other Operating Expenses excl Depreciation		
Repair and Maintenance	$ 879,655	See TO Schedule for Detail
Insurance	311,427	Includes 3rd Installment of $50K held for Future Claims
Professional Services	381,856	See TO Schedule for Detail
Facility Rent	158,513	Shop St $36K, Y Transit $112,132 Washoe School $10,255, Meeting Rooms $126
Facility Utilities	72,746	
Telephone	28,968	
Sales Tax on Fuel	735	
Reproduction & Printing	22,105	
Supplies	96,308	Includes $36K for special cleaning supplies due to COVID-19, $10,308 for computer equipment and $50K for Misc supplies
Uniforms	7,500	
Postage	165	
Advertising & Public Relations	85,000	
License & Permits	953	
Dues, Subscriptions and Publications	6,557	
Legal Services	31,562	
Travel and Training	58,588	
Bank Fees	5,481	
Events	3,000	
Miscellaneous Expenses	45,000	TBD
Total Other Operating Prior to Depreciation	$ 2,196,119	
Depreciation and Disposal of Assets	$ 873,580	
Capital Outlay		
Equipment under $5000	$ 129,000	
Other Funding Sources - Revenues		
Capital (In) Out	$ (7,468,634)	See CIP Transit Ops Detail

Tahoe Transportation District
Proposed FY21 Budget -
Transit Fund

	Operations
Total Expenses, Outlay and Other Funding Sources	$ 1,254,162
Increase / Decrease) to Fund Balance	**$ 6,472,365**

Tahoe Transportation District
Proposed FY21 Budget
Transit Ops Fund
Personnel Costs

FY21 Budget	**Transit**
PERSONNEL	
Salaries & Wages	$ 2,611,087
Admin/Vac/Sick	390,885
Medicare	43,529
SUTA	24,770
ETT	419
Mass Mutual - SSRP	87,083
FICA	118,634
Mass Mutual - Retirement	69,337
Health Insurance	472,516
Dental Insurance	11,737
Life/STD Insurance	3,167
Vision Care Insurance	2,467
Workers Compensation	258,913
EE Compensated Absences	25,000
Contingency	44,719
Total Personnel	$ 4,164,263

Operations

Positions	Number	FY21 Budget	Estimated Hours
Full Time Operators	25	1,504,821	54,870
Part Time Operators	3	71,225	3,180
Extra Board Operators	6	73,374	3,220
Full Time Dispatch	4	255,736	10,056
Full Time Maintenance	5	404,443	11,896
Full Time Facility Techs	4	199,640	9,030
Full Time Parts Clerk	1	51,949	2,092
Total Represented EE's	48	2,561,188	94,344
Full Time Technical Supervisor	1	82,374	2,080
Full Time Operations Specialist	1	71,176	2,110
Full Time Information Officers	1	57,096	2,110
Full Time Road Supervisor	4	336,918	8,930
Full Time Safety Training Manager	1	94,996	2,080
Part Time Parking Attendants	2	16,104	930
Full Time - Fleet & Facility Mgr	1	116,944	2,080
Full Time - Transit Operations Mgr	1	120,736	2,080
Total Non-Represented EE's (Operations)	12	896,344	22,400

Administrative

Positions	Number	FY21 Budget	Estimated Hours
Allocated - District Manager	1	19,062	196
Allocated - HR Specialist	1	87,895	1,600
Allocated - Transportation Proj Mgr	1	1,386	20
Allocated - Chief Financial Officer	1	54,024	880
Allocated - Controller	1	71,502	1,633
Allocated - Clerk to the Board /Exec Admin	1	42,296	925
Allocated - Payroll Accountant	1	63,157	1,605
Allocated - Transit Accountant	1	70,333	1,778
Allocated - Transit System Program Mgr	1	119,527	1,760
Allocated - Transit Planner / Analyst	1	92,798	1,950
Allocated - Account Clerk	1	15,032	768
Contingency		44,719	
Total Non-Represented EE's (Admin)	11	681,731	13,115
Sub-Total	71	4,139,263	129,859
EE Allocated Absences		25,000	
Total Transit Payroll		4,164,263	129,859

Tahoe Transportation District
Proposed Budget FY21
Transit Operations Supplemental Schedule

	Operations	
Professional Services		
Maintenance Support (Solutions)	$ 50,000	
IT	45,000	
Run-Cutting and Bid Development Software Support	33,000	
Uniform Cleaning	40,800	
AVL	19,200	
Security Bank Pickup Fees (Loomis)	20,000	
Maintenance Doors	6,000	
Genfare Support	6,000	
Radio Support	13,000	
Drug Testing	12,000	
Snow Removal	8,500	
Scheduling Software Support	6,800	
Time Keeping Support	7,000	
Financial Software Support	37,000	Incl Upgrade and Support
Pressure Washer Up-Keep	4,800	
Water Service	2,446	
Background Checks	5,000	
Rhino Care Hazard Matl Pick Up	3,000	
Lift Repairs	2,000	
Website Support	2,500	
Annual Fire Inspection (Extinguisher)	1,000	
Security Camera Support (Nest)	4,000	
SR28	2,810	
Misc - TBD	50,000	
Total Professional Services	**$ 381,856**	

	Operations
Repairs & Maintenance	
Painting	$ 60,000
Maintenance Work Orders	409,571
Outside Contractor	210,267
Outside Tires	18,501
Fluids & Oils	25,741
Consumables	52,176
Delivery	10,862
Core Taxes	50
Other	36,730
Equipment Rental	865
Equipment under $5K	19,200
Passenger Amenities	30000
Write Off	5,692
Total Repairs & Maintenance	**$ 879,655**

Cost per Mile		
Total Operating Expenses	7,720,216	
Less		
LCTOP Farebox Replacement	(201,652)	
Net Expense	7,518,564	
Total Miles	579,064	
Total Cost per Mile	$ 12.98	
Miles / %		
FTA 5307	316,264	55%
FTA 5311	262,800	45%
Total Miles / %	579,064	100%

Tahoe Transportation District
Proposed FY21 Budget
Parking Systems

	Parking Systems	Notes
Revenues		
Contributions	$ 7,000	WC1 Bond
Charges for Services		
Parking Revenue	$ 210,000	
TOTAL REVENUES	**$ 217,000**	
Expenses		
Personnel	$ 18,668	Includes Parking Ambassador
Contracts	89,430	LPR $30K, Outreach $15K, Website $3,500, Software Customization $2,500, Annual O&M $20K, Enforcement $17,500, Meter Support $930
Legal Services	2,800	
Rent / Lease	12,000	Vehicle Lease for Enforcement
Supplies	1,500	
Repairs & Maintenance	3,000	
Admin Support (ICAP)	21,000	10% of Revenues Received
Travel - Auto	500	
Bank Fees	4,194	
Misc Fees	7,920	
Total Operating Expenses Prior to Depreciation	$ 161,012	
Depreciation and Disposals	$ 41,430	
TOTAL EXPENSES	**$ 202,442**	
Increase /(Decrease) to Fund Balance	**$ 14,558**	

Tahoe Transportation District
Proposed FY21 Budget
Governmental Fund Assets

	GFA Total
Revenues	$ -
Expenses	
EE Compensated Absences	$ 6,000
Depreciation	1,398
Total Expenses	$ 7,398
Increase / (Decrease) to Fund Balance	**$ (7,398)**

Tahoe Transportation District
Proposed FY21 Budget
By Work Element

WE	Total	General	CIP	Transit Ops	PS	GFA	Wages & Benefits (includes GFA)	Hours
1	$ 31,616	$ 31,616	$ -	$ -	$ -	$ -	$ 30,616	499
2	$ 694,208	532,915	8,398	152,895		6,000	325,833	5,683
3	$ 6,841,558		6,841,558				251,760	3,788
4	$ 9,083,635	33,101	278,191	8,569,901	202,442	1,398	4,136,446	129,914
5	$ 1,236,365	194,710	1,041,655				115,942	1,363
Total	**$ 17,887,382**	**$ 792,342**	**$ 8,169,802**	**$ 8,722,796**	**$ 202,442**	**$ 7,398**	**$ 4,860,597**	**141,247**

Represented EE's - 39 Full Time	87,944
Represented EE's - 3 Part-time/6 X-Board	6,400
Non-Represented EE's - 21 Full Time	44,598
Non-Represented EE's - 4 Part Time	2,305
Total Employee Hours	141,247

Full Time	60
Part Time incl X-Board	13
Total	73

Tahoe Transportation DISTRICT

Connecting our communities

MEMORANDUM

Date: May 4, 2020

To: Tahoe Transportation District (TTD) Board of Directors

From: TTD Staff

Subject: Discussion and Possible Direction on Planning Efforts for Regional 9-1-1 Dispatch/Traffic Operations Center and Associated Communications Systems

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Action Requested:
It is requested the Board hear the item, discuss it with Staff, provide feedback and possible direction on planning efforts for potential Regional 9-1-1 Dispatch/Traffic Operations Center and associated communications systems.

Fiscal Analysis:
TTD was asked by the California Office of Emergency Services (CalOES) to participate in a Technical Assessment (TA) for potential Regional 9-1-1 Dispatch/Traffic Operations Center and associated communications systems. The TA was requested to the Department of Homeland Security (DHS) Cybersecurity & Infrastructure Security Agency (CISA) Interoperable Communications Technical Assistance Program (ICTAP) through CalOES. Limited staff time was required as the project was led by the DHS. Regional stakeholders will assess the recommendations of the TA, select an approach to proceed and then DHS will prepare an Engineering Assessment at the request of Nevada Department of Emergency Management.

Work Program Analysis:
As noted above, the TA was led by DHS, with limited bi-state coordination led by TTD and North Tahoe Fire Protection District. The study work thus far has led to other partnerships and potential funding sources to advance the improvement of needed transportation infrastructure for Tahoe and the resort triangle. Among these partnerships, TTD is joining with the fire protection districts to address critical improvements in Tahoe's communication system network, including a well thought out coordinated 9-1-1 Dispatch and Traffic Operations Center. The development of potential projects and funding sources is part of TTD's Capital Improvement Program development process to secure resources necessary to achieve needed transportation related infrastructure and services. Project development work is included in the work program and TTD's Capital Improvement Program. Future work associated with this effort will be captured under respective elements of the future Work Program and allotted corresponding staff time.

Background:
Tahoe and its transportation network are vulnerable to natural, technological, and human-caused hazards and associated risks to regional infrastructure and operations. This is once again evident under the current COVID-19 situation where Tahoe's visitation and the movement of people create unique regional challenges. Climate related events and wildfire only exacerbate

this issue when it comes to the movement of people or emergency evacuation situations. These situations illustrate the ingress and egress of vehicles has major impacting consequences to travelers, law enforcement and emergency services, the economy, and communities.

In 2017, the TTD Board passed a resolution adopting the Linking Tahoe: Corridor Connection Plan, which contains a goal to create a traffic control/management center for the Lake Tahoe region from the I-80 to US 50 corridors. At that time, TTD recognized the inadequate tools available to monitor travel and communicate with the traveling public in regard to issues and remedies across the greater region. Staff is also aware of the benefits to an interoperable region with examples demonstrated by the system in place and overseen by Regional Transportation Commission of Southern Nevada. After working with regional fire chiefs on issues post the Camp Fire and possible Tahoe scenarios, the issue of interoperable dispatch had parallel and related needs.

On April 23, 2019, the Lake Tahoe and Truckee regional fire chiefs signed a letter of support requesting feedback on exploring the development of a consolidated command center for dispatch services of fire and emergency services within and around the Lake Tahoe and Truckee region. DHS staff was provided a copy of this letter signed by 11 fire chiefs from California and Nevada agencies that serve the Tahoe Basin. The 11 fire agencies represented by the fire chiefs are served by five Public Safety Answering Points (PSAP), which are also commonly known as emergency communications dispatch or command centers. The large number of dispatch centers serving the Tahoe Basin was listed as a shortcoming to interoperability in the region. The fire chief letter cited the bi-state Blue Ribbon Commission recommendations (The Emergency California-Nevada Tahoe Basin Fire Commission Report, May 2008), and clarified that many of those recommendations have been implemented in the region.

Emergency communications and public safety agencies across the nation are evolving to meet the requirements and take advantage of newly available technologies. DHS ICTAP typically focuses on the public safety aspect of emergency communications. The incorporation of traffic and transportation management into a Bi-State Regional Command Center offered the opportunity for a new point of view into interoperability across the public safety and public service spectrum. When referring to public safety, ICTAP is classifying the traditional agencies: 9-1-1 dispatch, police, fire, and emergency medical services as the defined responders. Developing the regional TA, provides a strategic approach to implementation that complements existing systems and provides opportunities to partner on critical system needs.

Discussion:

The Tahoe Basin faces some unique challenges when maintaining public safety. Whether the challenge is a traffic accident on a two-lane mountain highway with injuries, interoperability limitations due to the geological landscape, or a rapidly spreading wildfire during the peak summer season involving local, state and federal jurisdictions, the ability to transfer data seamlessly between Public Safety Answering Points (PSAP) and Departments of Transportation (DOT) is an important benefit to the involved agencies and the public. Interoperable communications are the backbone of government services. The methodology used to assess the validity of a Bi-State Regional Command Center in the Tahoe Basin began by researching examples of consolidated dispatch centers nationally (with and without traffic management center integration), along with industry best practices. The TA includes an assessment of the following services: 9-1-1 calls from wireless and landline phones; providing radio communications systems and equipment to facilitate voice and data communications for public safety agencies; radio dispatching services to first responders; tracking resources assigned to

public safety incidents; data services and communication; and the opportunity for expansion to house traffic/transportation services that coordinates with the two State DOTs. The study considered both land-based and water-based systems in light of the proposed cross-lake ferry and potential disruptions to the road network.

Regional partners will need to consider both opportunities and constraints for multiple dispatch/traffic operation sites presented in the TA, as well as regional technology and radio improvement costs. Once site selection, technology improvements, and participating agencies are determined, DHS can prepare the Engineering Assessment. The Regional 9-1-1 Dispatch/Traffic Operations Center and associated communications systems has been added to the 10-year list of critical infrastructure improvement for Lake Tahoe.

Additional Information:
If you have any questions or comments regarding this item, please contact Danielle Hughes at dhughes@tahoetransportation.org or (775) 557-4901.

Attachment:
A. Tahoe Regional Command Center Study – Operations Assessment Report

DH/ja AGENDA ITEM: VIII.B.

Prepared for the State of California

ICTAP

Interoperable Communications Technical Assistance Program

CISA/ICTAP-CA-OPASSESS-001-R0

Tahoe Regional Report

March 2020

Tahoe Regional Command Center Study
Operations Assessment Report

This document was prepared for the State of California by the DHS Cybersecurity and Infrastructure Security Agency (CISA), Interoperable Communications Technical Assistance Program (ICTAP) as part of Work Order # WO19-188. Additional information about the program can be found at https://www.dhs.gov/safecom/ictapscip-resources.

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Executive Summary

The State of California, along with first responders and transportation agencies of the Lake Tahoe and Truckee region (Tahoe Basin), requested assistance from the Department of Homeland Security (DHS), Cybersecurity & Infrastructure Security Agency (CISA) Interoperable Communications Technical Assistance Program (ICTAP) to develop a bi-state preliminary exploratory study of a consolidated command center for public safety dispatching of fire and emergency services with an integrated traffic and transportation management center. The request included a needs assessment to determine the validity of a regional dispatch/command center.

On April 23, 2019, the Lake Tahoe and Truckee regional fire chiefs signed a letter of support (further referenced as the fire chief letter) requesting feedback on exploring the development of a consolidated command center for dispatch services of fire and emergency services within and around the Lake Tahoe and Truckee (Tahoe Basin) region. ICTAP staff were provided a copy of this letter signed by 11 fire chiefs from California and Nevada agencies that serve the Tahoe Basin. The 11 fire agencies represented by the fire chiefs are served by five Public Safety Answering Points (PSAP), which are also commonly known as emergency communications dispatch or command centers. The large number of dispatch centers serving the Tahoe Basin was listed as a shortcoming to interoperability in the region. The fire chief letter cited the bi-state Blue Ribbon Commission recommendations (The Emergency California-Nevada Tahoe Basin Fire Commission Report, May 2008), and clarified that many of those recommendations have been implemented in the region.

Emergency Communications and public safety agencies across the nation are evolving to meet the requirements and take advantage of newly available technologies.

ICTAP typically focuses on the public safety aspect of emergency communications. The incorporation of traffic and transportation management into a Bi-State Regional Command Center offered the opportunity for a new point of view into interoperability across the public safety and public service spectrum. When referring to public safety, ICTAP is classifying the traditional agencies: 9-1-1 dispatch, police, fire, and emergency medical services as the defined responders. Public service refers to government services that don't fall under public safety but play an important role in the provision of government services. In this assessment, the term public safety and service is specific to the traditional public safety agencies and traffic & transportation management.

This assessment presented many unique challenges in determining the feasibility of a regional command center. There are both primary and secondary PSAPs in the region, along with bi-state coverage between California and Nevada. Although the concept of inclusion of traffic management in a public safety environment is not a common practice nationwide, it is gaining interest, which created an added layer of complexity when attempting to provide a preliminary exploration of a regional command center.

Across the region, both public safety and service agencies are fatigued by the existing risks to both the public and responders under the current emergency communications structure in the region. A great deal of time and money has been spent analyzing incidents after the fact in a reactive manner, and the agencies are prepared to step up and take the lead with a proactive approach that includes making intentional and involved decisions. There are numerous common themes in the Tahoe Basin, there is cooperation across the fire agencies, but little tolerance across the disciplines (i.e., private sector, law enforcement). It was identified early on during the study that the region has competing priorities which can create a precarious situation when discussing a consolidated command center. The competing priorities also lend to confusion

when trying to explain the interoperability status in the region across jurisdictions and disciplines. Due to these challenges, it was important to focus on a high-level review of the current dispatch operations in the Tahoe Basin and the fact that all involved can agree that a better quality of service can be obtained in the region.

Consolidated command/dispatch center models already exist in the region. CAL FIRE partners with United States Forestry Services (USFS) to house two dispatch agencies in the same location, sharing facilities but operating separately, with the USFS having limited hours of operation and transitioning operations to CAL FIRE after hours. The concept explored in this assessment is not to follow the traditional idea of consolidating existing centers, but rather to create a regional-real time command center unlike anything else in the region. As Real-time Operations Centers (RTOC) are trending across the nation, the approach used here was to engage the fire agencies who are currently under contract with separate PSAPs in the region and create a fire focused PSAP/command center that incorporates traffic & transportation management using a regional command center philosophy. The creation of a regional command center with real-time operations center management that will include the use of private Internet of Things (IoT), and other functions similar to fusion centers with dispatch elements could provide the supportive, cooperative environment the fire agencies are striving to create.

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1 Introduction

The mission of the US Department of Homeland Security (DHS), Cybersecurity & Infrastructure Security Agency (CISA), Interoperable Communications Technical Assistance Program (ICTAP) is to unify and lead the nationwide effort to improve emergency communication capabilities across all levels of government. Working with local, regional, and state public safety personnel, ICTAP leverages a wealth of resources and knowledge to aid in improving operable and interoperable communications across the nation. More information about CISA/ICTAP and other CISA work products related to interoperable communications can be found at http://www.dhs.gov/safecom/ictapscip-resources.

Across the nation, public safety agencies are seeking ways to save costs while also increasing interoperability across traditional agency and jurisdictional boundaries. As trustees of public funds, public safety agencies have a responsibility to evaluate tactics that produce cost savings and increase the efficiency of service. Another hardship facing public safety is the ability to fully staff the 9-1-1 emergency communications centers. The concept of shift work and a high stress working environment can make recruitment difficult. It is important to note early on in this assessment that the concept of consolidation is not necessarily a solution to a dispatcher shortage in an area. In fact, it can prove detrimental to staffing when consolidating, as many dispatchers will leave the profession due to fear of what consolidation can mean. Whether those fears are perceived or actual it is important to maintain an awareness of this fact while exploring the feasibility of a regional center.

Throughout this assessment, the term “dispatcher” will be used to describe communications staff. Dispatchers, communications operators, emergency dispatchers and emergency communications specialists are all terms that apply to the role of 9-1-1 call takers and radio dispatchers regardless if they are employed by an agency that uses cross-trained (all dispatchers can do all tasks) or two-tier (tasks are divided between call taking and radio disciplines) centers.

The Lake Tahoe and Truckee regional fire chiefs signed a letter of support (see Appendix A, Regional Dispatch Letter 2019) requesting feedback on exploring the development of a consolidated command center for dispatch services of fire and emergency services within and around the Lake Tahoe and Truckee (Tahoe Basin) region. In addition to the fire agencies supporting the research of a consolidated command center, both Department of Transportation assets from Nevada and California expressed interest in participating in a command center. The addition of public service agencies does tend to direct this assessment more towards a real-time operations center concept than a consolidated dispatch center approach.

The ICTAP team consisting of Sara Boucher-Jackson, PSAP Subject Matter Expert (SME), and Gregg Wiggins, Engineering SME visited the Tahoe Basin and conducted a project kick-off meeting as well as site visits and interviews with the involved agencies in the Tahoe Basin.

Analysis of Public Safety Answering Point (PSAP) and dispatch operations in a single county can be complicated, let alone the analysis of operating practices across state lines. The preliminary analysis of the operating practices in the Tahoe Basin revealed many levels of complexity. Varied levels of governance, or lack thereof, combined with differing processes in tracking resources and available equipment to adequately perform daily dispatch functions can make it difficult to make a fair comparison between agencies under the current operating structure in the Tahoe Basin. It was important that this assessment build a basic foundation to

support the involved agencies in understanding from a high-level view of how the agencies within the Tahoe Basin currently function and provide realistic steps toward future progress.

This assessment first outlines the current operating practices, which include the evaluation of challenges (gaps) facing the region and strengths in the existing emergency communications structure. Secondly, the assessment addresses some initial implementation options for the Tahoe Basin. Governance, technology, facilities, implementation, and command center features were all issues included in this analysis.

ICTAP encourages the involved agencies to evaluate the recommendations in this assessment and implement them in their next steps of this project. The gaps identified in this assessment are not listed in any particular order of importance or priority. ICTAP personnel will not make any specific vendor recommendations; rather, the recommendations in this document focus on the necessary and nice-to-have features described by the involved agencies during the interview process.

1.1 Purpose

The purpose of this document is for ICTAP to assess existing agency roles and responsibilities, and to summarize the bi-state agency needs in the Lake Tahoe Basin, to include those of both the State of California and across the state line in Nevada, to determine the feasibility of a consolidated/regional command center. The study will acknowledge existing challenges and identify recommendations for those challenges.

In the U.S., emergency communications centers are facing numerous challenges such as budget cuts and staffing shortages. The chronic issue of understaffing in dispatch centers leads to the use of excessive overtime, which then contributes to the budgetary issues. One solution to overcome these challenges that agencies have deployed in various regions of the country is the consolidation of dispatch services. In the Tahoe Basin, there are already consolidated command/dispatch centers providing dispatch services to the 11 fire agencies.

In addition to the challenges facing many of the command/dispatch centers, the Lake Tahoe Basin faces some unique challenges when maintaining public safety. Whether the challenge is a traffic accident on a two-lane mountain highway with injuries, interoperability limitations due to the geological landscape, or a rapidly spreading wildfire involving local, state and federal jurisdictions, the ability to transfer data seamlessly between Public Safety Answering Points (PSAP) and Department of Transportation (DOT) is an important benefit to the involved agencies and the public. Interoperable communications are the backbone of government services.

1.2 Methodology

The methodology used to assess the validity of a Bi-State Regional Command Center in the Tahoe Basin began by researching examples of consolidated dispatch centers nationally (with and without traffic management center integration), along with industry best practices.

On July 2, 2019, a kickoff meeting was hosted to introduce regional and state agency representatives from both California and Nevada to the project and to inform them of the role of ICTAP. There were more than 60 attendees at the kickoff meeting including multiple public safety / public services disciplines and public sector entities.

Following the kickoff meeting, the agency attendees that participated were contacted to complete a short survey explaining their agency's service area. This was done to ensure that ICTAP had the most appropriate SMEs as points of contact (POC) to collect data from. Input

from the survey was useful to help scale down the number of contacts involved in the assessment process.

Once the appropriate agency POCs were identified, ICTAP staff conducted information gathering interviews via email. It was crucial at this stage to verify that participants from all of the key involved agencies were engaged in the study. Since the request for this assessment was largely coming from fire services and transportation management, engaging the PSAPs was important, but was a challenge for this project. In order to have an accurate understanding of the current status of emergency communication services in the region, a firm understanding of how the existing centers in the region operate is key. These steps are all components of determining the possibility of restructuring the involved communication centers into a consolidated Bi-State Regional Command Center that is focused on the agencies that serve the Lake Tahoe Basin.

California Department of Forestry & Fire Protection (CAL FIRE) is a state agency that provides emergency services via contracts with local governments in 36 counties throughout the state for fire dispatch services. CAL FIRE operates as a secondary Public Safety Answering Point (PSAP) in the Tahoe Basin at CAL FIRE Grass Valley Emergency Communications Center.

Site visits were conducted on October 18th and 19th 2019 in both Nevada and California. ICTAP staff were able to visit the following locations:

- Washoe County Sheriff's Office / Regional Dispatch (Reno NV)
- Douglas County Emergency Communications Center (Minden NV)
- South Lake Tahoe Joint Dispatch Center (South Lake Tahoe CA)
- CAL FIRE Station 50 (Truckee CA)
- CAL FIRE Grass Valley Emergency Communications Center Nevada Yuba Placer Unit (NEU) (Grass Valley CA).

One key finding to highlight from this process is the high level of interest of the involved fire agencies as indicated in the fire chiefs' letter supporting the exploration of a consolidated command center for dispatch services (see Appendix A).

The term regional command center used for this assessment includes the following services:

- 9-1-1 calls from wireless and landline phones
- Providing radio communications systems and equipment to facilitate voice and data communications for public safety agencies
- Radio dispatching services to first responders
- Tracking resources assigned to public safety incidents
- Data services and communication
- Opportunity for expansion to house traffic/transportation services

1.3 Source Information

Information used for this document was gathered directly from agency personnel recommended to ICTAP from Danielle Hughes with the Tahoe Transportation District and Fire Marshall Steve McNamara with North Tahoe Fire. For a complete listing of the agency personnel, participating agencies, and specific POCs, see Appendix B, Contact List. Additionally, ICTAP staff conducted independent research to gather much of the information included in this study.

2 Overview of Recommendations

ICTAP staff is recommending a refreshed approach to consolidation through the implementation of a real-time regional command center that migrates services from the existing dispatch centers. While the large number of centers was cited as a shortcoming to interoperability in the fire chief's letter, the topic of consolidation is highly sensitive in the region. The term "consolidation" was used in the scoping of this project. Early on, the project's primary points of contact requested that the term "consolidation" be avoided. The sensitivity to the concept of consolidation is not surprising; the concept is often contentious and strikes fear in dispatch center staff. The delicate nature of consolidation, along with the lack of engagement of dispatch centers, presented challenges to this project.

Based on the findings of ICTAP, the main recommendation is that the involved agencies take the first steps to engage and familiarize all of the involved dispatch centers' leadership and staff to the project. Secondly, that they move away from the concept of consolidation towards the migration of services to a Bi-State Regional Command Center. Lastly, before discussing a migration of services to a Bi-State Regional Command Center, they should put effort into improving both radio operability and interoperability in the area. This last effort will be further addressed by an additional technical assistance (TA) request for an engineering study for the Lake Tahoe regional operations area. Stakeholders need to consider the development of a Regionwide Communications Working Group that could then address the various communication options and explore the costs associated with each option.

Initial Recommendations

- The Bi-State Regional Command Center would still be functioning primarily as a secondary answering point, receiving the information from the initial answering PSAP.
- Identify a point person to engage the dispatch centers. This should be someone who is well-respected within the involved community and is available to provide oversight of the project from beginning to end.
- Define initial stakeholders to be included in the launch of a Bi-State Regional Command Center. Develop interest amongst these stakeholders to support the migration of services across the region and agencies.
- Define which agencies are willing to participate in a migration of services. Determine if migration of dispatch services makes sense from a service level, political, technical and financial perspective.
- Leverage the second TA engineering study to develop system performance expectations and identify solutions.
- Create an executive governance structure.
- Agree upon a process for managing and documenting the project. Designate a project manager to maintain a formal agreed upon method for documenting the process and scope management. Standardize definitions and policies.
- Determine technology infrastructure and operational procedures. Develop criteria for requests for proposals (RFPs). Create a list of which vendors will be solicited in the RFP process.
- Establish and agree to a potential location to reduce the scope of the project.
- Conduct a fiscal impact study, once the participants are defined, to assess the financial benefits and risks of transitioning fire dispatch services to a regional center.

3 Demographic Analysis

The Lake Tahoe Basin is a major tourist attraction that drives a significant economy based on recreation and outdoor activities. Lake Tahoe is the largest alpine lake in North America and the second deepest lake in the United States. The region lies in the states of California and Nevada. There are 72 miles of shoreline, with two-thirds of the shoreline laying in California and one-third in Nevada. More than 75% of the watershed is national forest land protected by the United States Forest Service Lake Tahoe Basin Management Unit. The largest city, by population, is South Lake Tahoe CA, which is adjacent to Stateline NV.

[1]

California

Placer County

- Carnelian Bay #3
- Dollar Point #4
- Kings Beach #1
- Sunnyside-Tahoe City #5
- Tahoe Vista #2
- Tahoma (partially in El Dorado County) #6

El Dorado County

- South Lake Tahoe #7
- Tahoma (partially in Placer County) #6

Nevada

Carson City #14

Douglas County

- Glenbrook #13
- Lakeridge #11
- Logan Creek #12
- Round Hill Village #8
- Skyland #10
- Stateline #17
- Zephyr Cove #9

Washoe County

- Crystal Bay #16
- Incline Village #15

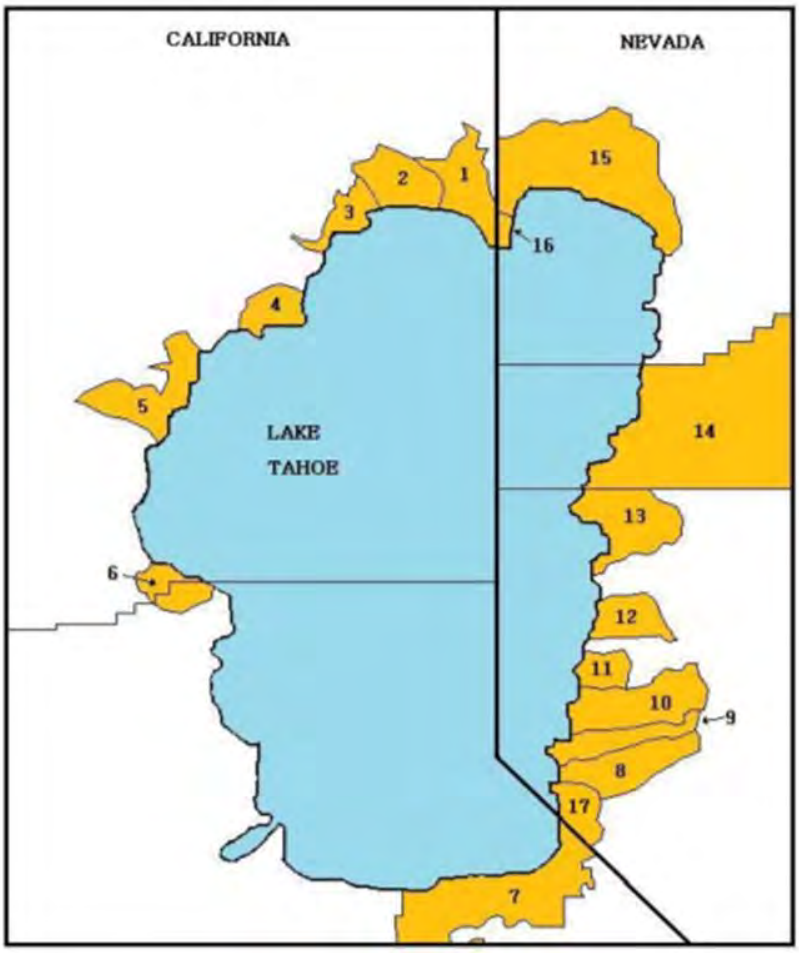

Figure 1 - Lake Tahoe

[1] By Georgie lennon8705 - Own work, CC BY-SA 4.0, https://commons.wikimedia.org/w/index.php?curid=49761486

There are five counties and one city in the Tahoe Basin. In California, the area is divided between El Dorado County and Placer County at Tahoma on the west side of the lake with Nevada County to the northwest. The state line between California and Nevada at the southern end of the lake is between El Dorado County and Douglas County at the city of South Lake Tahoe CA and Stateline NV. The state line between California and Nevada at the northern end of the lake is between Placer County and Washoe County. Carson City lies between the two other Nevada counties. The region is unique as it is shared by the two states. The Tahoe Basin is a large community of residents, visitors, businesses, homes and schools. As a major tourist attraction, the Tahoe Basin has a fluctuating population, the area can see upwards of 24 million visitors annually in addition to its long-term population.

Table 1 - Tahoe Basin Census Information

County	Population	Median Income	Housing Units	Land Area in Square Miles
El Dorado CA	190,678	$80,582	91,105	1,707.88
Placer CA	393,149	$84,357	140,661	1,407.01
Nevada CA	99,696	$63,240	54,258	957.77
Douglas NV	48,467	$62,503	24,543	709.72
Washoe NV	465,735	$61,155	201,081	6,302.37
Carson City NV	55,414	$52,034	22,461	144.66

The population represents the full-time year-round countywide residential population and is not restricted specifically to the Tahoe Basin. As stated previously in the assessment, the demographics of this region are constantly changing. For example, Grass Valley can see an increase of up to 100,000 based on visitors to the area.

4 Public Safety and Service Agencies

The Lake Tahoe Basin consists of two states, 5 counties and Carson City. There are 5 dispatch or command centers providing emergency services included in this assessment that provide PSAP and dispatch services to the 11 fire agencies. Across the region, PSAP and dispatch services are provided by 28 public safety agencies. Not all of the 28 public safety agencies were engaged in this assessment. Of those 28 agencies, there are both primary and secondary PSAPs.

The existing PSAP structure in the Lake Tahoe Basin is complex and at times difficult for the agencies involved in this project to articulate. For this assessment, it was important to work with the agencies that are willing to consider transitioning emergency communications services to a Bi-State Regional Command Center. ICTAP staff utilized the fire chief letter (see Appendix A, Regional Dispatch Letter) to establish a starting point of agencies to include in this assessment.

Table 2 - Fire Agency Information

Fire Agency	Command / Dispatch Center	County or Region
North Tahoe Fire Protection District	CAL FIRE Grass Valley Emergency Command Center	Placer County CA
Meeks Bay Fire Protection District	CAL FIRE Grass Valley Emergency Command Center	Placer County CA
Squaw Valley Fire Department	CAL FIRE Grass Valley Emergency Command Center	Placer County CA
Northstar Fire Department	CAL FIRE Grass Valley Emergency Command Center	Placer County CA
Truckee Fire Protection District	CAL FIRE Grass Valley Emergency Command Center	Nevada County CA
North Lake Tahoe Fire Protection District	Washoe County	Washoe County NV
Tahoe Douglas Fire Protection District	Douglas County	Douglas County NV
South Lake Tahoe Fire Rescue Department	South Lake Tahoe Joint Dispatch Center	El Dorado County CA
Lake Valley Fire Protection District	South Lake Tahoe Joint Dispatch Center	El Dorado County CA
Fallen Leaf Fire Department	South Lake Tahoe Joint Dispatch Center	El Dorado County CA
Carson City Fire Department	Carson City	Carson City NV

4.1 CAL FIRE NEU - Grass Valley

The CAL FIRE Nevada Yuba Placer Unit (NEU) Interagency Emergency Command Center (ECC) is located at 13120 Loma Rica Dr., Grass Valley CA 95945 and is commonly known as Grass Valley. The center itself is located in Nevada County. Grass Valley provides dispatch services to five fire agencies involved in this study. Four of those five agencies are located in Placer County. The fifth agency is located in Nevada County.

Grass Valley is a secondary PSAP that handles 9-1-1 calls for 31 separate agencies over five counties, including all of the fire departments in Nevada County, CA as well as portions of Placer, Plumas, El Dorado, and Yuba counties, from the Sacramento Valley floor to the Nevada state line. They are also the air ambulance coordination center for Sierra –Sacramento Valley (S-SV), OES region 4 coordinator, and dispatch for a private ambulance service. Additionally, they dispatch all CAL FIRE resources in Nevada, Yuba and Placer counties, which include aircraft, dozers, engines and hand crews. The Grass Valley ECC contracts dispatching services with five of the fire agencies in the Tahoe Region interested in a Bi-State Regional Command Center. The center utilizes the International Academy of Emergency Dispatch (IAED) Emergency Medical Dispatch (EMD) protocols.

The North Tahoe Fire Protection District (NTFPD) protects an area of 32 square miles on the north and west shores of Lake Tahoe. There are six fire stations within the District, located in Alpine Meadows, Tahoe City, Homewood, Meeks Bay, Dollar Hill, Carnelian Bay, and Kings Beach. NTFPD provides a full-time chief officer and management of Meeks Bay Fire's staff for fire protection, training and administrative duties.

Figure 2 - NTFPD Station Locations

Squaw Valley FD serves Squaw Valley and the river corridor between Alpine Meadows and Brush Creek on California Highway 89.

Northstar FD serves the community of Northstar in Placer County near the northwest shore of Lake Tahoe.

Figure 3 - Northstar and Squaw Valley FD Station Locations

Truckee FPD located in Nevada County CA provides fire protection services to the town of Truckee and portions of both Placer and Nevada Counties.

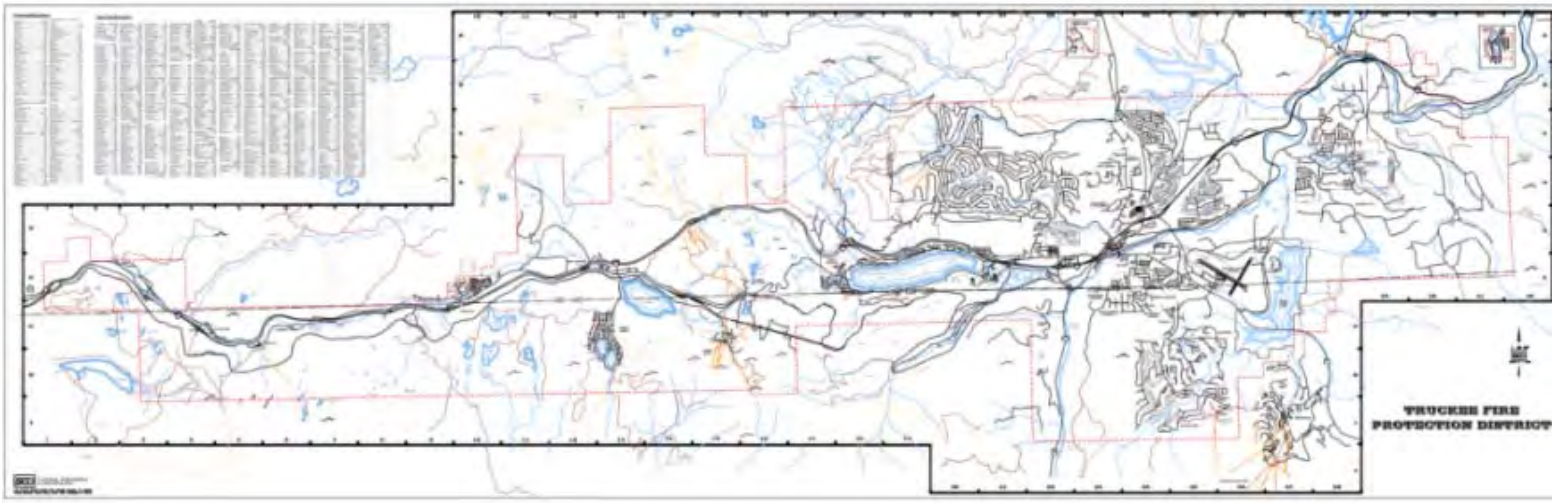

Figure 4 - Truckee FD Operational Area

Figure 5 - Truckee FD Station Locations

4.2 Washoe County Sheriff's Office Regional Dispatch & Emergency Operations Center

The Washoe County Sherriff's Office Regional Dispatch & Emergency Operations Center (REOC) is located at 5195 Spectrum Blvd., Reno NV 89512. The second address listed 9-1-1 Parr Boulevard, Reno NV 89512. As a regional center, they are a consolidated primary PSAP that houses both the City of Reno Public Safety Dispatch (Reno 9-1-1) and public safety services for Washoe County.

Reno 9-1-1 operates independently in the center and provides 9-1-1 and dispatch services for the City of Reno Police and Fire, the City of Sparks, and the University of Nevada.

The physical building is owned by Washoe County; the Computer Aided Dispatch (CAD) software is owned by the City of Reno. The center utilizes Harris Radio and Zetron for fire dispatching services. 9-1-1 staff is certified in the use of International Academy of Emergency Dispatch (IAED) protocols for the disciplines of fire, Emergency Fire Dispatch (EFD) and police, Emergency Police Dispatch (EPD). The center dispatches for a total of four fire agencies, including Truckee Meadows Fire Protection District (TMFPD) which serves the unincorporated areas of Washoe County and North Lake Tahoe Fire Protection District.

Washoe County utilizes 3-1-1 to offset the number of non-emergency calls to the dispatch center. They are utilizing NG9-1-1 technology and do have Text to 9-1-1 available.

North Lake Tahoe Fire Protection District (NLTFPD) contracts with Washoe County for dispatch services. The Fire District averages about 2,200 incidents a year, with a full-time residential population of 7000. They serve the communities of Incline Village and Crystal Bay NV.

Figure 6 - North Lake Tahoe FPD Station Locations

4.3 Douglas County 9-1-1 Emergency Services

Douglas County is part of a consolidated regional Emergency Communications Center, named 9-1-1 Emergency Services. 9-1-1 Emergency Services is a primary PSAP, responsible for handling emergency and non-emergency calls for eight primary agencies in Douglas County NV and Alpine County CA, including Tahoe Douglas Fire Protection District. The center is located at 1615 8th St., Minden NV 89423. The department reports to the Douglas County Manager. The center employs Emergency Communications Specialists certified by IAED as EMD and EFD and is recognized by IAED as an Accredited Center of Excellence. They provide dispatch services for East Fork Fire, Tahoe Douglas, Alpine County, Douglas County, and Washoe Tribal. Zetron software is used for fire station alerting. The center is staffed with 12 dispatchers, 3 supervisors and they are a single-stage primary PSAP with the capacity to transfer calls for service to Minden, Nevada Highway Patrol (NHP) and Moana. The town of Kirkwood has rollover capability to Douglas County. The center does have CAD-to-CAD with NHP for interoperability. They communicate with South Lake Tahoe for EMS services via the phone. Douglas County implemented the use of text-to-9-1-1 in January of 2020.

The Tahoe Douglas Fire Protection District (TDFPD) serves the communities of Zephyr Cove, Stateline, Lake Tahoe, and Nevada; this includes 4,998 households and 495 businesses.

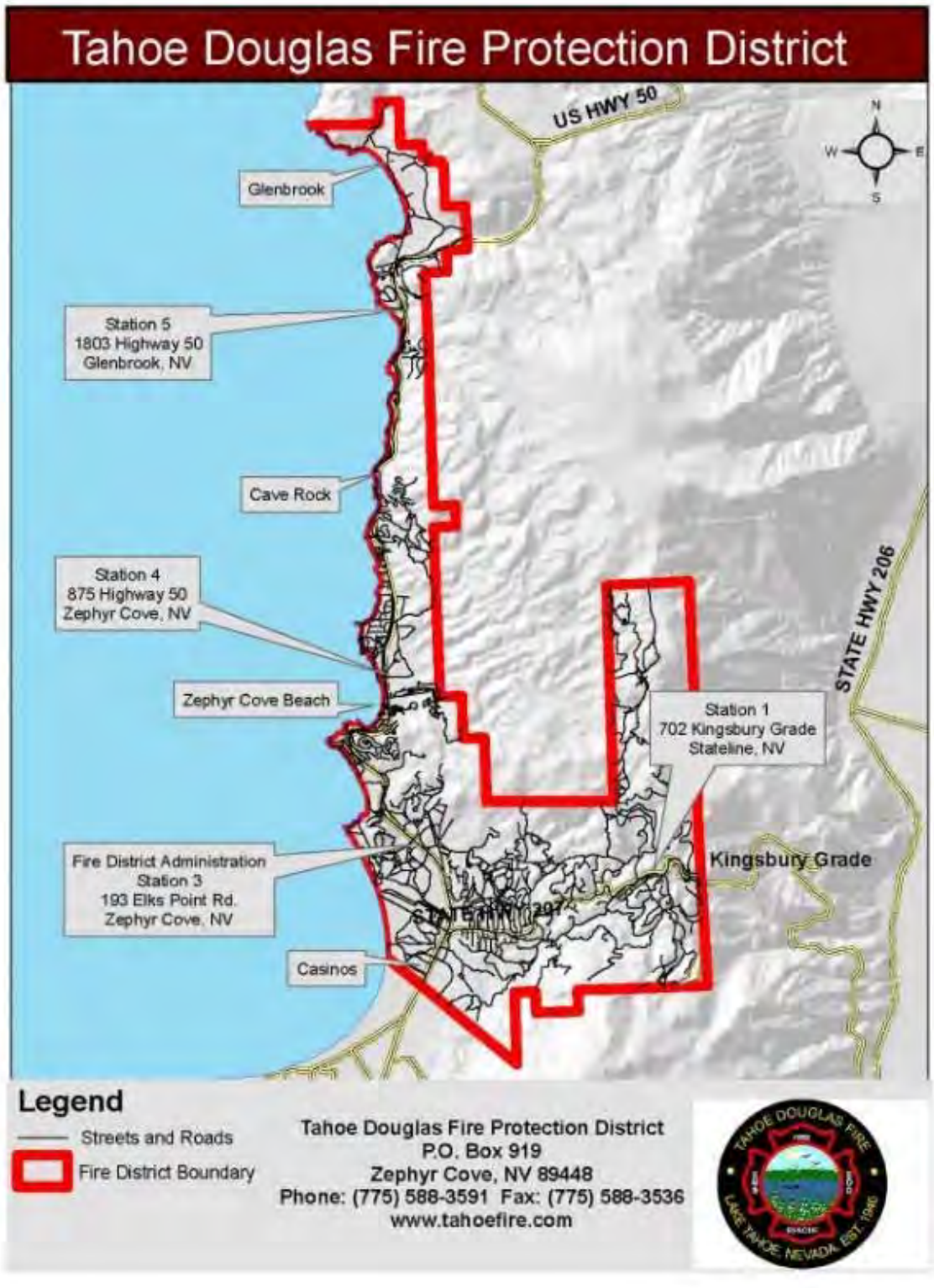

Figure 7 - Tahoe Douglas FPD District Boundary and Station Locations

East Fork Fire Protection District is another of the fire agencies that contracts with Douglas County for dispatch services. East Fork FPD is the largest fire and EMS provider in Douglas County with both full time and volunteer fire and medical personnel and an average of 78,000 calls for service annually.

4.4 South Lake Tahoe Joint Dispatch Center

South Lake Tahoe (SLT) Joint Dispatch Center is a primary PSAP that serves the City of South Lake Tahoe, and unincorporated areas of El Dorado County in the Tahoe Basin to Sierra at Tahoe and Meeks Bay. The center dispatches emergency services for the South Lake Tahoe Police Department, South Lake Tahoe Fire Rescue Department, Cal Tahoe EMS, Lake Valley Fire Protection District, and Fallen Leaf Fire Department. The dispatch center is operated by the South Lake Tahoe Police Department in South Lake Tahoe. The center is located at 1352 Johnson Blvd, South Lake Tahoe CA. Census statistics show the residential population of South Lake Tahoe at 22,036. They have seen a 3% population increase since the 2010 census. The median household income is $48,653. The land area in square miles is 10.16.

The SLT Dispatch Center is part of the California Tahoe Emergency Services Operations Authority which is a Joint Powers Authority (JPA) formed in 2001 for ambulance services. All EMS units in the county of El Dorado are dispatched from two centers. On the western slope 9-1-1 medical emergency calls are routed to the secondary PSAP CAL FIRE Amador El Dorado Unit (AEU) - Camino Interagency Command Center for dispatch service.

California Tahoe Emergency Services Operations Authority (Cal Tahoe) JPA provides ambulance service in the county of El Dorado. Cal Tahoe members include: Lake Valley Fire Protection District, City of South Lake Tahoe Fire Department, El Dorado EMS and Fallen Leaf Lake Community Service District.

Located in El Dorado County, the fire agencies that are dispatched by South Lake Tahoe are:

- South Lake Tahoe Fire Rescue Department
- Lake Valley FPD
- Fallen Leaf FD

Figure 8 - SLT FD, Lake Valley FPD, and Fallen Leaf FD Station Locations

4.5 Carson City Public Safety Emergency Communications Center

The Carson City Public Safety Emergency Communications Center is a division of the Sheriff's Office and dispatches for Carson City Fire Department, Carson City Sheriff's Office, and all other city departments after hours. They are a primary PSAP located at 911 E. Musser St., Carson City NV 89701. The center uses IAED EMD protocols.

Figure 9 - Carson City FD Station Locations

4.6 Service Levels, Calls for Service by Center

ICTAP staff placed a specific focus on collecting data from the five command/dispatch centers that are currently responsible for providing dispatch services for the 11 fire agencies in the Tahoe Basin. When analyzing service levels, ICTAP staff looked both at the command/dispatch center annual service level, along with the individual fire agencies. It is important to look at the service levels from both of these angles as one of the benefits to a Bi-State Regional Command Center is to help offset the workload on each of the existing centers. Through this process, the topic of staffing to meet the ever-growing calls for service and dependencies on the dispatch centers was voiced by many of the participants.

Table 3 - Call Volume Data

Command / Dispatch Center	Center Call Volume	Fire Agency	Call Volume by Fire Agency
CAL FIRE Grass Valley Emergency Command Center	112,000	North Tahoe Fire Protection District / Meeks Bay Fire Protection District	2,536
		Squaw Valley Fire Department	555
		NorthStar Fire Department	500
		Truckee Fire Protection District	2,659
Washoe County	101,176	North Lake Tahoe Fire Protection District	2,236
Douglas County	78,000	Tahoe Douglas Fire Protection District	2,181
South Lake Tahoe Joint Dispatch Center	48,000	South Lake Tahoe Fire Rescue Department / City of South Lake Tahoe	7,096
		Lake Valley Fire Protection District	170
		Fallen Leaf Fire Department	95
Carson City	42,120	Carson City Fire Department	10,558
Total Call Center Volume:	**381,296**	**Total Fire Agency Call Volume:**	**28,586**

4.7 Staffing

EMS, Fire and Police departments must meet specific standards of staffing. It is equally important that dispatch/command centers also meet a standard of staffing. The Association of Public Safety-Communications Officials (APCO) Project RETAINS (Responsive Efforts to Assure Integral Needs in Staffing) set out effective practices to serve as a staffing guideline for public safety communications agencies. The Commission on Accreditation for Law Enforcement (CALEA) sets standards of definitions for PSAP centers. The National Fire Protection Agency (NFPA) includes call intake time when measuring response times. The performance of law and fire are both directly impacted by the 9-1-1 center.

The existing consolidation models used by CAL FIRE have USFS located in the same building, but the emergency dispatchers are not cross trained across both agencies. CAL FIRE staff can take on the workload of USFS after hours, while the USFS dispatch staff does not assist with the CAL FIRE 9-1-1 services during periods of peak activity. USFS is responsible for 80% of the land (federal) in the Tahoe Basin. A Bi-State Regional Command Center would offer the opportunity to balance staffing, allowing for the ability to reallocate staff resources based on demand.

If it is agreed that the goal is for migration of fire dispatch services to a Bi-State Regional Command Center, meaning that if none of the existing centers will be closing, decisions will have to be made regarding if dispatch staff will be laterally hired or recruited from the existing centers to work in the Bi-State Regional Command Center. In a regional command center, there will need to be staff trained to process the available technologies, relieving the expectation that this task be added to the already full plate of the emergency dispatcher.

In the assessment of staffing, the current staffing of each command/dispatch center should include the total number of full-time employees (FTE) and part-time employees (PTE). To fully understand the merits of a migration model, such as a regional command center, the current agencies must collect transparent data that can be equally measured.

Table 4 - Command Center Staffing

Command Center	CAL FIRE Grass Valley	Washoe County	Douglas County	South Lake Tahoe	Carson City
Total Budgeted Staff	21	31 dispatch only	16	11	19
FTE Comms	14	29	15	7	19
PTE Comms	0	0	0	0	0
Actual Staff	13	29	12	7	
PSAP Seats	9 / 6 radio	7	8	4	6
Supervisory Staff	5	5	3 / +1 director	1	6**
Admin Staff	1	0	1 PTE	1	0
IT Staff	1	1	*	2 entire city	City IT

* Douglas County IT staff is provided by county
** Carson City 6 supervisors and 1 manager included in the 19 FTE Comms staff

The stakeholders should work with the existing five command/dispatcher centers to assess if their current staffing levels are adequately meeting the needs of their service levels. There are tools available, such as the APCO Project RETAINS Toolkit, that can help in determining adequate staffing. Building this data will set a baseline to identify what the current staffing problems are for each of the centers. This data can then drive the analytics needed to determine the appropriate staffing of a Bi-State Regional Command Center.

As the process evolves additional factors of staffing will need to be taken into consideration. If transferring or laterally hiring staff from the current centers, the physical location of the Bi-State Regional Command Center could impact the level of interest in the new position. If hiring staff that are new to the industry, adequate plans for training will need to be in place. Further elements to take into consideration when staffing a public safety emergency command center is the impact of vacation, sick, or paid time off (PTO) and staffing.

4.8 Other PSAPs in the Region

The California Highway Patrol (CHP) has a primary PSAP located in Redding which covers their Northern Division and a PSAP located in Sacramento providing services to the Valley Division. CHP is building a new facility in Truckee; there will not be dispatch services at that location.

The CHP Redding Communication Center (RCC) is the largest of the five dispatch centers in the Northern Division. Their service area spans to the Nevada border. RCC also provides dispatch services for Caltrans after-hours, weekends, and holidays. The CHP Valley Division has four communications centers that encompass ten different counties. Their service area spans to the east to include South Lake Tahoe.

4.8.1 Sierra Front Interagency Dispatch Center

Sierra Front Interagency Dispatch Center (SFIDC) is located in Minden, NV. They are the local interagency ordering point for mobilizing resources for wildland and prescribed fires in Western NV and the Eastern slope of the Sierra Nevada Mountains known as the Sierra Front area.

Figure 11 - SFIDC Coverage

4.8.2 Placer County Sheriff's Office

The Placer County Sheriff's Office Dispatch is the primary PSAP for Placer County from the Sacramento County line to the Nevada state line at Lake Tahoe. The Placer County Sheriff's Office Dispatch is located in Auburn, CA. The annual call volume is approximately 40,000 9-1-1 calls and 130,000 non-emergency calls. Placer County Dispatch transfers fire calls for service to Grass Valley who then dispatches Northstar Fire Department. Placer County is in the process of implementing a 2-1-1 system, which can be used to help quickly disseminate information during wildfires.

4.8.3 Camino Interagency Command Center

The CAL FIRE Camino Interagency Command Center - AEU is located at 2840 Mt. Danaher Rd., Camino CA 95709 and are responsible for State and Federal operations in the Tahoe Basin. They serve as the secondary safety answering point (SSAP) for all fire resources on the west slope of El Dorado County and all fire resources in Amador County. AEU is an Interagency Command Center co-located with USFS. As an interagency dispatch center with USFS they are responsible for the Federal areas of the entire Tahoe Basin both in California and Nevada, including all 5 counties that are in the basin. They have approximately 40,000 calls for service annually. AEU does not dispatch any of the local public safety agencies located within the Tahoe Basin.

4.8.4 State of Nevada, Communications Bureau

The Carson City Communications Center Manager is Tawanna Walker. This secondary PSAP serves the State of Nevada's Law Enforcement agencies, including the NHP. They interact with other agencies via telephone, radio and a CAD interface. Nevada Department of Public Safety (DPS) Richard Burger, Radio Administrator was available to provide information on radio technology. NHP provides traffic related communication to Nevada Department of Transportation (NDOT).

4.8.5 Regional Emergency Medical Services Authority (REMSA)

The Regional Emergency Medical Services Authority (REMSA) is a private, non-profit emergency medical services (EMS) provider for Washoe County. Additionally, they serve an 11-state western region with their air ambulance program. Washoe County Dispatch utilizes REMSA for medical 9-1-1 calls and mass casualty incidents (MCI), as they have connectivity to the area hospitals. REMSA staff are EMD certified by the IAED.

4.9 Transportation & Traffic Management Agencies

Transportation, traffic management, and safety agencies have been working proactively in California and Nevada utilizing analytics to identify at-risk areas and harnessing technology to share and disseminate real-time traffic information to both public and private entities. Traffic planning and incidents have a direct impact on public safety responses. A minor accident blocking traffic can impede a fire crew's ability to quickly respond to a fire incident.

4.9.1 Tahoe Transportation District (TTD)

The Tahoe Transportation District (TTD) is responsible for facilitating and implementing safe, environmentally positive, multi-modal transportation plans, programs and projects for the Lake Tahoe Basin, including transit operations in both California and Nevada. As a bi-state district, they have a public-private partnership to ensure adequate representation. The board is made up of four county representatives, City of South Lake Tahoe, and Carson City, as well as non-voting members from CalTrans and NDOT. There is also one private business representative and the Transportation Management Association. The structure of the board is currently in a transitional period and is in the process of adding two governor representatives and a Tahoe Regional Planning Agency (TRPA) representative.

4.9.2 Nevada Department of Transportation (NDOT)

NDOT provides public safety assistance across the state of Nevada, including assistance through the freeway service patrol program in the Reno/Sparks and Las Vegas metropolitan areas. NHP will call the NDOT road operation center and Freeway Service Patrol (FSP) will be dispatched to assist with traffic control and/or clearing disabled vehicles from the roadway. When incidents require full road closures, NHP will request for NDOT Maintenance to provide full traffic control services for the duration of the incident. NDOT is a member of the Traffic Incident Management (TIM) Coalition which is a coordinated multi-agency, multi-disciplinary, and multi-jurisdictional program that improves safety by training to implement safe, quick clearance of crashes. Early removal of vehicles, debris and injured parties has demonstrated a significant decline in secondary crashes and saves lives of first responders, incident victims and other motorists.

NDOT operates programs such as 5-1-1, Hazmat Emergency Response, and Wrong Way Driver detection, which uses radar and closed-circuit cameras to detect vehicles going the wrong way. NHP, NDOT and the Regional Transportation Commission of Southern Nevada (RTC) all use Waycare, Artificial Intelligence (AI) software.

4.9.3 California Department of Transportation (Caltrans)

Caltrans manages more than 50,000 miles of California's highway and freeway lanes, provides inter-city rail services, permits more than 400 public-use airports and special-use hospital heliports, and works with local agencies. Caltrans carries out its mission of providing a safe, sustainable, integrated and efficient transportation system to enhance California's economy and livability, with six primary programs: Aeronautics, Highway Transportation, Mass Transportation, Transportation Planning, Administration, and the Equipment Service Center.[2] Caltrans District 3 serves the California counties of Butte, Colusa, El Dorado, Glenn, Nevada, Placer, Sacramento, Sierra, Sutter, Yolo, and Yuba. Similar to NDOT and NHP, Caltrans has an FSP with CHP.

4.9.4 Collaborative Traffic/Transportation Efforts

Traffic and Transportation partners play a vital role in assisting with the safety of the public and first responders. During the Tubbs/Santa Rosa wildfires of 2017, 370 people were rescued by transit operations. There are collaborative efforts at work in the Tahoe Region, such as the TTD's 2016 Linking Tahoe Corridor Connection Plan (LTCCP) and the Transit Master Plan identification of the critical need for cross-jurisdictional Intelligent Transportation System (ITS),

[2] https://dot.ca.gov/about-caltrans

information and communication technology to decrease accidents and congestion, improve response times and provide traveler information. 2014 cellular data indicated approximately 19.5 to 29 million visitors to the Tahoe Basin in any given year, with 42% of those travelers coming to the area for day use and 58% overnight. The majority of visitors access the region on the two-lane mountain highway system.

The private sector in the region, specifically resort associations, have more detailed data regarding traffic and visitor traffic. Visitors to the region are willing to sit in traffic for 8 hours for the Tahoe experience; this becomes a huge transportation issue and can contribute to larger public safety issues. Unfamiliarity with the region's highway system, adverse road conditions, or an accident on the two-lane highway can all add to safety issues in the region. Increased Broadband coverage to provide greater access to transportation applications, along with sharing of existing information platforms across public and private sectors, are solutions that can be implemented either in a regional command center or across existing DOT and emergency communications centers.

5 Legal Authority and Governance

There is currently no governance model or plan for sharing costs. When undertaking a project of this scale and scope, the lack of governance can lead to political challenges. A governance model needs to be established by way of a neutral control group, such as a user board. This user board should serve as leaders and liaisons of the project. The introduction of a neutral control group should allow each agency to act as an independent customer and set standards to alleviate any undue financial burden on any one agency that may act as the host.

The establishment of a governing board to facilitate communications when it comes to the expectations of the participating agencies is crucial to the success of migrating services to a Bi-State Regional Command Center. This model can promote the development of Standard Operating Procedures (SOP) and cooperative agreements. Having clear governance in place will help reduce liability concerns for involved agencies and potential staff. Lack of cooperative agreements can cause unnecessary tension between agencies due to a lack of understanding.

The Tahoe Basin is a complex environment with multiple stakeholders in the region with competing priorities. There are 11 fire agencies engaged in the project at this point in addition to the 28 PSAPs that provide some level of emergency communications service in the region. All of the engaged parties can agree that interoperability needs to be improved, but some of the agencies want to maintain their autonomy. It is because of these expectations that the early establishment of a governing structure is important if the region moves forward with the migration of dispatch services to a centralized center. Along with establishing an executive user board, sub-committees specific to operations and technology can be developed to ensure regular communications and engagement of stakeholders.

Adding to the complexity of the region is the uniqueness of California Proposition 172, the Local Public Safety Protection and Improvement Act of 1993; a sales tax dedicated to local public safety services. Having an executive user board in place to liaison with local and state government will be an important piece of this project.

The Red River Regional Dispatch Center was the first consolidated dispatch center in the nation to cross state lines to manage public safety communications and dispatch services. Through a JPA the cities of Moorehead MN and Fargo ND, and their respective county entities, transitioned from independent dispatch agencies to a joint dispatch center. The initial step in that process was to establish the Red River Regional Dispatch Center (RRRDC) Board of Authority. Below is the governance model they utilized for their executive board and dispatch center structure.

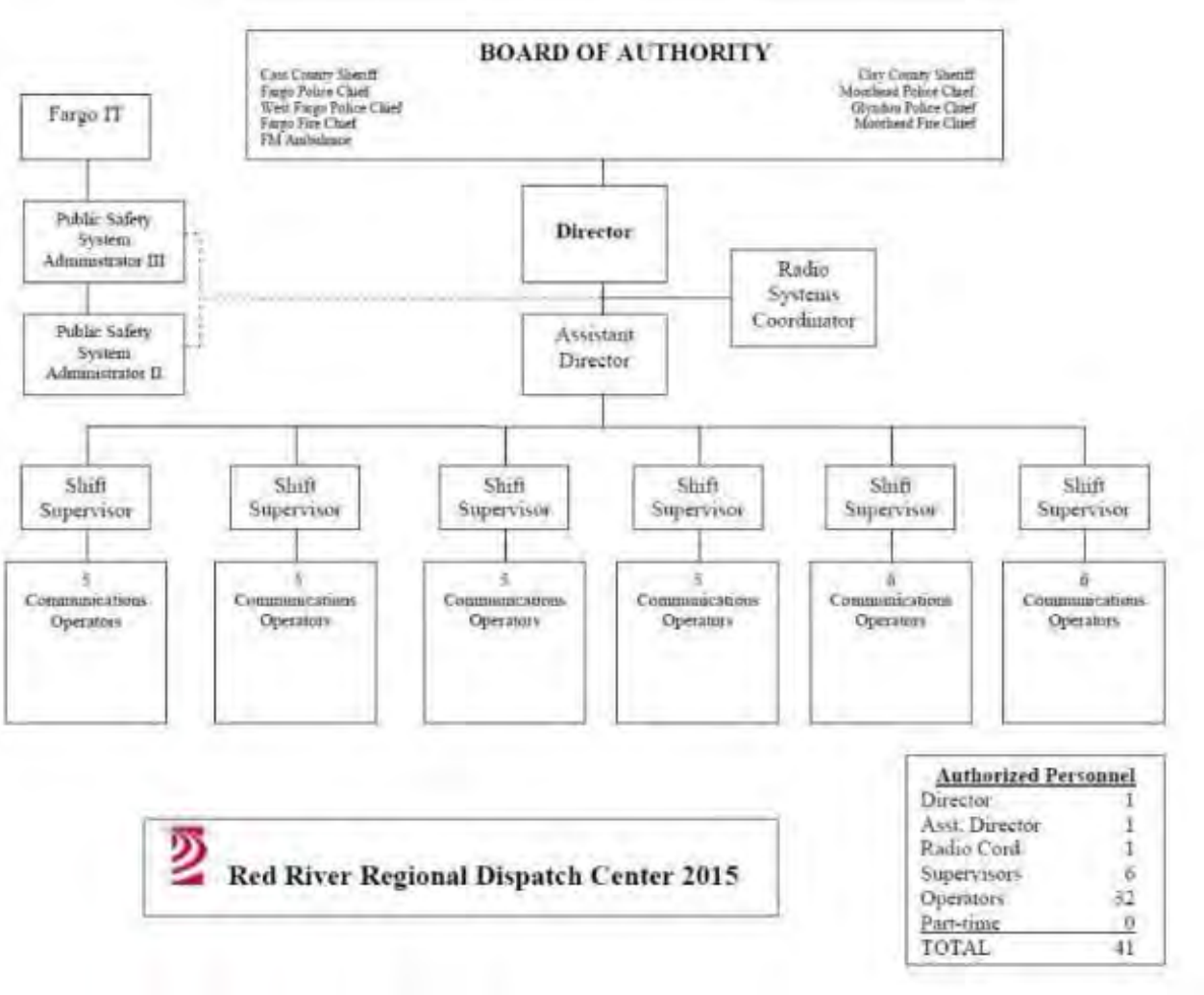

Figure 12 - Red River Regional Dispatch Center 2015

The RRRDC model is one that the Tahoe group could use as an example as they move forward with this project. Another agency that has a consolidated governance model to review for this project is the Consolidated Emergency Communications Bureau[3], State of Maine which operates three regional communications centers across Maine that provide both PSAP and emergency dispatch services for police, fire, and emergency medical services.

In order to successfully migrate services to a Bi-State Regional Command Center, the stakeholders will need to survey for a neutral entity to establish a governance model. They could then utilize the governance model to facilitate the development of an executive user board with representation from each agency. Establishing structure for executive direction and decision making related to a Bi-State Regional Command Center is an important step for success; it cannot be stressed enough that input from stakeholders all the way down to frontline staff must be included. An implementation team should be created as part of the governance model.

This governance model could oversee the project and any future expansion opportunities and facilitate cooperative agreements between involved agencies. There are current mutual aid agreements (MAA) and JPAs in place that could be built upon. The governance model should be the authority to create a framework for SOP development. To assist with moving forward, the executive user board could create technical and operational sub-committees to work on developing memorandums of understanding (MOU) and operating guidelines, along with making recommendations on technology needs.

[3] Department of Public Safety Consolidated Communications Bureau State of Maine https://www.maine.gov/dps/bec/

6 Equipment and Capabilities Assessment

This section includes information regarding the current system elements and recommendations to consider if the decision is made to migrate the existing emergency communications structure in the region into a Bi-State Regional Command Center.

6.1 Computer Aided Dispatch & Record Management Systems

Each of the existing command centers that provide dispatch services for the 11 fire agencies use separate CAD systems that do not have an interface to share data of calls for service. Transitioning the fire dispatch services to a Bi-State Regional Command Center will alleviate some of the known issues related to a lack of CAD-to-CAD interface such as duplicate dispatches, but it will not solve all of the issues. The Bi-State Regional Command Center would still be functioning primarily as a secondary answering point, receiving the information from the initial answering PSAP. Beyond implementing a consolidated center or transitioning services to the Bi-State Regional Command Center, stakeholders in the Tahoe Basin should consider researching CAD-to-CAD interface options to streamline information sharing across the command centers without relying on telephone or radio communications.

A key function of a CAD system is to interface with agency records management systems (RMS) in order to share data between CAD and RMS immediately, alleviating the need for redundant data entry.

If consideration is going to be taken to include a transportation/traffic element in the command center, all staff will have to complete training and certification to meet Criminal Justice Information Services (CJIS) requirements for access to law enforcement sensitive data, such as vehicle license plate information.

Table 5 - Existing CAD Systems

Center	CAD Vendor	Version	Interface with Other Agency
CAL FIRE NEU Grass Valley	Northrop Grumman	86	No
Carson City	Tiburon (CentralSquare)	2.9.1	No
Douglas County	Spillman	2018.2.13.343	NHP
South Lake Tahoe	Cyrun Alliance	v7.0.4.3318	No
Washoe County	Tiburon (CentralSquare)	2.9.1 of Total Command PC	No

6.2 IncidentView

While not a true communications system, ICTAP touches on the IncidentView® app in this section because of the amount of data it provides to first responders throughout the Tahoe Basin. IncidentView is a third-party app for first responders. It provides quick, graphically displayed access to critical tactical information. The IncidentView app features include automatic vehicle location (AVL), address point search/routing, local fire infrastructure data, and display of preplanned incident responses. What makes this special is the amount of local data that has been integrated into the app by the partnership of North Tahoe FPD and Truckee FD. After the initial investment in both time and money to get the data into the system, the partners shared the app and data with neighboring agencies to allow the system to spread throughout the Tahoe area as well as into the CAL FIRE NEU dispatch center. This is a best practice in interoperable communications.

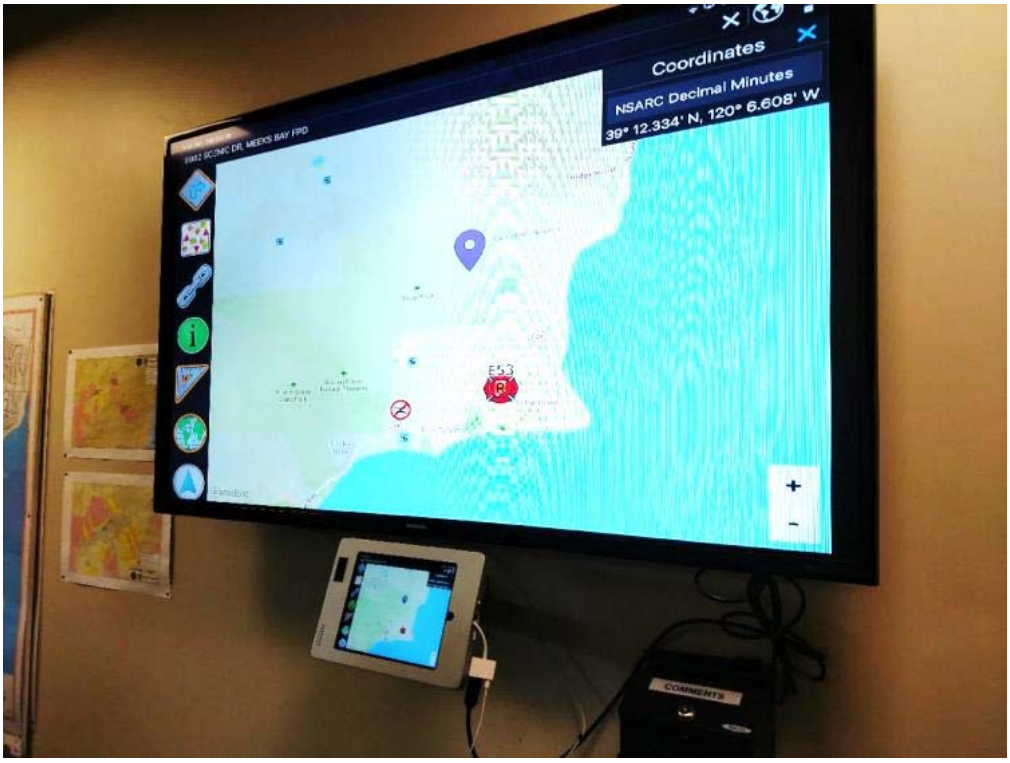

Figure 13 - IncidentView® Station - North Tahoe Fire

6.3 Radio Systems

The Tahoe Basin radio communications system is comprised of federal, state, county and local systems. The geopolitical boundaries of the Basin have two states, five counties and one city with operational responsibilities. This operations assessment report is limited in scope to potentially developing a Bi-State Regional Command Center. The proposed Bi-State Regional Command Center will have limited law enforcement responsibility in that the County Sheriff Offices dispatch will remain within the existing Counties' dispatch centers. This Bi-State Regional Command Center will primarily be for local fire agencies, the original 11 signatories of the April 23, 2019 letter (A. Regional Dispatch Letter 2019):

The original 11 signatories are as follows:

- North Tahoe FPD
- Meeks Bay FPD
- Squaw Valley FD
- Northstar FD
- Truckee FPD
- South Lake Tahoe Fire Rescue Department
- Lake Valley FPD
- Fallen Leaf FD
- North Lake Tahoe FPD
- Tahoe Douglas FPD
- Carson City FD

The proposed Bi-State Regional Command Center would need to be able to conduct over the air radio dispatch for any and potentially all of the above agencies if, in the future, they decide to join the center. To accomplish the radio dispatch, the proposed center could take over the existing radio systems, either completely or just by providing the capability to communicate on the frequencies as they exist, make changes to the existing systems such as change out radios and frequencies, or develop a completely new combined radio system. The following is a very simple description of each of the existing dispatch communication systems.

With the limitations of the scope of the proposed Bi-State Regional Command Center being in support of the above fire agencies, this radio systems review will be limited to the radio systems, talkgroups, channels, and frequencies that directly affect the dispatch of these agencies.

This section will also touch on the communications and interoperability with the United States Department of Agriculture (USDA) Forest Service Lake Tahoe Basin Management Unit and the two California Department of Forestry and Fire Protection (CAL FIRE) operational areas in the Tahoe Basin.

There is some limited consolidation of fire agency dispatch in the Tahoe area and this section of the report will begin with these dispatch centers.

6.3.1 CAL FIRE Nevada-Yuba-Placer Unit (NEU)

As part of the Eastern Placer County Fire Chiefs JPA, the CAL FIRE Grass Valley NEU Emergency Command Center (ECC) provides dispatch services for North Tahoe FPD, Meeks Bay FPD, Squaw Valley FD, Northstar FD, and Truckee FPD. These dispatch services are conducted over a CAL FIRE channel called NEU East.

Figure 14 - NEU East Radio Site

NEU East is a repeated VHF pair (154.130 MHz TX, 159.495 MHz RX). This is the official dispatch channel for the NEU eastern operational area. FCC call sign WPMF290 provides the licenses for the CAL FIRE sites including the control stations at 10152 Keiser Ave, Truckee CA and the Truckee Airport. FCC call sign WQHS535 added three of the four additional JPA required sites. There are several points of interest on the JPA sites:

- The site labeled as SW of Highway 50 & 89 JPA, while licensed for the NEU East frequency, does not have any radio equipment installed.
- The Snow Valley Peak JPA site does have radio equipment installed and in use but does not have an active FCC license.
- The radio equipment at the JPA sites was provided by the JPA partners and is jointly maintained by the JPA and CAL FIRE.
- CAL FIRE holds all the frequency licenses for all sites regardless of radio ownership.
- All NEU East radios operate on a single pair; Continuous Tone Coded Squelch System (CTCSS) is used on each mountaintop in an attempt to separate the radio traffic (more on CTCSS later in this section).

Figure 15 - Console Tone Remote Selection

All of the existing radio systems are conventional, analog and operating in the VHF frequency band.

The CAL FIRE radio system is a very simple line of sight (LOS) system. The system uses a Telex Radio Dispatch DSP-223 tone-remote adapter to provide a means of remotely controlling the two-way radio base stations. The dispatch operator selects the channel, in this case, “NEU E”, and then selects the tone. The CAL FIRE system limits it to 16 potential tones (see Figure 15). These tones are used to “set up” the remote DSP-223. The DSP-223 then sets, according to how the user programs the unit, the proper CTCSS for the mountaintop repeater and keys up the control station radio. This control station sends radio frequency (RF) to the mountaintop radio with the required CTCSS to break squelch on the repeater.

For the JPA radios, there is a minor change. The Grass Valley site does not have LOS to the three JPA mountaintops. To overcome this, CAL FIRE sends the audio (with remote tone) over the state microwave to DOT Truckee, located at 10152 Keiser Ave, Truckee CA, to a remote DSP-223 that keys a control station. An alternate path is available; it is a leased copper line from Grass Valley to CAL FIRE Station 50 at the Truckee airport. This leased line connectivity is not switch protected and if a failure occurs on the microwave the dispatcher has to physically move the audio from the microwave to the leased line.

CTCSS

To allow CAL FIRE to make the most of their reuse of the NEU East frequencies, they make heavy use of CTCSS tones. Each discrete channel utilizes a separate sub-audible tone for its use. For example, all three NEU East JPA channels operate on a 154.130 MHz TX, 159.495 MHz RX frequency pair but each mountaintop has a discrete CTCSS tone. In this system, the sub-audible tone can also be referred to as a PL tone (private line tone). The CTCSS tone is a sub-audio frequency that the radio utilizes to filter out the speech of other radio user's

transmissions on the same frequency in the area. The use of separate sub-audible tones allows for reuse of frequencies and squelches out unwanted transmissions. The use of CTCSS tones does not eliminate interference. To ensure no interference, the user would be required to look at the receive indication light on the radio or monitor the channel (disable the sub-audible tone filter) before transmitting. Another subscriber may be using the RF frequency with a different tone at an adjacent location. If a radio user was to transmit on the frequency while another user on a different PL tone is on the same frequency, interference could occur. The CTCSS tone, when enabled, keeps a subscriber from having to listen to a radio conversation to which they have no interest. The sub-audible tone does not prevent interference at the RF level. Two users in overlapping coverage areas (an example would be Mt. Pluto and Squaw Peak) can cause considerable interference to each other's important conversation. The sub-audible tone merely selects which group of users to listen to and transmit to; it does not prevent two RF transmissions on the same frequency in the area from interfering with each other.

These limitations are exacerbated on the JPA sites due to the fact that all audio to/from the JPA sites needs to be transmitted and received on the single control station and tone remote for transmission to/from Grass Valley. Only one radio can hold the squelch of the control station at a time, regardless of urgency. Due to the RF connectivity to/from Grass Valley, the dispatchers do not have priority, they are effectively just another subscriber on the system.

6.3.2 South Lake Tahoe Joint Dispatch Center

The South Lake Tahoe Joint Dispatch Center, located at 1352 Johnson Blvd, South Lake Tahoe CA provides dispatch services for the City of South Lake Tahoe fire and police, Lake Valley FPD and Fallen Leaf FD.

The present communications system is a disparate group of radios that separately support South Lake Tahoe fire, South Lake Tahoe police, Lake Valley FPD and Fallen Leaf FD. The radios for these groups have been installed and relocated over years at various sites in the South Lake Tahoe area in an attempt to provide adequate coverage. The City of South Lake Tahoe, at the time of this report, has an RFP out for bid that will redesign their entire system, hopefully eliminating some of these disparities, fix their known coverage issues, and simplify dispatch. The focus of this report will be on the system as it is at the time of writing.

All of the existing radio systems are conventional, analog and operating in the VHF frequency band.

South Lake Tahoe Police Department

The police radio system is a simple, single-site transmitter located at South Lake Tahoe Joint Dispatch Center and a somewhat complex and marginally successful voted multiple receivers. The police department receive only sites are South Lake Tahoe high school, Fire Station 3, Tahoe Keys, Resort at Ski Run, and the South Tahoe Public Utility District (STPUD) water tank. During a previous radio study on the system, it was found that, due to poor site location or poor antenna location, or a combination of both, the high school, Fire Station 3 and Tahoe Keys receivers are seldom used, with the bulk of the receive activity on the Resort at Ski Run, and the STPUD water tank receivers. The Resort at Ski Run and STPUD water tank sites are at the two ends of Ski Run Blvd. This combination of the single transmit site and the two primary receiver sites both on Ski Run Blvd greatly limits city-wide coverage.

Dispatch has wireline control of the transmitter and all of the voted receivers. The wireline connectivity to/from the radio sites is over outdated and limited supported copper lease lines. At some point in the near future migration to either leased fiber or wireless technology (microwave) will be required. See Figure 16 for South Lake Tahoe police radio site locations.

Figure 16 - South Lake Tahoe Police Radio Sites

As shown in Figure 16 above, the single transmitter site at the dispatch center (1352 Johnson) and the two busiest receiver sites form a tight triangle in the northeast section of the city. The transmitter site at dispatch sits in a low spot in the city, greatly reducing the talk out coverage from this site. Note that the dispatch site is approximately 44 feet above the surface of the lake. The tower is small with an approximate antenna height of 80 feet, placing the transmitter antenna below the treetops on the site. The combination of a low elevation site and a low antenna height has the transmit signal greatly limited due to terrain variations and foliage absorption.

FCC license WCP351 shows the police dispatch frequency licensed at both 1320 Johnson and 901 Ski Run. At the time of this writing, there is no transmitting capability at 901 Ski Run. On a side note, the FCC license physical lat/long location for 901 Ski Run is off; the lat/long location is at the opposite end of Ski Run Blvd.

South Lake Tahoe Fire

The South Lake Tahoe Fire dispatch radio (FCC call sign KJD298) has been on the move in recent years. The FCC license shows the radio site location as a water tank located near Keller and Sherman. According to the South Lake Tahoe radio support contractor, the Keller and Sherman water tank has been abandoned and the fire dispatch radio has been relocated to the STPUD water tank. The fire radio may ultimately relocate to Angel's Roost located on the Heavenly Ski Resort.

It is the belief of the South Lake Tahoe communications support contractor that dispatch has wireline control of the transmitter at its present location on the STPUD water tank. It is unknown if the city will be able to provide wireline connectivity to the proposed Angel's Roost site. Wireline connectivity is over outdated and limited supported copper lease lines. See Figure 17 for South Lake Tahoe fire radio site locations.

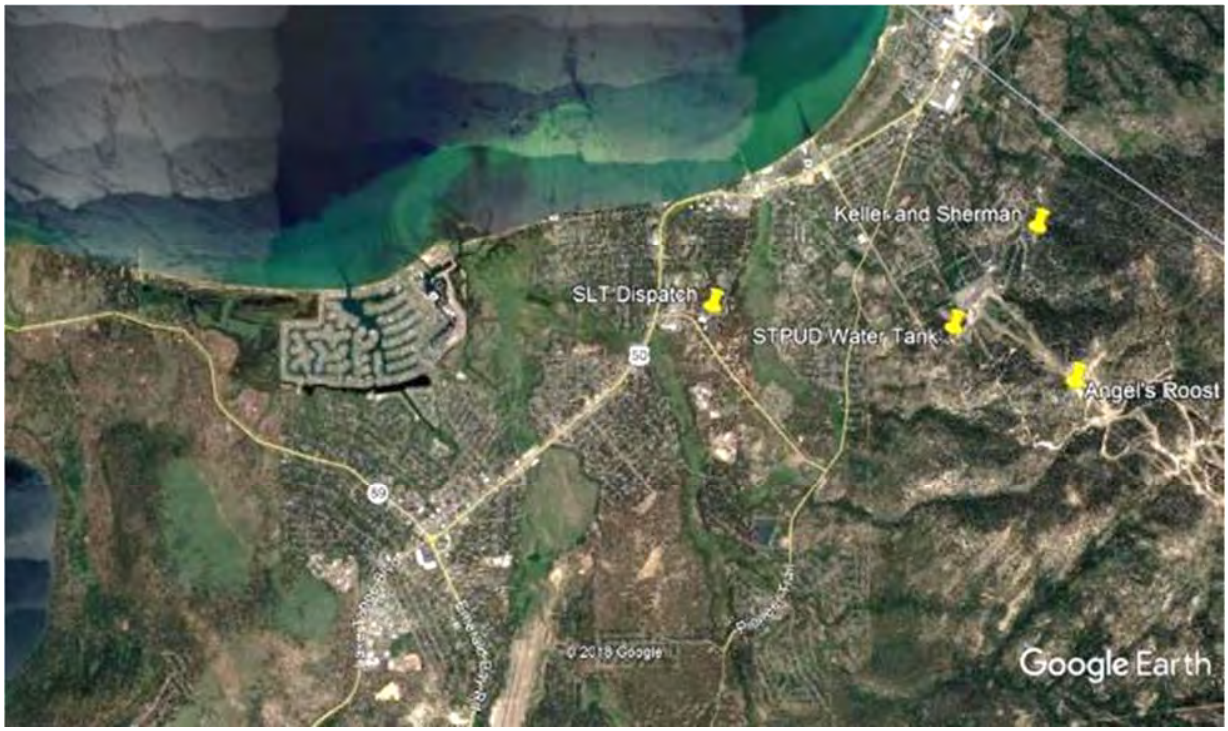

Figure 17 - South Lake Tahoe Fire Radio Sites

Lake Valley FPD and Fallen Leaf FD

The primary Lake Valley FPD and Fallen Leaf FD radio dispatch site is called Angora or Angora Ridge. The dispatch frequency operates under FCC license call sign WNFI481. The secondary radio dispatch site is called Echo and is located at the top of Sierra-at-Tahoe Resort. At the time of this writing, the Echo site was unusable and off the air. See Figure 18 for Lake Valley FPD and Fallen Leaf FD radio site locations.

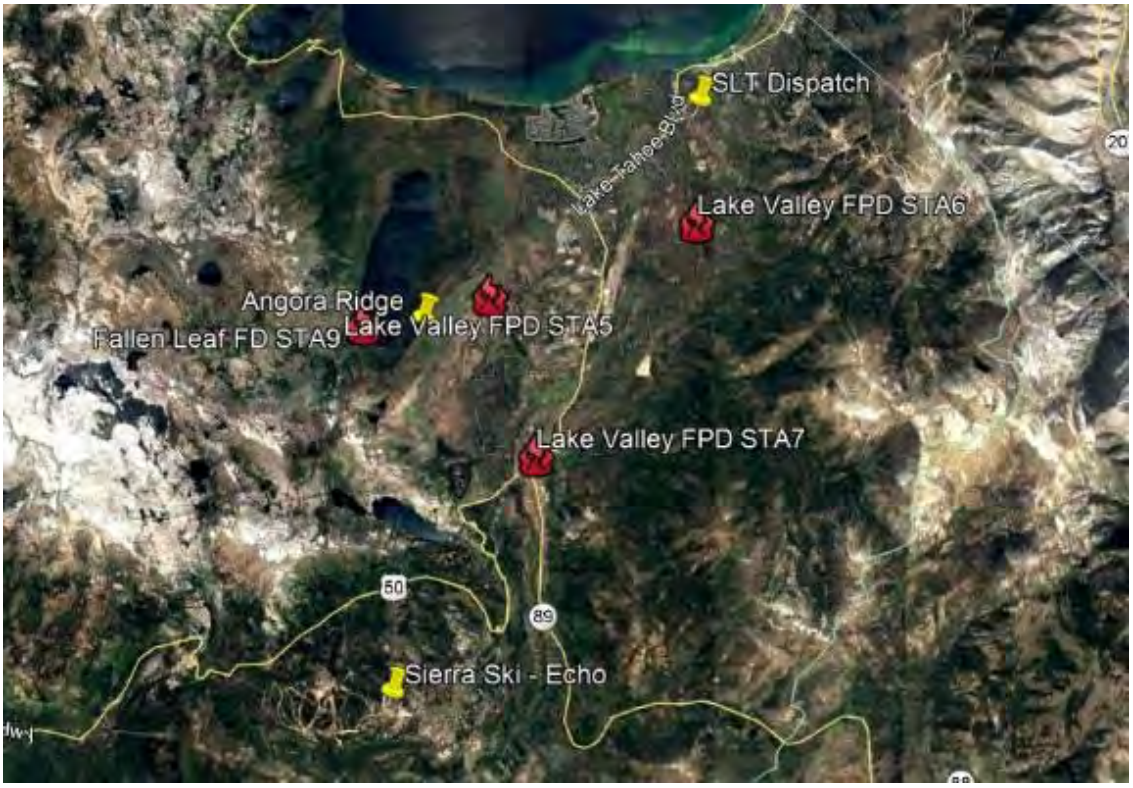

Figure 18 - Lake Valley FPD and Fallen Leaf FD Radio Sites

Figure 18 above shows the two existing radio sites, Angora Ridge (primary) and Echo (secondary), the existing Lake Valley FPD and Fallen Leaf FD fire stations and their relationship with the South Lake Tahoe Dispatch center.

6.3.3 North Lake Tahoe FPD

North Lake Tahoe FPD (NLTFPD) is dispatched out of the Washoe County Regional Dispatch, 5195 Spectrum Blvd., Reno NV.

In contrast to all of the other fire department radio systems in the region that are simple, conventional radio sites operating in the VHF spectrum, the Washoe County system is a fairly complex, multiple site, trunk system operating in the 700/800 MHz frequency band. The system is known as the Washoe County Regional Communications System (WCRCS). The radio system technology utilized is the L3 Harris Corp EDACS®. EDACS is a proprietary system and is not APCO-25 (P-25) Common Air Interface compliant. Note that the County is fielding a small testbed P-25 system with the plans to replace the EDACS with a P-25 compliant system in the near future.

The County's system operates from ten sites in the county with three of the sites having direct coverage in the Tahoe area. The primary coverage in the Tahoe Basin is from the Crystal Bay water tank and Snowflake Lodge; these sites form a two-site simulcast. The third county site with some high-level coverage of the area is Mt. Rose.

There are two other sites in the Basin: North (1030 Skyline, Tahoe City) and South Tahoe (4274 Saddle Road, South Lake Tahoe), owned and operated by NV Energy (NVE). They are part of the Nevada Shared Radio System (NSRS), of which Washoe County is a partner along with NVE and NDOT. The three radio systems are maintained by their individual agencies but are combined into a "system of systems" approach providing system users with a very wide potential operational footprint. NLTFPD can utilize any of these NSRS sites; automatic roaming is a function of the system.

NVE did note that when their system completes the migration to P-25 the North and South Tahoe sites will be removed, limiting coverage to the WCRCS sites.

NDOT does have a very low-level site near the intersection of highways 50 and 28. The site has a very limited coverage area. NDOT does have plans to add a new site in the southwest part of the lake at Tahoe Mountain. There is also a possibility of NDOT expanding to a couple of proposed sites on the western shore. At the time of this writing, the sites on the western shore had not been decided. Adding Tahoe Mountain and a second site on the western shore would greatly enhance roaming on the NSRS system.

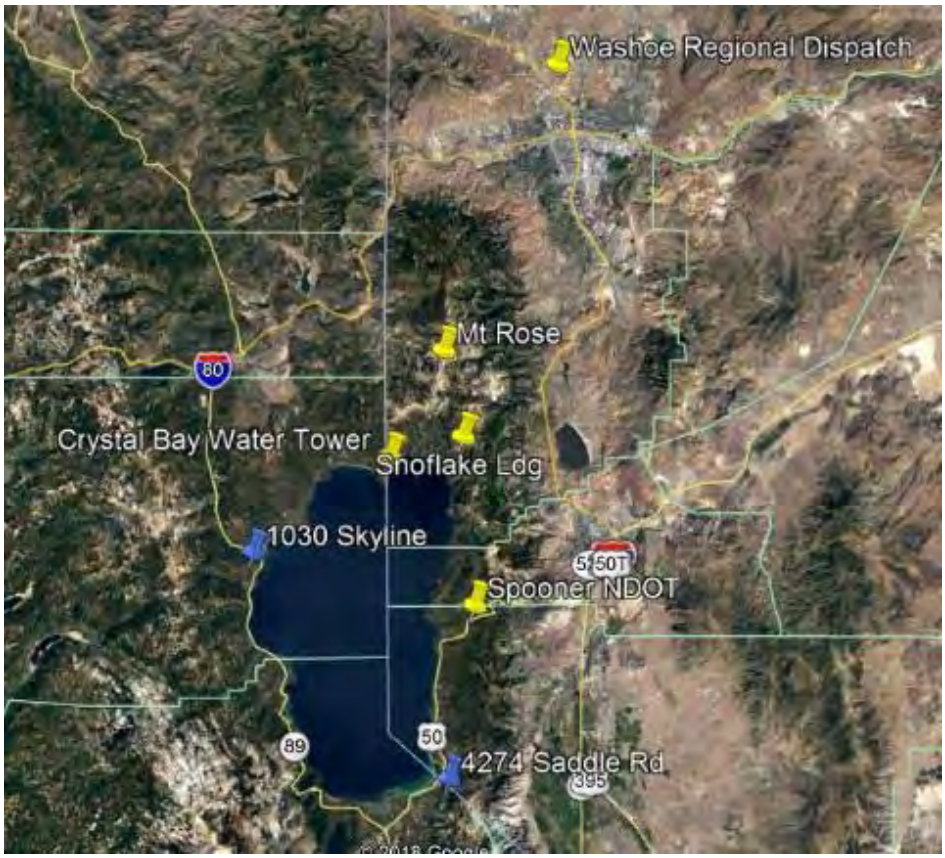

Figure 19 - NLTFPD Radio Sites

As stated above, the NLTFPD radio system is different from all of its fire partners in the area due to the use of 700/800 MHz and trunk technology. All NLTFPD vehicles and staff carry, as their primary radio, a 700/800 trunk subscriber unit. To provide a baseline of interoperability with its neighbors, the fire district does have some conventional, analog, VHF radio assets. The primary dispatch talkgroup - NLTFPD Disp (could also be displayed as IF Disp) has a VHF radio (154.235 MHz) tie to a Washoe County conventional gateway interface to allow the VHF to be simulcast with the trunk signal. This allows conventional VHF system users (mutual aid partners) to talk directly with NLTFPD users in the field and Washoe County dispatch. NLTFPD also has three tactical talkgroups. The talkgroup - NLTFPD Tac 2 (IF Tac 2) is tied via a conventional gateway interface to a second VHF radio to allow for tactical interoperability. At present this tactical channel utilizes the VHF Public Safety Mutual Aid and Common Channel VFIRE21. The fire protection district is working with the FCC to get a licensed frequency to pair with IF Tac 2.

While the 700/800 trunk system is simulcast on two sites plus the third site on Mt Rose, the VHF radios only broadcast for the single site at Incline Station (Fire Station 11). See Figure 20 below for radio site and fire station locations.

Figure 20 - NLTFPD Sites

Note that all Washoe County radio sites are on a county-owned and maintained or NDOT owned and county-maintained microwave system. More information on microwave connectivity is in Section 6.4, System Connectivity.

6.3.4 Tahoe Douglas FPD

Tahoe Douglas FPD is dispatched out of the Douglas County Emergency Communications Center, 1615 8th Street, Minden NV.

The Tahoe Douglas FPD dispatch radio system is a four-site multicast with two additional receive-only sites providing additional talk in coverage. See Figure 21 below.

Figure 21 - Tahoe Douglas Dispatch Radio Sites

The radio sites and primary fire stations for Tahoe Douglas are shown above. The four transmit sites are the Hardrock Hotel in Stateline NV (156.1125 MHz TX), the Upaway water tank in Glenbrook NV (159.2475 MHz TX), Bliss State Park (155.0250 MHz TX) and one site in the valley along the US 395 corridor near the intersection of North Sunridge Drive and US 395 (159.2925 MHz TX). The two additional receive-only sites are East Peak and Fire Station 24. All of the receive frequencies (talk into the base or repeater) are 158.7750 MHz.

All of the existing dispatch radios are conventional, analog and operating in the VHF frequency band.

Channel names for the four multicast dispatch channels:

- Hardrock TDF STATELINE
- Upaway water tank TDF GLENBROOK
- Bliss TDF BLISS
- Sunridge & 395 TDF VALLEY

All six receiver audios are voted at Fire Station 23. Connectivity between the radio, voter, and dispatch is via leased, outdated, and limited supported copper lines with the exception of audio connectivity between Fire Station 23 (voter) and both Bliss State Park and East Peak. These two sites are connected to the voter system at Fire Station 23 using UHF radio links.

6.3.5 Carson City FD

The existing Carson City radio system is another very simple VHF conventional system. The primary dispatch radio site for both fire and the SO is Duck Hill/Sugarloaf. Fire transmits on 154.430 MHz and receives on 153.845 MHz, and the SO transmits on 155.970 MHz and receives on 155.250 MHz. To extend coverage into the western end of the county at Lake Tahoe, the fire and SO dispatch frequencies are also available on Snow Valley Peak. To minimize audible interference, the sites utilize separate CTCSS tones at each site. See Figure 22.

Figure 22 - Carson City Radio Sites

As the city of South Lake Tahoe, Carson City is in the process of a complete radio system upgrade/replacement. The County plans to join the NSRS and move primary radio operations to the 700/800 MHz frequency band and operate as a trunk, P-25 system. Moving to the NSRS will not only greatly expand their existing radio coverage and capacity it will allow complete interoperability with their primary mutual aid partner, Washoe County. To maintain interoperability with their other county partners, Douglas and Lyon counties, and their wildland fire partners, the County plans to retain their existing VHF assets and operate in a cross-band mode with both 700/800 MHz P-25 trunk and VHF analog conventional. Carson City is also replacing its subscriber units with dual-band (700/800 MHz and VHF) allowing users in the field to operate on both frequencies bands.

6.3.6 Other Radio Systems

The following agency radio systems, while not part of the existing dispatch system for the initial 11 fire agencies, could potentially be affected or an asset to any proposed Bi-State Regional Command Center.

Placer County Radio System

Placer County is in the process of upgrading its communications in the Tahoe Basin. At the time of this assessment, the county's plan for the Tahoe Basin is to install a trunk, three-site simulcast, subsystem. The simulcast will be P25 Phase I and will operate in the VHF spectrum. The plan is for four channels deep, (one control channel and three talk paths) at each of the simulcast sites. The planned sites are as follows:

- Cabin Creek at the Tart facility area
- Mt. Pluto
- Martis Peak

Like virtually all other radio system users on the lake, the County has difficulty covering the shoreline. In an attempt to cover the shoreline, the County is looking to add an additional standalone trunk site on the eastern or south shore. The Douglas County site at Caverock has been considered and would be an ideal addition to the system. The County does have another standalone trunk site at Signal Peak.

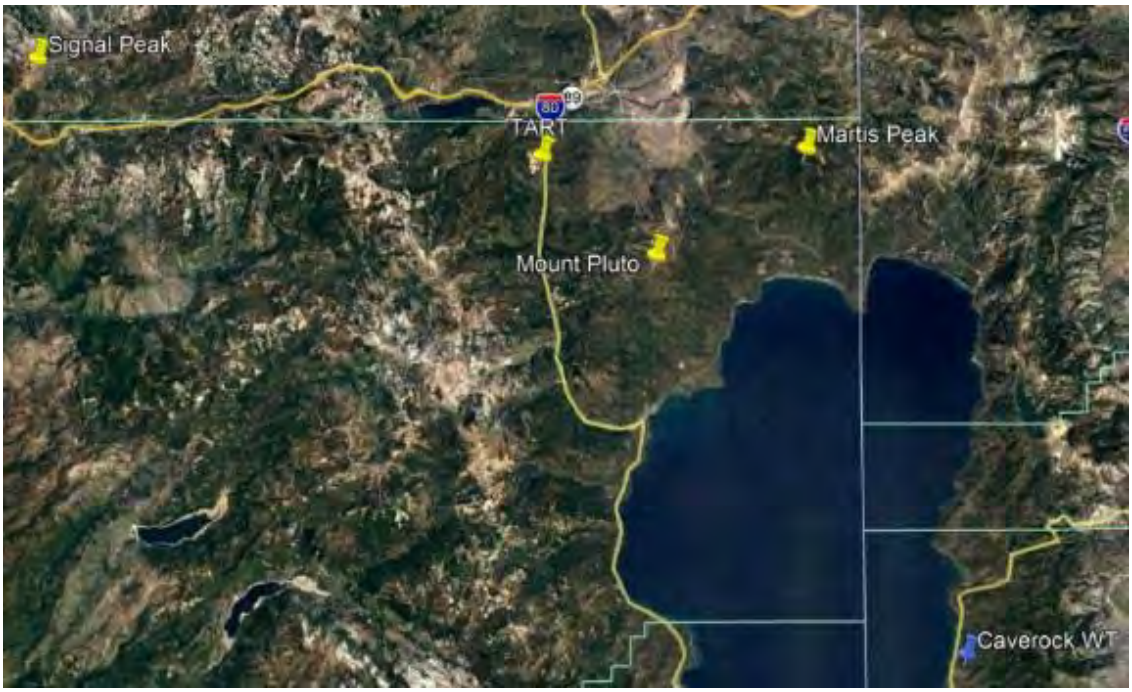

Figure 23 - Placer County Sites - Tahoe Basin

As can be seen in the image above, the three proposed simulcast sites are in a somewhat tight grouping in the northeast portion of the county. The Caverock water tower site, while not in the immediate plans, is shown in this image to demonstrate the line-of-sight that the site would provide to too difficult to cover areas along the Placer County shoreline including Tahoe City, Dollar Point, and Kings Beach.

CAL FIRE Amador-El Dorado Unit (AEU)

The CAL FIRE AEU radio system in the Tahoe Basin is very similar to the way CAL FIRE NEU operates.

The system uses a Telex Radio Dispatch DSP-223 tone-remote adapter to provide a means of remotely controlling the two-way radio base stations. The dispatch operator selects the channel and then selects the tone. These tones are used to “set up” the remote DSP-223. The DSP-223 then sets, according to how the user programs the unit, the proper CTCSS for the mountaintop repeater and keys up the control station radio. This control station sends RF to the mountaintop radio with the required CTCSS to break squelch on the repeater. There is a leased T1 that connects the Emergency Command Center (ECC) at 2840 Mt. Danaher Road, Camino CA to the USFS Lake Tahoe Management Unit on Al Tahoe Blvd in South Lake Tahoe. The local control station is located at the USFS Lake Tahoe Management Unit. The three remote repeaters within the Tahoe Basin are:

- Snow Valley – Northeast Basin area
- East Peak – Southeast Basin area
- Scout peak – Southwest Basin area

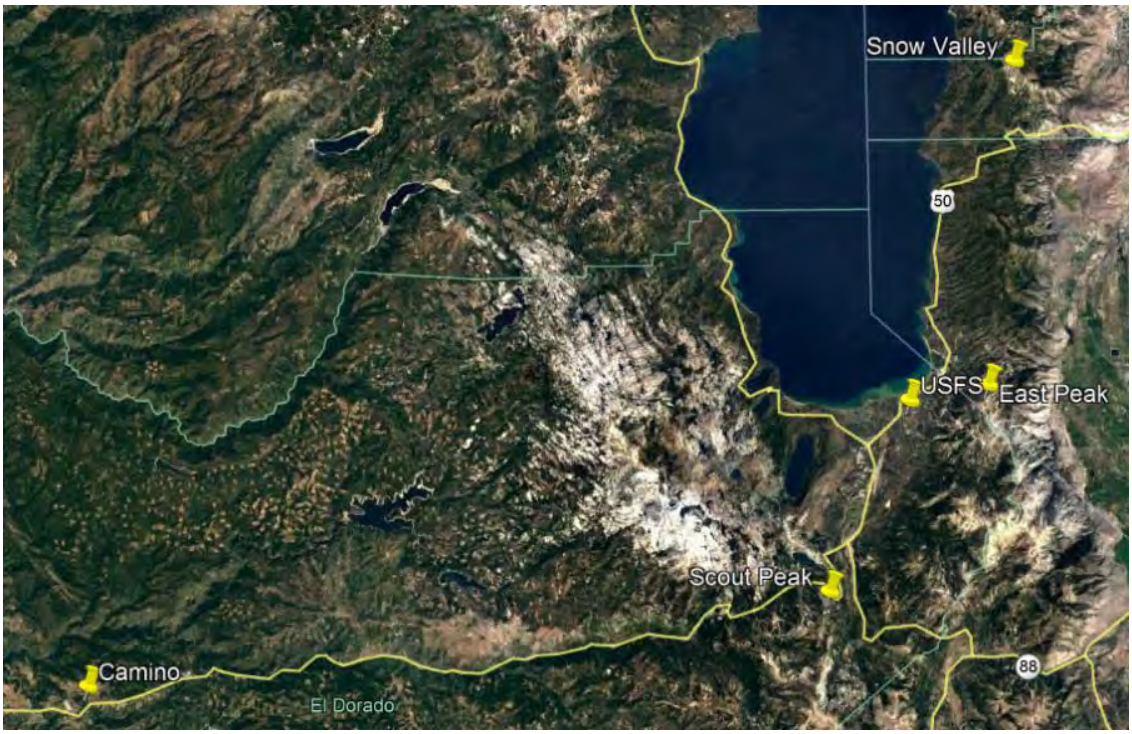

Figure 24 - CAL FIRE AEU Tahoe Basin Radio Sites

Figure 24 above shows the existing CAL FIRE AEU radio sites and their relationship to the ECC located in Camino CA.

USDA Forest Service

There are two groups of USDA Forest Service units that support operations in the Tahoe area. Both are co-located in the two CAL FIRE Emergency Command Centers (ECC). From the CAL FIRE AEU ECC in Camino CA the Forest Service dispatches for the Eldorado National Forest and the Lake Tahoe Basin Management Unit. From the CAL FIRE NEU ECC in Grass Valley CA the Forest Service dispatches for the Tahoe National Forest.

Sierra Front Interagency Dispatch Center (SFIDC)

The SFIDC is an interagency local ordering point for mobilizing resources for wildland and prescribed fires in Western Nevada and the Eastern slope of the Sierra Nevada Mountains.

Neither the USDA Forest Service or SFIDC should be directly affected by the proposed development of a Bi-State Regional Command Center.

6.3.7 Tactical Communications

All of the above agencies have their own tactical frequencies/channels for their use when in the field. This proposed Bi-State Regional Command Center would have no effect on these existing tactical communications assets.

6.3.8 Radio Systems - Next Steps

The existing radio systems were all built for and by a single agency with little to no input from neighboring agencies. This has resulted in a “stovepipe” type of system architecture where individual agencies have to develop and support separate systems. The end result is too many radio sites that have been developed over the years for single agency use, combined with overall coverage issues. The Tahoe area has relied on high-elevation, high power output sites attempting to provide the most coverage possible from the least number of RF sites. These single agency/discipline systems created an RF environment with too much overlap of coverage area and too many RF sites all adding to a very high noise floor (especially in the VHF spectrum). The area has too many standalone efforts for such a small geographic region.

The Tahoe Basin has two of the hardest terrain types to provide RF coverage: shorelines and deep valleys. To support shoreline coverage, virtually every agency could be served by having some radio coverage that is radiating from the opposite shore of the lake. To properly accomplish this requires a regional approach to RF design and regional cooperation.

From a technology standtpoint, the region has covered the complete array of options from an extremely simple, four-site, single frequency pair, VHF, analog repeater network to a radio system that is a partnership in a “system-of-systems” statewide 700/800 MHz trunking system with simulcast nodes and is migrating to P-25.

Create a Regionwide Communications Working Group

The creation of a Regionwide Communications Working Group would allow all stakeholders a say in any new command center communications. The Regionwide Communications Working Group could then address the various communication options. Chief among these options is what would a proposed Bi-State Regional Command Center communications setup look like? Which agencies would be participating (all eleven fire agencies or a subset) and what radio technology is preferred? These are all driven by need and budget. These are questions that ICTAP cannot help to answer. Radio technology has the potential for a wide range of costs and ongoing support.

Issues for the Regionwide Communications Working Group to Address

The future Bi-State Regional Command Center dispatch communications could look as simple as the existing Eastern Placer County Fire Chiefs JPA. The existing four-site JPA provides adequate dispatch coverage for five of the signatories of the April 23, 2019 letter: North Tahoe FPD, Meeks Bay FPD, Squaw Valley FD, Northstar FD, and Truckee FPD. North Lake Tahoe FPD has the ability to operate in both VHF and 700/800 MHz and could, therefore, join the JPA system for dispatch while retaining the ability to interoperate with Washoe County on 700/800 MHz. This type of scenario would have all 6 fire agencies in the north end of the lake on one dispatch system.

Taking control of the existing CAL FIRE frequency pairs is unlikely. The CAL FIRE NEU East frequency pair and the JPA radios have become too valuable for wildland fire. An option would be if CAL FIRE allowed the proposed command center the ability to dispatch local incidents on the frequency pair while retaining overall control of the pair for all wildland operations. Another option would be to add additional repeaters at each location with a second pair. With this option, the sites could be reviewed with predicted coverage plots developed and maybe better sites selected. The idea of adding a second pair brings the "VHF spectrum issue" into the considerations.

The public safety VHF spectrum is completely saturated and the likelihood of the Tahoe Basin adding any new VHF frequencies is very minimal. This means that any new or expansion of VHF radio in the Tahoe Basin would require reallocating existing licensed frequencies. This would have a negative impact on the agencies' existing tactical channels. Any VHF system upgrades or additions need to take this into account.

Under the above option of simply reusing JPA sites (and possibly the frequency pairs), the dispatch capabilities could expand south by adding sites and frequencies, over time, or a second option would be to have a southern command center. The logical choice would be SLT. At the time of the writing of this report, SLT had an RFP out for its communications system. ICTAP does not know what the proposed system could look like or if it will address the known radio issues that are present in SLT. The assumption here is if SLT were to lay out considerable amounts of money for a new system, the existing issues would be addressed, including coverage and maintenance. After such a large fiscal outlay, would the three fire agencies now supported out of the SLT dispatch center want to leave the new system? Tying the CAD systems of the proposed command center to the existing SLT dispatch center could provide a virtual combined center. This option would require redundant digital connectivity, microwave and leased fiber, to assure connectivity of the two centers. Some existing SLT issues would still need to be addressed like site maintenance and radio system support. SLT was the only agency that did not have a "go-to" communications support person in-house. All services were provided by a third-party contractor. ICTAP has no issues with the contracting of support services; in fact, this is probably the prevalent approach across the nation. The issue is the lack of in-house personnel to control, manage and be the repository of historical knowledge of the system as the services contractor changes from contract to contract.

Another communication option would be a completely new radio system. This, due to the VHF spectrum issues, would almost require a shift to 700/800 MHz and trunking. The fire agency dispatch call volumes by themselves do not warrant the need for a trunk system. Additionally, going to a trunk system is an expensive option, both for infrastructure and subscriber radios. The recommendation for the Tahoe Basin to overcome the infrastructure costs issues would be to join one of the existing or proposed trunk systems that have a footprint in the basin. This would be the WCRCS/NSRS network, the expanding Placer County system, or possibly the future SLT system. The Placer County system would allow the fire agencies to remain in the

VHF spectrum but will have the available VHF spectrum limitations. The SLT system, at the time of this writing, is an unknown.

The Washoe County/NSRS network has an existing RF footprint in the Tahoe Basin, and the NSRS partner NDOT has plans to expand the coverage southward in the lake area. Adding RF sites to an existing trunk system is an expensive option but not even close to the costs of adding a new master site for a new standalone radio system.

Going to a 700/800 MHz system for dispatch would have its own issues and advantages. Due to the need to support the wildland fire operations, all fire agencies in the Tahoe Basin would be required to carry dual-band (VHF and 700/800 MHz) subscriber radios. Dual-band radios have a higher per-unit cost. Regardless of the option that the fire agencies take, the fire agencies will not forego their existing VHF tactical frequencies and infrastructure. The advantages to 700/800 MHz is the available RF spectrum and superior in-building penetration. The fire agencies could remain on VHF for all wildland fire and tactical simplex communications while having 700/800 MHz spectrum available for both dispatch and in-building tactical use.

Due to the stovepipe design of the existing disparate radio systems, there are a large number of radio RF sites in the Tahoe Basin. Unfortunately, even with a large number of RF sites, all of the existing radio systems have gaps in coverage. The existing VHF sites are all at high elevations which works well for the wildland fire operations. For local agency dispatch, these high power, high-level sites create too much interference and noise by overshooting the intended operational area. Regardless of the frequency band used, any new RF sites that are intended to dispatch local agencies should be placed closer to the populations served. The majority of the existing coverage gaps are along the shorelines, where the population resides. These issues are exacerbated by not having adequate RF sites along the eastern shore and the southwest portion of the lake.

There has been some discussion of new RF sites at Tahoe Mountain (SLT and NDOT) and at a water tower in Rubicon Bay at the intersection of Highland Dr and Highview Dr (NDOT and Douglas County). Both of these sites appear to provide good local coverage as well as coverage along the eastern shoreline. ICTAP initially studied fire camera sites in Zephyr Cove, Dollar Point, and Alpine Meadows. These three sites could potentially address known coverage issues around the lake. Unfortunately, these sites at present lack the required infrastructure needed to provide radio services. See Section 6.9, Fire Cameras, for info on the fire camera sites.

Any planning for a new Tahoe Transportation District facility in the area just east of Highway 50 in Zephyr Cove should consider adding a communications tower. Zephyr Cove area is a difficult area to provide coverage and depending on the tower site location and height could provide coverage of the southwest shoreline and the difficult coverage area of Emerald Bay.

Any RF site planning should include predicted area coverage plots for VHF and 700/800 MHz and plan for multi-agency usage.

Selection of a Proposed Bi-State Regional Command Center Location

The Tahoe Basin regional stakeholders need to have discussions over the potential command center locations and come to some sort of consensus on which of the sites works best for the region as a whole.

All follow-on efforts should be tied directly to this selected site. See more on proposed sites in Section 7, Physical Space/Facilities.

6.4 System Connectivity

The vast majority of RF sites in the Tahoe area do not have any connectivity (microwave, fiber, leased line) to/from their respective dispatch center. This results in the radios operating as stand-alone repeaters. For these radio sites, the dispatcher keys a local radio that sends RF to the repeater site. The dispatcher does not have “wireline” control of the remote radio. This lack of wireline connectivity to the radio limits the dispatcher control of the radio net, making the dispatcher just another subscriber on the radio.

The lack of connectivity to RF sites greatly reduces the region's options to upgrade and update the radio systems in the area. From something as simple as add receiver voting to more complex options like simulcast or trunk will require connectivity to/from RF sites.

There is also minimal agency to agency connectivity in the Tahoe Basin. This lack of agency to agency connectivity makes sharing data difficult. This affects the ability to share CAD, radio system connectivity, and traffic data among other data sources.

There is some leased line connectivity in the region and these radio sites that have leased line connectivity are discussed in Section 6.3, Radio Systems. The concerns with leased lines are all copper leased lines, which are no longer going to be supported and have a limited life expectancy. All leased lines that have not yet converted will at some point need to be converted to fiber. ICTAP did not find any radio sites that are presently connected via agency owned fiber.

This portion of the assessment will concentrate on the existing (or in the final installation phases) microwave networks that could potentially have a significant effect on extending connectivity around the Tahoe basin.

The Tahoe basin microwave connectivity is very limited. Most of the existing microwave connectivity is routed around the Tahoe Basin. There are portions of four major microwave systems that do have a presence in the basin. These systems are the Washoe County system (with some Washoe County maintained NDOT assets), the Quad County system, the Nevada Enterprise IT Services, and a California State system managed by CalOES.

All of the radio end sites are shown in the Figures with yellow push pins. The Washoe County/NDOT system microwave paths are shown in red; the Quad County system microwave paths are shown in yellow; the Nevada Enterprise IT Services paths are shown in blue, and the California State CalOES system microwave paths are shown in white.

All of the existing microwave networks are either along the interstate 80 and Highway 50 corridors or on the Nevada side of the lake. The actual microwave site presence is minimal within the Tahoe Basin.

For all four of these systems, there are other microwave paths that are not shown in this image (and in the following images) due to distance from the Tahoe area or being insignificant to this assessment. In the following paragraphs, the report will provide more detail on each of these four systems.

6.4.1 CalOES Network

Figure 25 - CalOES Microwave Network - Tahoe Area

The State of California Office of Emergency Services (CalOES) microwave paths are shown in white in the image above. The CalOES County microwave system is primarily used to extend connectivity to/from State facilities and key radio sites.

The CalOES microwave network is very large, and Figure 25 above only shows the microwave paths that could have any influence in the Tahoe area. The CalOES sites shown are licensed with a variety of microwave radio types. The equipment includes very old analog Motorola StarPoint radios, Alcatel-Lucent MDR-87XX radios (both multiple DS1 and 150 Mbps Ethernet) and Harris Constellation DS3 radios. All of these radio types are no longer supportable and as such the State is in the process of upgrading the system using Nokia 9500 Microwave Packet Radio (MPR) which is the Nokia state of the art radio. These 9500 MPR radios have very high data throughput and utilize adaptive modulation. The older radios, that are being replaced, are all fixed modulation.

The system architecture, while not shown in these images due to size, is a ring design with spurs off of the ring.

ICTAP received very little information about the microwave networks. The majority of the information shown was discovered during FCC database searches. Once a microwave network was discovered, the ICTAP team, if required, contacted the appropriate POC. This was the case with the CalOES network. ICTAP wanted clarification of the continued use of out of date radio equipment. That was when ICTAP was informed of the on-going Nokia 9500 MPR upgrades. Also provided during these conversations was the information on the microwave link between Brockway and Scout Peak. This path could not be independently verified in FCC database searches.

Adaptive Modulation

The following is a brief description of adaptive modulation. Traditional microwave radios utilize a fixed modulation type. The more advanced the modulation scheme, the higher the data throughput (for example: a 30 MHz channel radio utilizing 4 QAM quadrature amplitude modulation may have a data throughput of 43 Mbps while the same radio utilizing 512 QAM would have a 206 Mbps throughput). The trade-off is the more advanced the modulation scheme, the higher the required receive signal (RSL) that is required to decode the modulated signal.

In a fixed modulation radio, a fade that drops the receive RF below the acceptable RSL for the modulation scheme, the radio is unable to decode the modulation and all traffic is dropped. In an adaptive modulation radio, as the radio RF fades the radio reduces the modulation, thus lowering the acceptable RSL. A well-designed adaptive modulation microwave link would have the radios operating at optimum throughput a majority of the time and just reducing the modulation scheme to remain on the air even during the worst of fades.

Note: a fade is when atmospheric conditions (weather, smoke, thermal ducting, etc.) causes the RF signal at the receiver to be reduced, sometimes greatly.

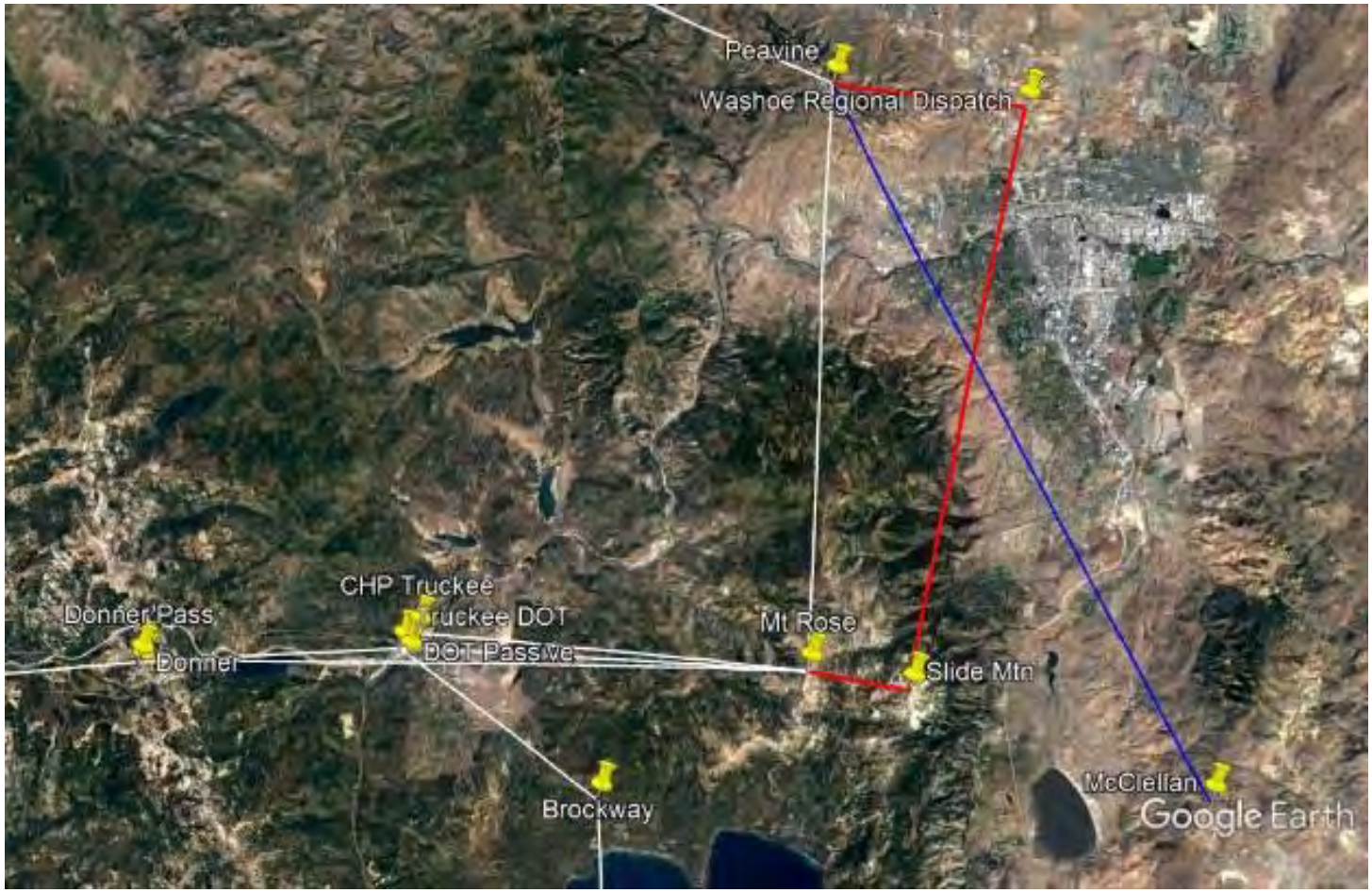

Figure 26 - CalOES Microwave network - North of Lake Tahoe

Figure 26 above shows a close-in view of the CalOES microwave paths that are in the area north of Lake Tahoe. The CalOES microwave links are shown in white in the image above. Additional microwave network links are shown where they have common site connectivity, the red links are part of the Washoe County/NDOT network, and the blue is part of the Nevada Enterprise IT Services network. These common sites could potentially provide a tie in point to Nevada and the counties on the Nevada side of the lake. Note that CalOES is on the same sites, but the radio equipment is housed in separate equipment vaults.

Figure 27 - CalOES Microwave Network - South of Lake Tahoe

The CalOES microwave network presence in the south end of Lake Tahoe is minimal. None of the Nevada microwave systems have any presence at the southern end of the lake.

The fact that there is no microwave connectivity to any of the public safety radio sites on the California side of the lake greatly limits radio communications options moving forward.

6.4.2 Washoe County/NDOT Microwave Network

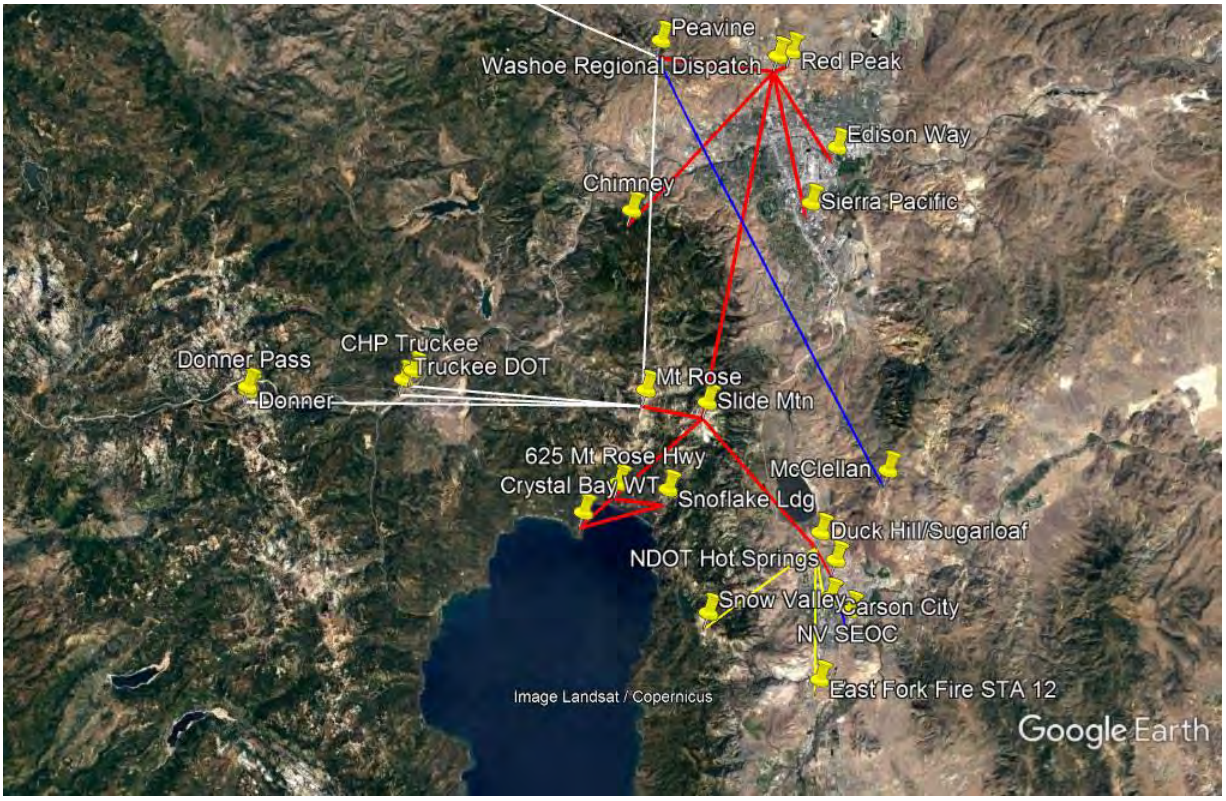

Figure 28 - Washoe County/NDOT Microwave Network

The Washoe County/NDOT microwave paths are shown in red in the image above. Additional microwave network links are shown where they have common site connectivity. The Washoe County microwave system is primarily used to extend connectivity to/from the WCRCS radio sites.

The microwave network shown is a combination of Washoe County licensed microwave links and the NDOT licensed microwave links that are operated and maintained by Washoe County. The Washoe County sites are licensed with Alcatel-Lucent MDR-87XX-16 digital, fixed modulation, 16-DS1 (24.7 Mbps) radios. Alcatel-Lucent is now part of Nokia and the MDR-87XX-16 radios are no longer supported. The NDOT microwave radios used on this system are Nokia 9500 Microwave Packet Radio (MPR) which is the Nokia state of the art radio. The NDOT radios have very high data throughput and utilize adaptive modulation. The adaptive modulation throughputs for these radio links have a high of 227 Mbps and a low of 43.4 Mbps. Where the Washoe County and NDOT paths are redundant, the older Washoe County radios have been replaced with the NDOT equipment.

The system architecture is a hub and spoke design, with all radio links emanating from the Washoe County Sheriff's Office Regional Dispatch & Emergency Operations Center (REOC). The majority of the spoke hops are single paths to/from the regional center; the exception is the paths that carry data to/from the Tahoe Basin. Data communications between REOC in Reno going to/from the Washoe County Sheriff's Office located at 625 Mount Rose Highway, Incline NV needs to traverse four microwave links. Any failure on any one of these four links would drop all data to/from the lake area.

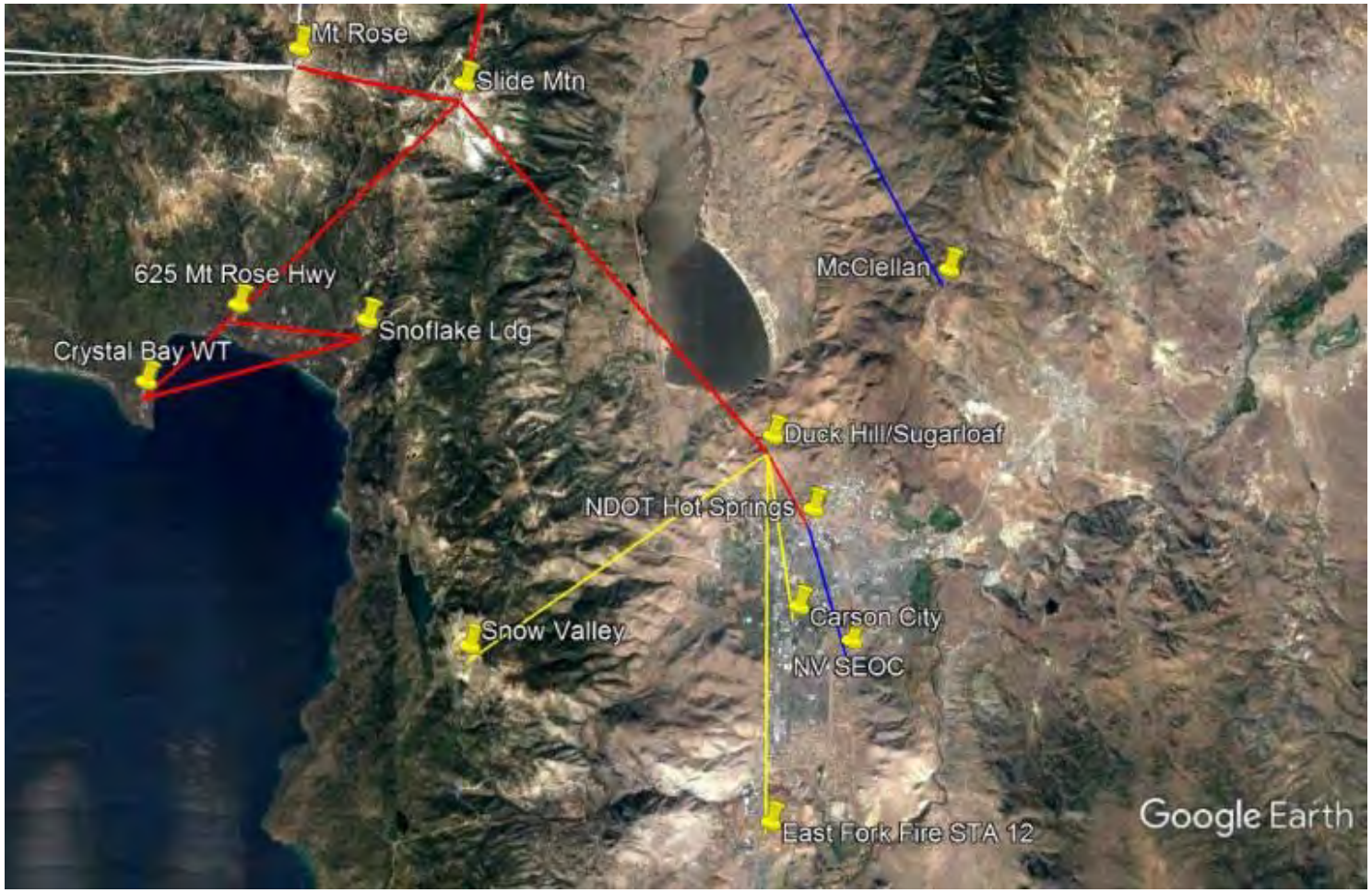

Figure 29 - Washoe County/NDOT Network Close In

Figure 29 above shows some of the critical common microwave sites that could potentially allow for system tie in.

Mount Rose has four CalOES links. Mount Rose, along with Peavine, provide common sites with the CalOES system. The two microwave network system's radio equipment are installed in separate radio vaults at the two sites, but the vaults are co-located.

Duckhill/Sugarloaf has three Nevada Quad County Interconnect (NQCI) microwave links. The connectivity to the NQCI microwave network would allow for direct connectivity into key sites within the four neighboring counties of Carson City, Douglas, Lyon, and Story. Key to this potential connectivity is a direct connection to the Carson City Public Safety Emergency Communications Center and Douglas County 9-1-1 Emergency Services.

There are two common sites that could allow for potential connectivity to/from the Nevada Enterprise IT Services network: DOT Hot Springs and Peavine. This would provide Washoe County with direct connectivity to the State EOC, Sierra Front Interagency Dispatch Center, the State Building at 575 E 3rd St, Carson City NV, Reno NHP, and the Nevada Department of Conservation and Natural Resources.

The following tables show the FCC call sign information for only the radio sites pertinent to this assessment. For both Washoe County and NDOT networks there are many additional FCC licenses than those detailed in the tables.

Table 6 - Washoe County FCC License

Washoe County FCC License	
FCC Call Sign	TX Site
WPUB306	Regional Dispatch/EOC
WPUA744	Slide Mtn
WQFS538	Mount Rose
WPUA742	Crystal Bay WT
WPUA738	Snowflake
WPUA724	625 Mount Rose

Table 7 - NDOT FCC License

NDOT FCC License	
FCC Call Sign	TX Site
WQYG433	Regional Dispatch/EOC
WQYG444	Slide Mtn.
WQPG425	Chimney
WQYG427	Duckhill
WQYG438	Peavine
WQUM646	NDOT Hot Springs

6.4.3 State of Nevada Enterprise IT Services Microwave Network

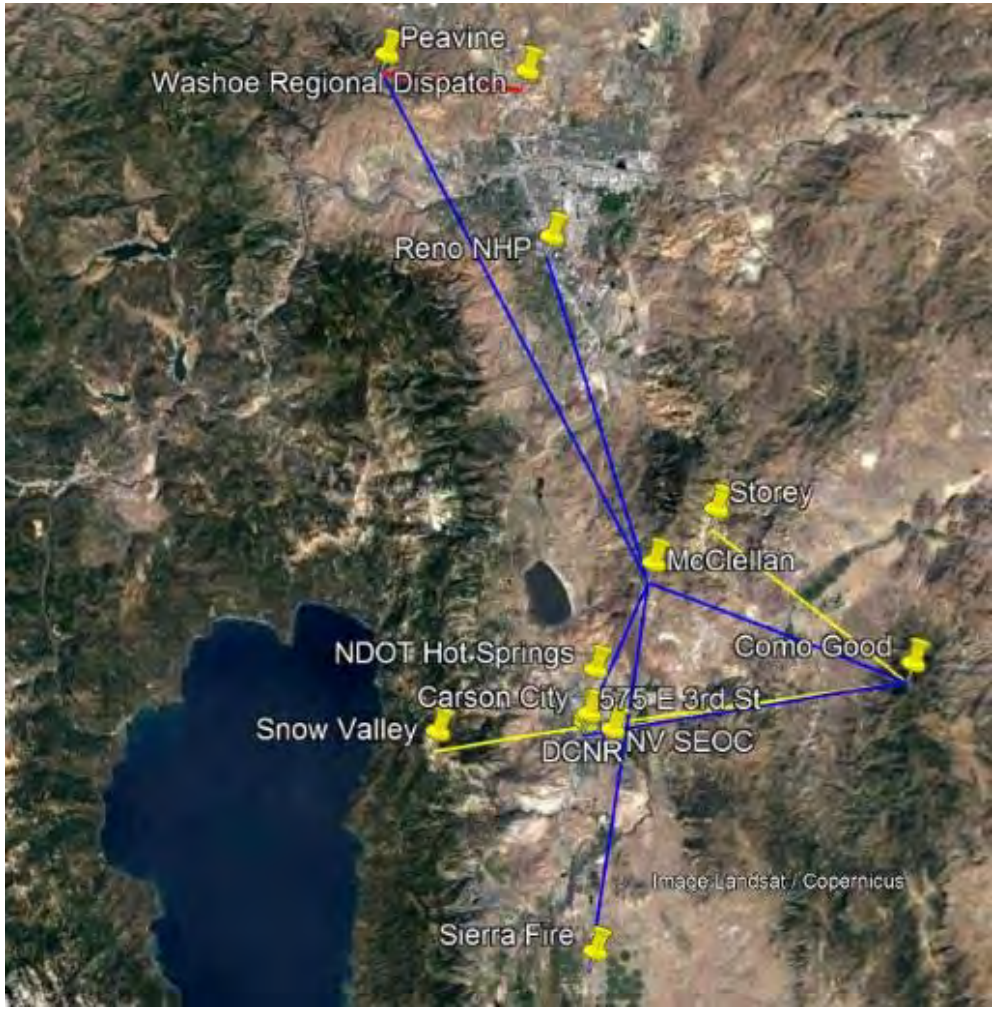

Figure 30 - Nevada Enterprise IT Services Microwave Network

The Nevada Enterprise IT Services Microwave Network paths are shown in blue in the image above. Additional microwave network links are shown where they have common site connectivity. The Nevada Enterprise IT Services Microwave Network is primarily used to extend IT connectivity across the state of Nevada.

The Nevada Enterprise IT Services Microwave Network sites are licensed with Aviat Eclipse/IRU600 digital microwave radios. The Aviat Eclipse/IRU600 represents the current Aviat state of the art radio. The Nevada Enterprise IT Services radios have very high data throughput and utilize adaptive modulation. The adaptive modulation throughputs for these radio links have a high of 189 Mbps and a low of 43 Mbps.

The system architecture is a hub and spoke design, with all radio links emanating from the McClellan site. There is a ring with McClellan to Como Good to 575 E 3rd Street with a couple of detached microwave segments.

With the common site connectivity to both the Washoe County/NDOT microwave network and the NQCI microwave network, there is the potential of tying all three Nevada county dispatch centers in this assessment to both the state EOC and Sierra Front Interagency Dispatch Center (SFIDC).

6.4.4 Nevada Quad County Interconnect (NQCI) Microwave Network

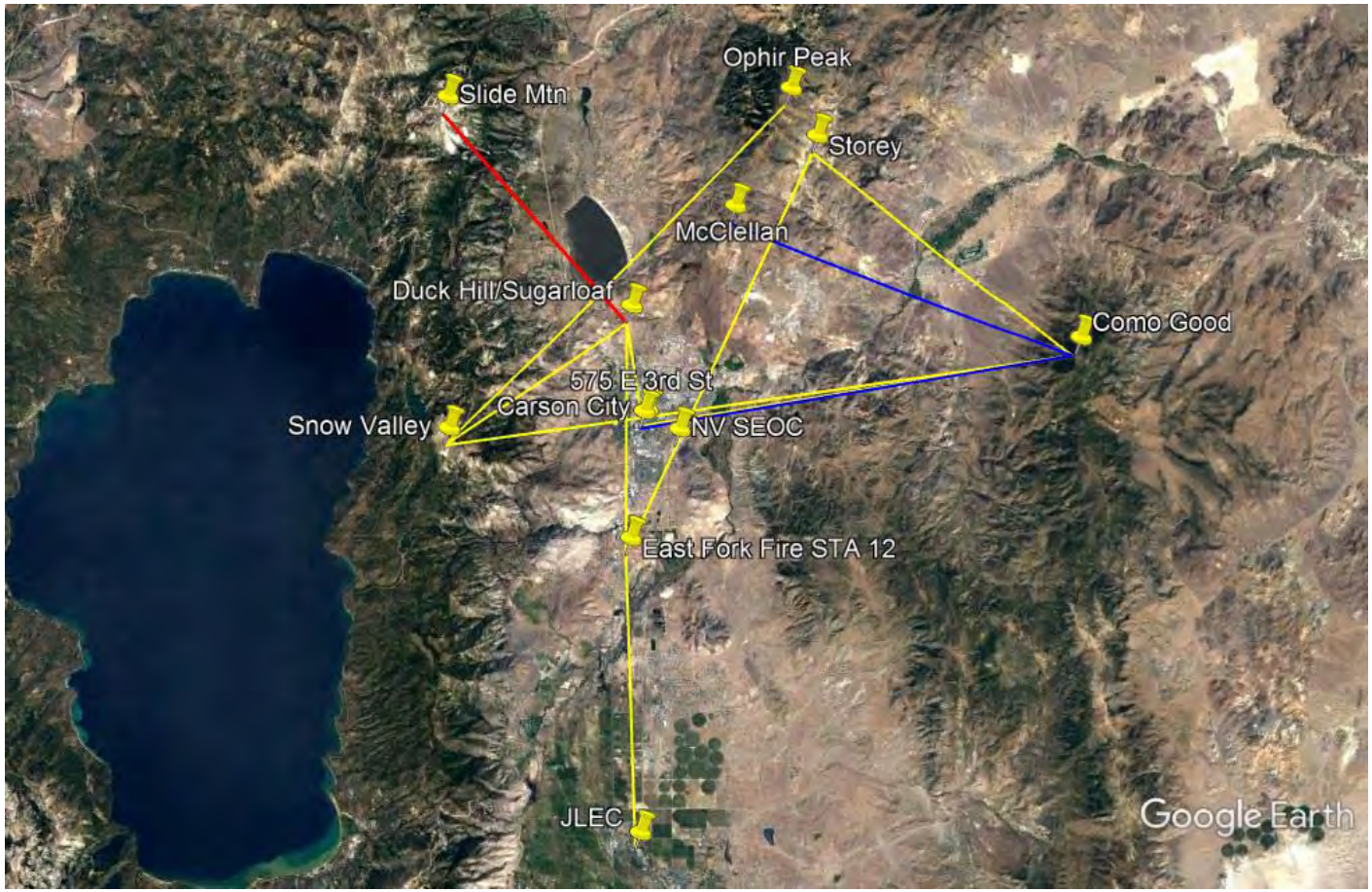

Figure 31 - NQCI Microwave Network

The NQCI microwave paths are shown in yellow in the image above. Additional microwave network links are shown where they have common site connectivity. The NQCI microwave network is to provide a common backbone to the counties of Douglas, Carson City, Lyon, and Story.

The Washoe County sites are licensed with Motorola Point-to-Point (PTP) 11800 Ethernet microwave radios. Motorola has since sold the PTP product line to Cambium Networks. These NQCI radios have very high data throughput and utilize adaptive modulation. The adaptive modulation throughputs for these radio links have a high of 236.5 Mbps and a low of 150.7 Mbps.

The system architecture is a ring design, Station 12 to Story to Como Good to Snow Valley to Duckhill/Sugarloaf back to Station 12, with spurs off of the ring.

All of the paths are operating in the 11 GHz spectrum which is a little concerning due to some of the lengths of the paths. ICTAP generally recommends limiting 11 GHz paths to approximately 12 miles. The Como good to Snow Valley path is 21.3 miles, the Snow Valley to Ophir peak path is 16.2 miles and the Station 12 to Story path is 14.9 miles.

The NQCI connectivity to Snow Valley represents the only microwave link to a Tahoe basin mountaintop. The concern at Snow Valley is the fact that the site is solar/DC powered and that having three microwaves with their 100% duty cycle is a strain on the DC power system. The other concern is the system appears to be using Snow Valley as only a microwave relay site and not a gateway to getting digital connectivity into the Tahoe area. Consider reviewing the data loading at these three Snow Valley microwave radios with the potential of turning one of these radios to provide a microwave link into the lake.

The NQCI microwave network, along with Washoe County, has hops from Duck Hill and Mount Rose back to the Washoe REOC, and has the ability to connect all three Nevada based Tahoe area county dispatch centers within the State of Nevada that support dispatching in the Tahoe area. There is an existing fiber that routes between the Douglas County Emergency Communications Center and the Judicial Law Enforcement Center (JLEC). The JLEC and the Carson City Public Safety Emergency Communications Center are nodes on the NQCI microwave network.

ICTAP was told that overall loading on this NQCI is minimal with most of the hops not in use.

6.4.5 System Connectivity - Next Steps

With the exception of Washoe County and a handful of unsupportable copper leased lines, the RF sites in the Tahoe Basin do not have direct connectivity to/from dispatch centers. This lack of connectivity to/from RF sites in the region greatly reduces the potential radio options. Any advancement in communications from as simple as providing wireline control of repeaters (allowing for dispatcher priority), to simulcasting repeaters, to deploying or extending trunk radio services would require adding connectivity to/from the RF sites.

The priorities for local Tahoe Basin regional stakeholders:

- Need to have discussions regarding the potential command center locations and come to some sort of consensus on which of the sites works best for the region as a whole.
- Define the agencies that will be joining the proposed command center. Is the list of agencies all eleven fire agencies that were signatories of the April 23, 2019 letter (reference letter A.) or a subset of that group? With some of the agencies in the process of expanding or replacing their communications, their interest in joining may have shifted.
- Define radio communications technology. What radio system technology best meets their needs and available budget?

Once these decisions have been made by the stakeholders, the engineering process begins on how best to provide the communications to/from the proposed command center. This effort

would include determining which RF sites would provide the best coverage when compared to costs and availability and then what is required to provide connectivity to/from the RF sites.

6.5 9-1-1 Phone Systems

Once the participants and direction of services is decided, the group will need to make decisions regarding 9-1-1 telephone equipment. The ability to answer and process 9-1-1 calls is the primary objective of a dispatch center. 9-1-1 telephone equipment is specifically designed for answering and processing 9-1-1 calls. In the United States, Enhanced 9-1-1 (E9-1-1) automatically provides the 9-1-1 center with the telephone number, automatic number identification (ANI), and location information/automatic location identification (ALI), of 9-1-1 callers. This information is delivered via Customer Premise Equipment (CPE). The 9-1-1 CPE interfaces with other 9-1-1 systems such as CAD and mapping/GIS. Table 8 shows the telephone vendors for the five existing 9-1-1 centers.

Legacy phone systems are aging and becoming progressively vulnerable, so any decisions regarding a phone system must be geared towards NG9-1-1 technology. On average, 80% of calls to 9-1-1 are from cellular devices, so it will be critical that the center has NG9-1-1 capability. The ability to receive text, photo and video via cell phone is a daily occurrence in most Americans' lives. Through the NG9-1-1 IP-based networks, 9-1-1 centers will be able to receive that same data. Emergency Services IP Network (ESInet) is used for emergency communications services on a managed IP Network and delivers NENA i3 compliant emergency calls to the correct PSAP (see section 9, Industry Practices for more information).

Table 8 - Current Phone Vendors

Center	Phone Vendor
CAL FIRE Grass Valley	Vesta 9-1-1
Washoe County	Intrado
Douglas County	Vesta
South Lake Tahoe	AT&T Cassidian
Carson City	Vesta

6.6 Geo Data including Location Data & Automatic Vehicle Location

Location information is a key component of public safety. The importance of correct location information for an incident, along with the location of responders, is critical to a dispatcher and the overall mission of public safety. There is a high level of complexity when it comes to location data in a region with a revolving population. The percentage of cellular 9-1-1 calls in the region adds to the difficulty shared by both caller and dispatcher in identifying the exact location of the emergency. There is not full AVL capability across all of the involved agencies for all of the disciplines. During site visits none of the current command centers mentioned using GPS based applications to assist with determining caller location. To increase interoperability in the area, the involved fire agencies should build upon their use of IncidentView, an application with an overlay feature that takes geographic data from multiple sources and produces it on a single map in real-time (see Section 6.2, IncidentView). The data should continue to include CAD/9-1-

1 incidents for service with the addition of caller location data, crime center mapping, and DOT mapping to aid in pinpointing the exact location of the event.

6.7 Broadband Capabilities

The lack of access to sufficient internet connectivity not only impacts residents and businesses, but also public safety agencies and the ability to be fully NG9-1-1 compliant. Broadband connects technology such as software solutions that leverage developed mobile applications that include location technology. Added software capabilities from the IoT to AI to live video feeds and rapid information sharing systems are changing the way public safety agencies communicate and respond.

The ability to transfer digital data in rural and isolated areas is a known issue nationwide. There are many grant options out there for the Tahoe region to explore. The National Telecommunications and Information Administration (NTIA) manages two broadband grant programs and the FCC ReConnect Program awards grant money to facilitate broadband deployment in rural America.

For complete NG9-1-1 operation, public safety must not only consider IP-based network connectivity but also the capability for broadband information to be received at the command center. Responders with access to push video can stream video to the command center personnel to provide the ability for real-time assessment of the incident scene.

On June 19, 2019 Danielle Hughes presented Lake Tahoe Basin End Warning System and Bi-State NextGen 9-1-1 Dispatch and Traffic Management Center during a Broadband USA NTIA Webinar Series titled Building Smart Cities and Communities at the Regional Level. This webinar presentation touched upon looking at solutions such as smart streetlights to build out the network. Solutions like this are important to explore, as partnerships between public safety and private companies are necessary to build a network in the Tahoe Region.

As the Tahoe Region makes decisions to transition services, one factor to consider when expanding broadband is the responsibility of the command center staff to manage the data. From the APCO P43 Initiative - *In the broadband environment, PSAPs may need to create a new position or function for a data or intelligence analyst to triage multiple sources of information concerning the same or unrelated incidents, in order to determine what multimedia data is critical to forward to responders immediately, versus what data is more "background noise" or evidentiary rather than actionable. The work of the data or intelligence analyst may at times need to be coordinated with other public safety agencies*.[4]

6.8 Alert and Warning Systems

Integrated end warning systems that allow for real-time information sharing across jurisdictions and public service disciplines are a critical tool in public safety. The ability to make notifications to residents, visitors, businesses and the community to allow them to make actionable decisions to effect disaster mitigation will greatly benefit the Tahoe Basin. Stakeholders in the region have a firm understanding of the importance of end warning systems as noted in the Broadband USA

[4] https://www.apcointl.org/download/apco-p43-report/ APCO International Broadband Implications For The PSAP – Analyzing The Future Of Emergency Communications. Project 43 Initiative.

NTIA Webinar: Building Smart Cities and Communities at the Regional Level and outlined as part of the Global City Teams Challenge[5].

Waycare is a cloud-based platform that capitalizes on the data from various transportation modes, such as in-vehicle and city data, along with the use of predictive analytics to provide traffic management and public safety agencies information to implement preventive methods in areas high risk traffic areas.

The topography of the region presents numerous connectivity challenges. Issues with Wi-Fi connectivity can greatly impact the efficiency of the use of end warning systems. As outlined in section 6.7, Broadband Capabilities, broadband capabilities will need to be evaluated and updated in the region.

The State of California Alert & Warning Guidelines provide clear structure to address the components of an effective alert and warning program. These guidelines should be incorporated into the planning process if the region determines to move ahead with a Bi-State Regional Command Center.

[5] https://gctc.opencommons.org/Lake_Tahoe_Basin_End_Warning_System_and_Bi-state_Next_Gen_911_Dispatch_and_Traffic_Management_Center

6.9 Camera Systems

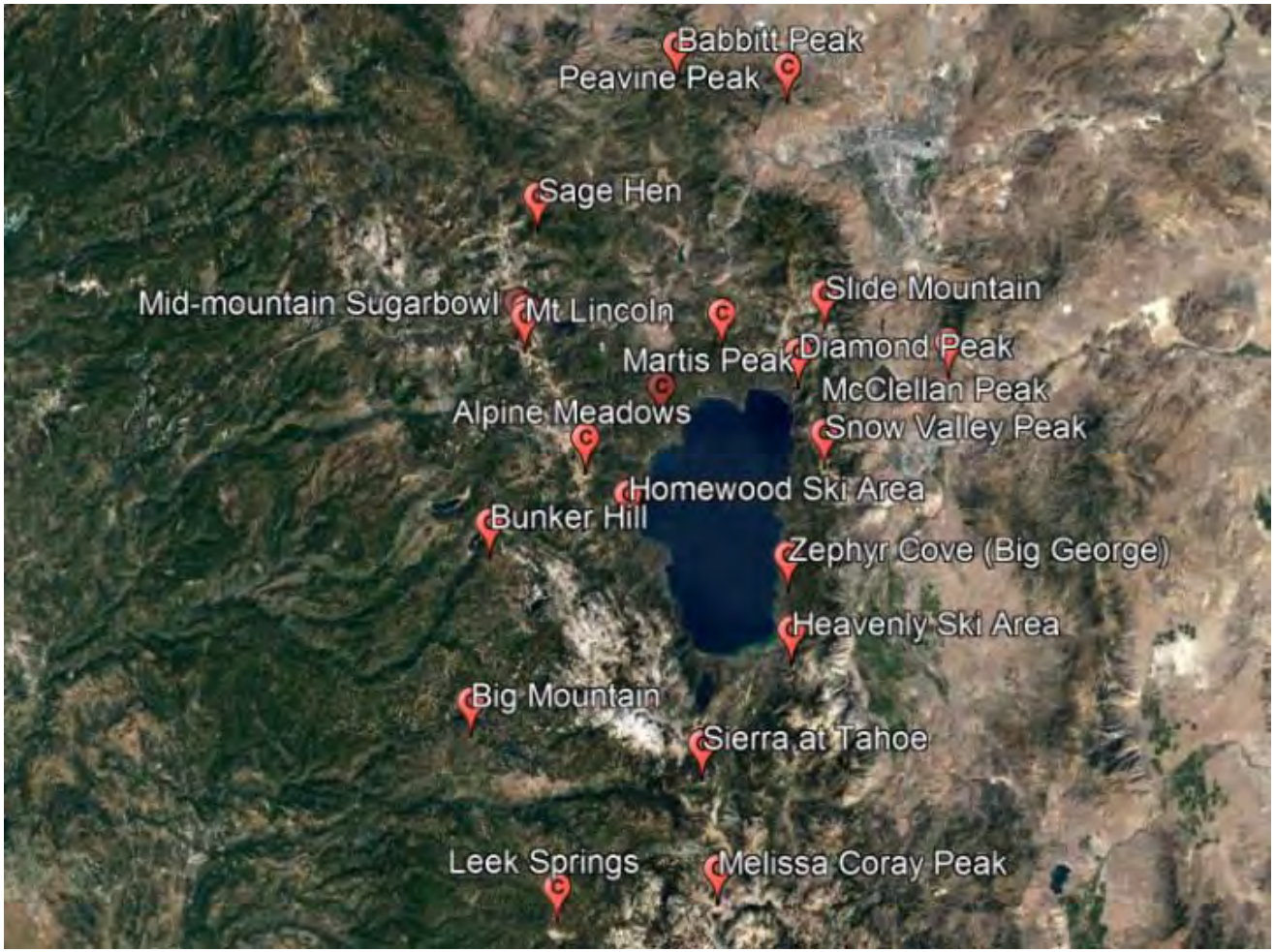

Figure 32 - Fire Cameras - Tahoe Area Site Locations

The fire camera system is known as ALERTWidefire. The Greater Tahoe Area is one of thirteen fire camera networks that cover California, Nevada, as well as parts of Oregon, Washington and Idaho. The system provides access to fire camera video via the internet. Access is available to the public. Public safety personnel received additional access allowing for pan-tilt-zoom (PTZ) and optical zoom. ALERTWildfire is available at http://www.alertwildfire.org/tahoe/.

The following is from the ALERTWildfire about webpage

> *ALERTWildfire is a consortium of three universities -- The University of Nevada, Reno (UNR), University of California San Diego (UCSD), and the University of Oregon (UO) -- providing access to state-of-the-art Pan-Tilt-Zoom (PTZ) fire cameras and associated tools to help firefighters and first responders: (1) discover/locate/confirm fire ignition, (2) quickly scale fire resources up or down appropriately, (3) monitor fire behavior through containment, (4) during firestorms, help evacuations through enhanced situational awareness, and (5) ensure contained fires are monitored appropriately through their demise.*
>
> *ALERTWildfire is an expansion of the first network, ALERTTahoe, which was a pilot program deploying PTZ cameras and microwave networks in the region surrounding beautiful Lake Tahoe. This initial project was funded through the Nevada Seismological Laboratory (NSL) at UNR, the Tahoe Prosperity Center, the Eldorado National Forest, and the USFS Lake Tahoe Basin Management Unit. Soon thereafter, through a contract with the Nevada Bureau of Land Management, the network quickly grew eastward into northern Nevada where the BLM Wildland Fire Camera Project was born. With growing successes in the summers of 2014-16, new contracts with the Oregon-Washington and Idaho Bureaus of Land Management and San Diego Gas and Electric (SDGE) provided further expansion of new fire cameras and microwave locations, and core university participation as UCSD and UO came aboard. Sonoma Water, Southern California Edison, Pacific Gas and Electric, and many counties, including Marin, Sonoma, Napa, Lake and Mendocino, have joined ALERTWildfire to make a statewide network in California a reality. As fire season 2019 begins, construction continues rapidly to expand throughout California and many other locations in four nearby states.*

Camera Sites

The majority of the camera sites are on existing towers/structures in the Tahoe area. A few of the camera sites were of great interest to the ICTAP team as they are in areas with known radio coverage issues and, unlike the majority of the existing radios sites, they were at lower elevations with great coverage of the area shoreline. The three sites with the most interest were Zephyr Cove (Big George), Dollar Point, and Alpine Meadows. ICTAP team held conversations with Dr. Graham M. Kent, University of Nevada Reno, the primary POC for ALERTWildfire. He informed the team that these key sites did not have any infrastructure and that ALERTWildfire installed very lightweight (Rohn) towers with the minimum solar/DC to support the single camera at the sites.

6.10 Equipment and Capabilities Summary

There are numerous technological advances that can be put in place that increase interoperability without the involved agencies being based in the same physical location. Common technical platforms can unify command centers; CAD-to-CAD solutions, shared channels/talkgroups, and ESInet phone services are all technical solutions that could aid in increasing interoperability across jurisdictions and disciplines. Exploring the option of implementing a CAD-to-CAD interface would alleviate the duplication of efforts and over-reliance on telephone communications. CAD-to-CAD interfaces can also be incorporated in DOT command centers, giving PSAP and DOT staff the ability to quickly transfer data on shared incidents. For example, an injury accident that has struck a guard rail could generate separate events for the correct responders that are actually one shared incident across the CAD systems.

The Tahoe group should work towards implementation of NG9-1-1 across all of the existing command centers and supporting ESInet, along with consideration of a hosted/shared phone system in the Tahoe Basin.

Additionally, the group may need to explore the possibility of adding new RF sites or upgrading sites like the fire camera locations of Zephyr Cove (Big George), Dollar Point, and Alpine Meadows to support radio communications. The establishment of Tahoe Basin specific channels or talkgroups would not only increase the ability for first responders to communicate but would facilitate improved communications across all command centers.

Cameras can provide precise location information. 9-1-1 callers who are unfamiliar or new to the area often cannot provide accurate location data but may be able to provide landmark information that camera operators can use to identify which stretch of roadway a caller is on. Agencies that house DOT with a PSAP allow dispatch access to monitor cameras and assist with identifying issues, bringing faster solutions to traffic related concerns. Sharing camera access is beneficial to the public and the responders, and with the correct technology in place can be shared across command centers.

The access to inexpensive camera equipment can lead to an abundance of privately-owned surveillance cameras. While these cameras may not be networked or readily available to public safety agencies, many of the private owners will share footage to social media. An added layer of video technology is live streaming of events on social media. That, along with the expanding NG9-1-1 technology to send photos and videos via text-to-9-1-1, place an added expectation on the public safety industry. 9-1-1 staff are not typically trained to deal with the imagery of the 9-1-1 calls they manage. Moving forward, a regional decision should be made regarding how to receive and process NG9-1-1 photo and video data.

7 Physical Space/Facilities

Initially, in the assessment process, it was stated that a location for a consolidated command center was identified and that it would not be a necessary component of the study. Through the process it became clear that there was not a regional consensus regarding a proposed location. This logistical decision will need to be addressed as the agencies move forward with the findings of this report. ICTAP does not make recommendations based on real estate, (costs, obtainability, constructability), and have based their observations on connectivity, access, and next steps for the stakeholders.

The ICTAP team did not get the opportunity to visit all of these sites due to some of the options coming to the forefront after the teams held site visits. ICTAP did get an opportunity to visit the Zephyr Cove (old Dreyfus Mansion) site. While researching the CAL FIRE JPA communications, the team did visit the CAL FIRE Station 50 at Truckee Tahoe Airport (TRK).

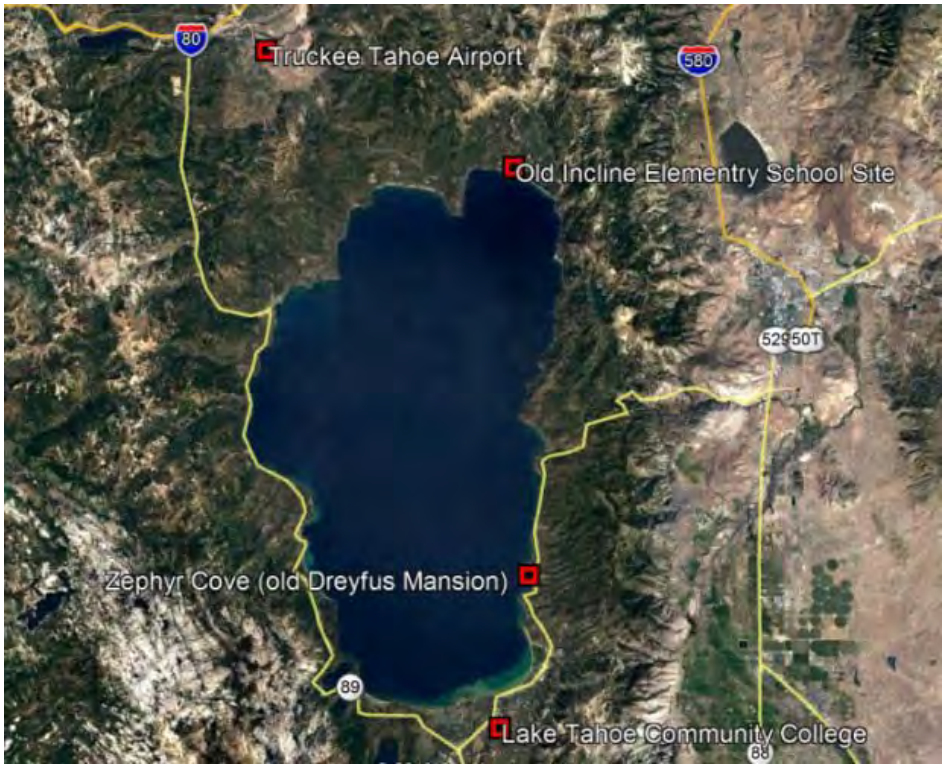

Figure 33 - Potential Regional Command Center Sites

7.1 Truckee Tahoe Airport (TRK)

The Truckee Tahoe Airport is located adjacent to the City of Truckee, just off of North Shore Road (highway 267) and approximately 1.4 miles from interstate 80. The airport is a large, relatively flat and cleared plot of land.

Advantages:

- The CEO of the Tahoe Truckee Airport District has expressed interest in the possible location of a Bi-State Regional Command Center on the airport property.

- The availability of existing infrastructure, power, internet.
    - All utilities are underground.
- The flat area of the airport that is nearly completely cleared of trees and with existing structure height limits would be ideal for wireless connectivity (microwave).
- Feasible microwave paths would include:
    - Connectivity to CalOES microwave network at their Donner, Brockway and Mount Rose sites.
    - Connectivity to Washoe County/NDOT microwave network at Mount Rose.
    - Potential to expand microwave connectivity to Mt. Pluto and Squaw Peak. Allowing for wireless connectivity to extend into the Tahoe Lake Basin.
- Existing RF Line of Sight to CAL FIRE NEU JPA sites.
    - Existing RF connectivity from CAL FIRE Station located on airport property.
- Co-location with CAL FIRE and Truckee Fire.
- Population base. Truckee is the second-largest city in the Tahoe area. Additionally, the north shore cities and the City of Reno are within a 35-minute drive to the airport.

Issues:

- Height limits on the airport property.
    - This would be overcome by the lack of any near field obstructions due to the airport property being nearly completely cleared of trees and existing height limitations on structures.
- Limited line-of-sight connectivity in the lake area.
    - Line-of-sight connectivity to sites in the north end of the lake such as Mt. Pluto and Squaw Peak could allow direct access into the lake but any RF sites in the southern end of the lake would require additional connectivity.

7.2 Zephyr Cove

One location identified is located at Zephyr Cove (old Dreyfus Mansion) on the Nevada side. Tahoe Transportation District will be building a facility in the area just east of Highway 50.

Advantages:

- Depending on the actual location of the center, could provide excellent RF coverage towards the western shore of the lake and the hard to cover area in and around Zephyr Cove.
- Close proximity to Tahoe Douglas Station 24.
    - It could be close proximity to a Tahoe Transportation District facility.
- Population base. Access to the population center of South Lake Tahoe/Kingsbury and Meyers.

Issues:

- Heavily treed area. Making any new communication towers would need to be extended above the tree line.
- Power, telephone and internet are above ground running through a heavily treed area.
- Limited line-of-sight to the eastern side of the lake.
- Access to/from the site limited to highway 50. Any issues on the highway could adversely affect center staff.

- Numerous plans are at play for facilities in the area; unable to identify exact locations of partner agencies and impact they could have on the development of a command center in the same area.

7.3 Old Incline Elementary School

As stated, the ICTAP team did not learn of this potential site in time to make a site visit. The old school is located at the corner of Tahoe Blvd. and Southwood Blvd. within the city of Incline.

Advantages:

- In city location. Close proximity to services.
- Large, assumed, buildable lot.
- Availability of existing infrastructure, power, internet.
- Close proximity to both the Washoe County Sheriff Office and North Lake Tahoe FPD Station 11.
- Feasible microwave path to Washoe County/NDOT microwave network at Snowflake.
- Population base. Incline has a population base of 8777. Additionally, Truckee and the north shore cities would be manageable driving distances. The city of Reno would be a further drive at approximately 50 minutes to an hour.

Issues:

- While the school site itself is nearly cleared of trees, the area around the site has very tall trees that could pose near field obstruction issues for any wireless connectivity.
- The low elevation site would require a large tower.
- Limited RF connectivity from the site.

7.4 South Lake Tahoe

During the ICTAP initial conversations for this assessment, the possibility of a site in the City of South lake Tahoe was mentioned. No specific sites were presented but the assumption was it would be on city property in the triangle area.

After the ICTAP site visits a potential site at the Lake Tahoe Community College was suggested. The Community College is said to be interested in the possibility. The exact location on the property has not been proposed.

Advantages:

- In city location. Close proximity to services.
- Availability of existing infrastructure, power, internet.
- Close proximity to other agencies on Al Tahoe Blvd. like SLT police department, El Dorado County Sheriff Office and the USDA Forest Service Lake Tahoe Basin Management Unit.
- Population base. SLT is the largest city by population in the Tahoe basin. This combined with Meyers, Kingsbury and Stateline provide the basin area's largest pool of potential employees.
- The college has obtained funding to develop a public safety training program, including training dispatchers.
    - Potential great partnership.

Issues:

- Just like the existing SLT dispatch site, the location is in a low elevation spot surrounded by terrain; an RF hole.
- Heavily treed area, requiring any new communication towers to be extended above the tree line.
- Power, telephone and internet are above ground running through a heavily treed area.
- Limited line-of-sight to the entire lake.
- Limited RF connectivity from the site.

7.5 Location Summary

When selecting a location, the stakeholders must take into consideration where the majority of staff to support a regional command center reside. They should also consider reviewing historical transportation data to ensure that the roads to and from the site are proven to be passable 24/7. Once a location has been selected, the region will have to address additional considerations such as site characteristics, building options, center layout and furniture, security features and requirements for a 24-hour work environment.

8 Financial Considerations

A Bi-State Regional Command Center may not only increase interoperability across geographic and agency boundaries, it can also bring financial benefits to the involved agencies. Keeping those potential benefits in mind, stakeholders must also weigh the benefits against the current expenses for each agency continuing to operate under their current partnerships. When potential savings are broken down across individual agencies, the issue of cost versus benefit becomes less clear, as the involved fire agencies may experience differing levels of savings depending on the chosen cost allocation formula when consolidating fire dispatch services into a Bi-State Regional Command Center. The current five command centers will have a direct budget impact dependent on whether their current fire agency contracts transition to a Bi-State Regional Command Center.

Offsetting costs may not necessarily be a substantial benefit to a Bi-State Regional Command Center as the services aren't necessarily being consolidated, but instead, they are being transferred to a centralized center. Migrating dispatch services to a regional command center could prove financially beneficial to the area PSAPs who have outgrown their existing centers, and are struggling to properly manage incoming calls for service and radio dispatch duties while maintaining appropriate staffing, if some of their call volume is alleviated by the transition of service to a regional command center.

Actual PSAP consolidations have not always resulted in cost savings for the involved entities. Some of the reasons for this include patterns of high inefficiencies, the avoidance of eliminating positions, and cost allocation decisions that impact the PSAP budget. Using the model of a regional command center as opposed to a consolidated center provides the opportunity to research the financial pitfalls and benefits of previous consolidation projects and implement the proven successful strategies.

It will be important that the stakeholders involved in this project establish a governing body to facilitate a collective agreement about how to share the costs. In addition to determining the cost-sharing formula, there is a cost difference that is dependent on which solution the involved agencies elect to go with. The data provided by each center can be used to create estimated staffing projections for any configuration of consolidation that the involved agencies may choose.

There is an economic reality of the pressure to do more with less. When discussing consolidation, the more obvious driving force is the financial benefits. There are other solutions that can bring financial gains. Streamlining resources, reducing duplication of efforts, sharing systems, and co-locating can provide budgetary solutions to support operations. The cost advantages are related to the scale of operations, a reduced need for staff, duplication of equipment needs, physical location, and the benefit of combining funds. The fiscal benefits do not necessarily equate to a reduction of staffing. Dependent on the pathway selected to build a regional command center, the larger benefit may come from the consolidation of technology.

The likelihood of cost savings, and their magnitude, for any specific proposed consolidation, would have to be determined as part of a feasibility study that looked very closely at job responsibilities and minimum staffing requirements. Due to the large number of agencies interested in this project and the undefined number of participants, ICTAP staff did not create fiscal impact statements for this study.

8.1 Operating Costs

As the involved agencies move forward with considering a Bi-State Regional Command Center, they will need to conduct an inventory of the budgeted dispatch center costs in the area. They should evaluate the annual amount budgeted as well as cost per dispatch employee. The stakeholders in the region will need to evaluate what the current pay is at centers in the area that services will be migrating from and determine the average pay in the region.

Capital costs can be both planned and unplanned. Capital cost savings are possible if the involved fire agencies are transitioning from a PSAP that has reached physical capacity, needs upgrades, and if the transition costs are low. Administrative tasks can be delegated to clerically classified staff, freeing dispatch staff to handle operational level responsibilities.

8.2 Funding

Funding mechanisms will need to be established and should include an agreement as to how to handle capital costs, including start-up and technology infrastructure, transitional, and operational costs. The POCs have already identified funding options. The implementation team should investigate grant options, bonds, existing funding (9-1-1 wireless/wireline fees, tax base).

8.3 Cost Allocation Models

A key benefit to consolidating services is the ability to follow a cost-sharing model. A cost-sharing model should be built with the understanding that the goal is to benefit the Bi-State Regional Command Center, not the individual operations of independent agencies.

Cost considerations

The majority of a Bi-State Regional Command Center operational budget will be the expenses for employees' salaries, overtime, benefits, and training. A determining factor in cost will be how many fire agencies will be transferring their dispatch services to the regional center. There will need to be established minimum staffing requirements based on the number of agencies, units/responders that dispatch is responsible for, and total average calls for service and incidents.

Options for cost-sharing

- Call volume and population-based formula: each agency pays a percentage based on the call volume and population of their service area.
    - The advantage of this option is that is simple to calculate and is easily communicated. It also balances service demands with the ability to pay.
    - This can be an unfavorable option as the population of the region fluctuates between year-round residency and visitors. For example, the city of South Lake Tahoe has a census population of 22,036 but can see upwards of 1 million visitors to the area for any given holiday or event.
    - If necessary, bylaws can be established that smaller agencies pay a minimal percentage.
    - This formula can be weighted equally, 50% based on population and 50% based on calls for service.
    - The percentage can be based on call volume or number of fire incidents for each geographical area.

- Equal share and population-based formula: a percentage based on the number of involved partners plus a share based on the agency's population.
    - This formula combines using an equal portion of fixed costs and a per capita portion.
    - Determine the fixed costs of operating a command center. Fixed costs such as radio and dispatch salary on average these costs are approximately 20% of operating costs. Each participating agency would be responsible for the fixed costs and the remaining balance of costs would be distributed on a per capita basis.
- Phased portion funding: for the first year (or set time frame) each participating agency pays what their previous costs were to the shared command center. The second year of operations each of the agencies will contribute 50% of their previous dispatch operation costs to the Bi-Regional Command Center. As funding sources are determined
- A formula of combined options (such as those listed above) with a weighted metric on points. Take the total estimated costs and divide them based on selected metrics, using an ownership percentage model. Ownership percentage (OP) involves each of the agency's portion of any common equipment or costs.

In the state of Oregon, the Portland Dispatch Centers Consortium (PDCC) has an existing cost-sharing model for its CAD-to-CAD interface that has been in use for many years. There are a variety of approaches successfully used by public safety agencies when embarking on consolidation, migration or integration projects. Below is the example provided for PDCC.

Table 9 - PDCC Sharing Model

Agency Size	Points	Definition
Large	12.1	More than 20 active positions
Medium	9.6	11-20 active positions
Small 2	2.1	5-10 active positions
Small 1	1.1	less than 5 active positions

Agency	Base Rate	Size Points	Size Percent	Total Cost
Total	**$ 1,550**	**56**	**100.0%**	**$ 6,200**
BOEC	$ 141	12.1	21.6%	$ 1,146
C911CD	$ 141	2.1	3.8%	$ 315
CCOM	$ 141	9.6	17.1%	$ 938
Cowlitz	$ 141	2.1	3.8%	$ 315
CRESA	$ 141	9.6	17.1%	$ 938
LOCOM	$ 141	2.1	3.8%	$ 315
PBEM	$ 141	2.1	3.8%	$ 315
PDX	$ 141	0	0.0%	$ 141
WCCCA	$ 141	12.1	21.6%	$ 1,146
AMR	$ 141	2.1	3.8%	$ 315
MWA	$ 141	2.1	3.8%	$ 315

There are existing agreements and contracts in place for fire dispatch services in the Tahoe Region. These agreements will need to be closely evaluated if the involved fire agencies choose to move forward with a Bi-State Regional Command Center. The Eastern JPA Repeater has an existing cost sharing model in the Tahoe region (see table 7)

Table 10 - Eastern JPA Repeater Cost Sharing Model

		Maintenance Cost Apportionment					
Repeater Site	Installed by	CAL FIRE / DGS	TFPD	NTFPD	NFD	SVFD	MBFPD
Mt. Rose	CAL FIRE	100%					
Mt. Pluto	NTFPD/SVFD grant	10%	10%	20%	20%	20%	20%
Snow Valley	NTFPD/SVFD grant	10%		35%	10%	10%	35%
Squaw Peak	NTFPD/SVFD grant			10%	10%	70%	10%
Donner Beacon	CAL FIRE	100% (?)					
Cisco Grove	CAL FIRE	100% (?)					
Northstar Mid-Mountain	Northstar Fire			10%	70%	10%	10%
CalTrans Control Station	DGS/ CAL FIRE	100% (?)					
Station 96 Control Station	JPA grant	100% (?)					

ICTAP recommends that the stakeholders in the Tahoe Basin establish a work group to determine what cost-sharing option best meets the needs of the involved agencies. This group will also need to determine if one agency will act as the shared / host agency. Many emergency communications agencies liaison with Emergency Management to seek funding options, and it is ICTAP staff's recommendations that those in the Tahoe Basin take that step.

A best practice to consider when developing a cost-sharing model is to have each agency be represented as a buyer in contract agreements when participating in the Bi-State Regional Command Center solution. From there, determinations can be made if each fire agency should be billed by the contractor for their portion of any equipment (e.g., CAD software) or if a shared / host agency is identified whether they will incur costs and make charges based on the selected cost-sharing model. A key component in determining a cost-sharing model will be the collection of current costs for contracting dispatch services incurred by each fire agency that decides to participate in a Bi-State Regional Command Center.

9 Industry Practices

Association of Public Safety Communications Officials (APCO) and National Emergency Number Association (NENA) are two professional emergency communications organizations that facilitate industry standards, training & certification, and government relations. APCO and NENA both acknowledge the importance of data interoperability and continually partner together to advance the NG9-1-1 industry.

APCO partnered with International Journal of Information Security (IJIS) to create the Unified CAD Functional Requirements (UCADFR) document (2010-2012), which is a detailed set of functional requirements for CAD systems. The document is meant to serve as a guide for PSAPs when compiling an RFP for a new or upgraded CAD system. NENA created the NENA i3 Architecture document which is a detailed functional and interface specification of NG 9-1-1 standards. These documents hold values from the National Information Exchange Model (NIEM). Both of these documents were taken into consideration during the assessment process.

The two organizations collaborated on a project to create the Emergency Information Data Document (EIDD). EIDD received final approval by the American National Standards Institute (ANSI) in January of 2017. The EIDD provides a neutral model with specifications of functional elements to support data interoperability.

The National Fire Protection Association (NFPA) is an international organization that provides standards, research and training including recommendations for communications standards (NFPA 1221). Compliance with NFPA standards is voluntary but is common practice for many agencies to incorporate NFPA standards into their agency practices.

The involved agencies will need to collectively decide if conformance to the standards and requirements outlined in the above-mentioned documents will be mandatory or optional and must come to an understanding to ensure a successful collaborative project. When conducting an RFP, the involved agencies would benefit from asking the vendors who respond if they conform and/or comply to the industry standards, particularly in regard to functional elements. If grant funding is secured for the development of a Bi-State Regional Command Center, ensure that the RFP meets any standards that are required by the grant.

10 Summary

The original scope of this report was to determine the feasibility of a consolidated command center, when it was quickly identified that consolidation of dispatch centers in the region would not be feasible. Instead, a migration of services to a regional command center would best suit the needs of the involved agencies. The process to determine the feasibility of a consolidated command center was multidimensional due to the size, complexity, and scope of this project. The scope of the project was inflated largely as a result of the number of agencies engaged. The continued addition of interested participants during an exploratory process made it difficult at times to find an adequate area of focus. A great deal of ICTAP time was spent gathering an understanding of the current interoperability status in the region.

Improving interoperability is the most important reason to consider a Bi-State Regional Command Center, along with potential cost savings, improved services, and the ability to increase the support of training and technology. The Tahoe Basin has a significant need for increased interoperability; there are some basic solutions that can be explored to increase communications between command centers without consolidating the existing emergency communications centers. In actuality, the more complicated solution to the interoperability issues would be to focus on the consolidation of the existing centers. The level of complexity associated with this solution cannot be understated. There are existing relationships throughout the region that complicate the ability to openly discuss consolidation. A more feasible approach is to first begin implementing the technology solutions to improve interoperability (which will be outlined in detail in the second related study for the Tahoe region) and then work towards building a Bi-State Regional Command Center with a phased expansion plan. ICTAP recommends that if the agencies involved do decide to move forward with a Bi-State Regional Command Center they begin with a small consortium and leave room for other interested partners to join.

A Bi-State Regional Command Center scenario could yield some cost savings as the involved fire agencies would transition their existing contracts with the five dispatch centers to one independent center. This is a favorable approach as not just one dispatch center would control the operations and each of the stakeholders could have a controlling share of how the command center is developed and operated. The downside to not using a consolidation is that the costs of purchasing land, building the space, hiring dispatch center staff, furniture, fixtures & equipment may outweigh any costs savings gained by transitioning the contracted dispatch services.

A significant benefit of moving forward with a Bi-State Regional Command Center is the opportunity to pool funding resources and work together to modernize 9-1-1 services in the Tahoe Basin. Brining modernized services that move towards adherence to the NG9-1-1 Advancement Act[6] will allow for the use of IP-based, broadband-enabled technologies to coordinate emergency responses.

Proper planning when considering consolidation or migration of services must include scope management for timelines and deliverables. The interested agencies have taken the first step with this report. It is recommended that the agencies use this document to create an organized governing board to facilitate the next steps. There is cooperation between the fire agencies and

[6] NG911 Advancement Act of 2017 https://www.congress.gov/115/bills/s2061/BILLS-115s2061is.pdf

existing JPAs in the region. Building upon those relationships and agreements will be beneficial to a successful project.

Dispatchers' priorities are to manage incoming calls from the public, assign the proper response, and track the responder's actions. With most emergency communications centers averaging 80% of their call volume from cell phones, there are added elements of the call taking process that can increase the dispatchers' "talk-time" or workload. Added requirements such as facilitating after-hours calls for other departments, managing the criminal justice databases, and alarm monitoring bring many dispatch centers to the point of being overwhelmed. Additionally, nationwide dispatch centers are facing a staffing shortage. Time and again it is stated that there is an over-reliance on dispatchers to complete tasks that could be delegated to other entities and partners. Extra work along with mandated overtime shifts are pushing many dispatch centers to the breaking point. It is the recommendation of ICTAP that the involved agencies in the region would be better suited to focus on a Bi-State Regional Command Center concept to meet the needs of each of the individual entities incorporating APCO Project 43 guidelines. Dispatch center staff are traditionally trained to use the three tools available to them – radio, telephone and CAD. The incorporation of alert and warning systems in use with DOT and Highway Patrol, along with the availability to monitor cameras for a real-time understanding of an incident, should be delegated to dedicated staff beyond the dispatcher. Staff situated within a regional command center can utilize information from various sources and platforms to effect an enhanced public safety response. Command staff will be able to send and receive notifications, ensuring that the appropriate service agencies are engaged in the response. If the agencies involved move towards inclusion of the DOT operations in a regional command center there will need to be a clear division of responsibilities between DOT staff and dispatch staff. The goal of clarifying the roles by using an operations center concept is to keep the dispatcher available to focus on the 9-1-1 aspect of the response. A regional command center with real-time operation center elements can provide a platform where the dispatch and command staff can receive information that is mission-critical after it has been analyzed by their partners in the command center.

A Bi-State Regional Command Center does offer benefits to the public safety response in the Tahoe Basin. An enhanced fire dispatch response that builds upon the partnerships in place across the fire districts & departments can greatly improve the response plans and how fire apparatuses are managed. Including traffic and transportation agencies in a regional command center can prove beneficial to increase awareness of traffic related incidents that can impact emergency response. Leveraging the existing technology and partnering to expand towards NG9-1-1 compliance would prove valuable to the region.

Appendix A Regional Dispatch Letter 2019

North Tahoe and Meeks Bay Fire Protection Districts

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Michael S. Schwartz, Fire Chief

April 23, 2019

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RE: Request for Information Related to Unified Dispatch Services

Dear Chief Estes, Supervisor Marsolais, and Chief Lindgren:

On behalf of the Lake Tahoe and Truckee regional fire chiefs, I am writing to seek your feedback and support on a proposed coordinated effort to explore the development of a consolidated command center for dispatch services of fire and emergency services within and around the Lake Tahoe-Truckee region. Following the Angora Fire, the bi-state Blue Ribbon Commission developed recommendations, many of which have been implemented and many more are still under way (2017 update report). Most notable is the continued commitment at the leadership level supporting a cooperative environment in aspects of fire suppression, prevention, and forest management.

At the "boots on the ground" level, our suppression personnel work effectively in a unified manner and our radio communications interoperability has greatly improved since 2007. One shortcoming remaining in regional interoperations is the large number of dispatch centers servicing the region. There are five dispatch or command centers providing emergency services across this region. Some centers are primary, and others are secondary (Public Safety Answering Points PSAP) using several different Computer-Assisted Dispatch (CAD) platforms with limited ability to transfer emergency calls from CAD to CAD. This leads to phone transfers of emergency callers often multiple times, leading to duplicate dispatches and uncoordinated responses. These practices are also not in alignment with the National Academies of Emergency Dispatch's best practices or Finding 42 of *The Emergency California-Nevada Tahoe Basin Fire Commission Report (2008)* identified as "Interagency communications during wildland fire occurrences is at times delayed and confusing."

To work around these issues for the past several years, a number of local fire agencies implemented Incident View software on their mobile data computers (MDCs). This inexpensive multi-platform response software allows for the sharing of incident-critical GIS data, mobile vehicle location information, and call routing of the closest resources between agencies from different jurisdictions, dispatch systems, and incompatible Computer-Assisted Dispatch (CAD).

Given the trends we are seeing in the number and scale of catastrophic wildfires and the continuing increase in calls for medical and law enforcement responses, the time for improved, more efficient consolidated dispatch is now.

I would like to suggest that the Multi-Agency Committee (MAC) and Eastern Placer County Fire Chiefs JPA could provide a starting point to explore this process for meetings, discussion, and reaching agreement to explore what a unified bi-state, multi-jurisdictional emergency dispatch could mean to the Basin and surrounding areas. I look forward to your response and discussion of our request.

Respectfully,

Michael Schwartz, Fire Chief
North Tahoe Fire Protection District

Steve Simons, Fire Chief
Meeks Bay Fire Protection District

Alan Riley, Fire Chief
Squaw Valley Fire Department

Sean Bailey, Fire Chief
Northstar Fire Department

Bill Seline, Fire Chief
Truckee Fire Protection District

Ryan Sommers, Fire Chief
North Tahoe Fire Protection District

Scott Baker, Fire Chief
Tahoe Douglas Fire Protection District

Jim Drennan, Interim Fire Chief/Battalion Chief
South Lake Tahoe Fire Rescue Department

Tim Alameda, Fire Chief
Lake Valley Fire Protection District

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Fallen Leaf Fire Department (CSD)

Sean Slamon, Fire Chief
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George Morris III, Assistant Region Chief
6105 Airport Road
Redding, CA 96002

Call Volume Summary by Agency

Agency	# of Calls
Squaw Valley Fire Department	555
Northstar Fire Department	500
Truckee Fire Protection District	2,659
North Lake Tahoe Fire Protection District	2,236
North Tahoe Fire Protection District	2,536
Tahoe Douglas Fire Protection District	2,181
City of South Lake Tahoe	3,538
Fallen Leaf Fire Department	95
Carson City Fire Department	10,558
Lake Valley Fire Protection District	170
South Lake Tahoe Fire Rescue Department	3,558
Total:	28,586

Appendix B Contact List

This list includes those invited to attend the kick-off workshop, participants of the workshop, points of contacts and contacts from site visits.

Agency	Name	Email
Alert Tahoe Wildfire Team UNR	Graham Kent	gkent@unr.edu
Alpine County Public Health Emergency Preparedness	Tim Streeper, Coordinator	tstreeper@alpinecountyca.gov
CAL FIRE	Brian Estes, Unit Chief Nevada Yuba Placer	brian.estes@fire.ca.gov
CAL FIRE	Battalion Chief Brian Newman AEU - Camino	brian.newman@fire.ca.gov
CAL FIRE	Chief Chris Anthony	chris.anthony@fire.ca.gov
CAL FIRE	George Morris III, Assistant Region Chief	george.morrisIII@fire.ca.gov
CAL FIRE	Mike Webb	mike.webb@fire.ca.gov
CAL FIRE	Scott Lindgren, Unit Chief Amador El Dorado	scott.lindgren@fire.ca.gov
CAL FIRE	Battalion Chief Steve Mueller Grass Valley	steve.mueller@fire.ca.gov
California Highway Patrol	Terry Lowther, Lieutenant	tlowther@chp.ca.gov
California State Parks	Matt Green, Superintendent	matt.green@parks.ca.gov
CalOES	Budge Currier	budge.currier@CalOES.ca.gov
CalOES	Henry O'Neil	henry.oneil@CalOES.ca.gov
CalOES	Jim Pratt, Senior Telecommunications Engineer	jim.pratt@CalOES.ca.gov
CalOES	Kit Bailey, Asst Chief Region IV	kit.bailey@CalOES.ca.gov
CalOES	Shelly Hutchens, Telecommunications Systems Mgr I	shelly.hutchens@CalOES.ca.gov

Agency	Name	Email
CalOES	Sophia Munoz	sophia.munoz@caloes.ca.gov
Caltrans	Gary Arnold, Program Director	gary.arnold@dot.ca.gov
Caltrans	Kevin Yount, Branch Chief	kevin.yount@dot.ca.gov
Caltrans	Shannon Roberts, Lake Tahoe Basin Liaison	shannon.t.roberts@dot.ca.gov
Caltrans, District 3	Brian Alconcel, PE, Chief of Traffic Operations	brian.alconcel@dot.ca.gov
Caltrans, District 3	Eric Royer, Traffic Operations	eric.royer@dot.ca.gov
Carson City Fire Department	Chris Vaughn	cvaughn@carson.org
Carson City Fire Department	Steve Slamon, Fire Chief	sslamon@carson.org
Carson City Public Works	James Jacklett, Operations Mgr-Control Systems	jjacklett@carson.org
Carson City Public Works Department/Carson Area MPO	Lucia Maloney, PMP, Transportation Manager	lmaloney@carson.org
Carson City Sheriff's Office	Communications Manager Karin Mracek	kmracek@carson.org
City of South Lake Tahoe Police Department	Chief of Police Brian Uhler	buhler@cityofslt.us
City of South Lake Tahoe Police Department	Bruce Martin	bmartin@cityofslt.us
City of South Lake Tahoe Police Department	Melissa Dube, Public Safety Dispatch Supervisor	mdube@cityofslt.us
City of South Lake Tahoe Police Department	Lt. Shannon Laney – Support Division	slaney@cityofslt.us
DHS Cybersecurity and Infrastructure Agency	Steve Noel, Sector Chief West	steven.noel@hq.dhs.gov
DHS Cybersecurity and Infrastructure Agency	Artena Moon, Western Sector Coordinator	artena.moon@cisa.dhs.gov
Douglas County	Jeff Brown, Communications Tech	jebrown@douglasnv.us

Agency	Name	Email
Douglas County	Jim Antti	
Douglas County	John Erb, Transportation Engineering Manager	jerb@douglasnv.us
East Fork Fire Protection District	Dave Fogerson, Deputy Chief	dfogerson@eastforkfire.org
East Fork Fire Protection District	District Chief Tod Carlini	tcarlini@eastforkfire.org
Eastern Alpine Fire / Rescue	Terry Hughes, Administrator	athughes75@hotmail.com
El Dorado County	Rafael Martinez, Transportation Director	rafael.martinez@edcgov.us
El Dorado County Sheriff	Greg Almos, Deputy	almosg@edso.org
El Dorado County Sheriff OES	Todd Crawford, Deputy	crawfordt@edso.org
Fallen Leaf Fire Department (CSD)	Gary Gerren, Fire Chief	ggerren@fllcsd.org
FHWA	Edward Ofori, Safety and Operations/ITS Team Leader	edward.ofori@dot.gov
FHWA	Khaled Maiser, Director, Technical Services	maiser.khaled@dot.gov
FHWA CA	Maria Bhatti, Safety and Traffic Operations Engineer	maria.bhatti@dot.gov
FHWA-NV	Andrea Gutierrez, Operations & Transportation Engineer	andrea.gutierrez@dot.gov
FHWA-NV	Jacob Waclaw, Project Delivery Team Leader	jacob.waclaw@dot.gov
Kirkwood Fire Department	Rick Ansel, Fire Chief	ransel@kmpud.com
Lake Valley Fire Protection District	Steve Pevenage	pevenage@caltahoefire.net
Lake Valley Fire Protection District	Chief Tim Alameda	alameda@caltahoefire.net
Meeks Bay Fire Protection District	Steve Simons, Fire Chief	simons@ntfire.net

Agency	Name	Email
Nevada Department of Public Safety / Nevada Highway Patrol	Richard Burger	rburger@dps.state.nv.us
Nevada Department of Transportation	Denise Inda, Chief Traffic Operations Engineer	dinda@dot.nv.gov
Nevada Department of Transportation	Jake Grivette IT Manager I - Nevada Shared Radio System	jgrivette@dot.nv.gov
Nevada Department of Transportation	James Whalen, Technology Manager	jwhalen@dot.nv.us
Nevada Department of Transportation	Jim Walker, Supervisor Emergency Management	jlwalker@dot.nv.gov
Nevada Department of Transportation	Juan Hernandez, ITS Programs & Operations Manager	jhernandez@dot.nv.us
Nevada Department of Transportation	Kandee Bahr Worley	kworley@dot.nv.gov
Nevada Department of Transportation	Rodney Schilling, Assistant Chief of Traffic Operations	rschilling@dot.nv.gov
Nevada Department of Transportation	Scott Bohemier, Transportation Futurist	abohemier@dot.nv.gov
Nevada Division of Emergency Management-Homeland Security	Melissa Friend, Emergency Management Interoperability / Communications	mnfriend@dps.state.nv.us
Nevada Division of State Parks	Bob Mergell, Administrator	rmergell@parks.nv.gov
Nevada Highway Patrol	Nicholas Nordyke	nnordyke@dps.state.nv.us
Nevada Highway Patrol	Todd Hartline, Lt. Deputy Commander	thartline@dps.state.nv.us
Nevada Highway Patrol - Carson District	Michael Edgell, Lt	medgell@dps.state.nv.us
Nevada Highway Patrol / State of Nevada	Tawanna Walker, Carson City Communications Center Manager	twalker@dps.state.nv.us
Nevada Homeland Security	Caleb Cage, Chief	cscage@dps.state.nv.us
Nevada Homeland Security	Kelli Anderson, Emergency Mgt Grants	kanderson@dps.state.nv.us

Agency	Name	Email
Nevada State Parks	Dale Conner	dconner@parks.nv.gov
NV Energy	Juan Riviera Jr. Nevada Shared Radio System	jrivera@nvenergy.com
North Lake Tahoe Fire Protection District	Battalion Chief Carol Green	cgreen@nltfpd.net
North Lake Tahoe Fire Protection District	Fire Chief Ryan Sommers	rsommers@nltfpd.net
North Tahoe Fire Protection District	Eric Horntvedt, Forest Fuels Coordinator	horntvedt@ntfire.net
North Tahoe Fire Protection District	Erin Holland	holland@ntfire.net
North Tahoe Fire Protection District	Michael Schwartz, Fire Chief	schwartz@ntfire.net
North Tahoe Fire Protection District	Fire Marshall Steve McNamara	mcnamara@ntfire.net
North Tahoe Fire Protection District	Steve Simons	simons@ntfire.net
Northstar Fire Department	Fire Chief Sean Bailey	sbailey@northstarcsd.org
Northstar Fire Department	Jason Gibeaut, Division Chief	jgibeaut@northstarcsd.org
Placer County	Bekki Riggan -Deputy County Executive Officer / Public Safety / Emergency Services	briggan@placer.ca.gov
Placer County	Dan Brockman	dbrockman@placer.ca.gov
Placer County OES	Holly Powers, Assistant Director	hpowers@placer.ca.gov
Placer County Public Works	Peter Kraatz, Deputy Director	pkraatz@placer.ca.gov
Placer County Public Works	Ryan Decker	rdecker@placer.ca.gov
Placer County Sheriff	Dave Hunt	dhunt@placer.ca.gov
Placer County Sheriff	Michelle Baxter, Lieutenant	mbaxter@placer.ca.gov

Agency	Name	Email
Sierra Electronics	Jared Schindler	jareds@sierraelectronics.com
South Lake Tahoe Fire Department	Jay Manning	jmanning@cityofslt.us
South Lake Tahoe Fire Rescue Department	Jim Drennan, Interim Fire Chief / Battalion Chief	jdrennan@cityofslt.us
Squaw Valley Fire Department	Fire Chief Allen Riley	ariley@svpsd.org
Tahoe Douglas Fire Protection District	Fire Chief Scott Baker	sbaker@tahoefire.com
Tahoe Prosperity Group	Heidi Hill Drum, CEO	heidi@tahoeprosperity.org
Tahoe Regional Planning Agency	Michelle Glickert, Transportation Planner	mglickert@trpa.org
Tahoe Transportation District	Carl Hasty, District Manager	chasty@tahoetransportation.org
Tahoe Transportation District	Danielle Hughes	
Tahoe Chamber	Steve Teshara, CEO	steve@tahoechamber.org
Town of Truckee	Deverie Acuff, Support Services Mgr	dacuff@townoftruckee.com
Town of Truckee	Robert Leftwich, Chief of Police	rleftwich@townoftruckee.com
Truckee Fire Protection District	Bill Seline, Fire Chief	billseline@truckeefire.org
US Coast Guard	Colt Fairchild, BMC	colt.t.fairchild@uscg.mil
US Coast Guard	Dustin F. Finkelson	dustin.f.finkelson@uscg.mil
USDA / USFS	Kyle Jacobson	kyle.jacobson@usda.gov
USDA / USFS	ECC Center Manager – Scott Wylie	scott.wylie@usda.gov
USFS	Mike Gabor	mgabor@fs.fed.us
Washoe County	Jenn Felter, Communications	jfelter@washoecounty.us

Agency	Name	Email
	Supervisor Communications Center	
Washoe County	Karinah Prevost, Communications Supervisor Communications Center	kprevost@washoecounty.us
Washoe County	Shawn Tayler Regional Communications Coordinator | Technology Services	stayler@washoecounty.us
Washoe County Emergency Management	Aaron Kenneston, Emergency Manager	akenneston@washoecounty.us

Appendix C Glossary of Acronyms

Acronym	Definition
AEU	CAL FIRE - Amador El Dorado Unit
AI	Artificial Intelligence
ALI	Automatic Location Information
APCO	Association of Public Safety Communications Officials
ANI	Automatic Number Information
ANSI	American National Standards Institute
AVL	Automatic Vehicle Location
CAD	Computer Aided Dispatch
CAL FIRE	California Department of Forestry and Fire Protection
Cal Trans	California Department of Transportation
CALEA	Commission on Accreditation for Law Enforcement
CalOES	California Governor's Office of Emergency Services
CHP	California Highway Patrol
CISA	Cybersecurity & Infrastructure Security Agency
CJIS	Criminal Justice Information Services
CPE	Customer Premise Equipment
CTCSS	Continuous Tone Coded Squelch System
DHS	Department of Homeland Security
DOT	Department of Transportation
DPS	Department of Public Safety
ECC	Emergency Command Center
EFD	Emergency Fire Dispatch
EIDD	Emergency Information Data Document
EMD	Emergency Medical Dispatch
EMS	Emergency Medical Services
EOC	Emergency Operations Center
EPD	Emergency Police Dispatch
FCC	Federal Communications Commission
FHWA	Federal Highway Administration
FD	Fire Department
FPD	Fire Protection District

Acronym	Definition
FSP	Freeway Service Patrol
FTE	Full Time Employee
GIS	Geographic Information Systems
GPS	Global Positioning System
IAED	International Academy of Emergency Dispatch
ICTAP	Interoperable Communications Technical Assistance Program
IJIS	International Journal of Information Security
IoT	Internet of Things
IT	Information Technology
ITS	Intelligent Transportation System
JLIC	Judicial Law Enforcement Center
JPA	Joint Powers Agreement
LOS	Line Of Site
LTCCP	Linking Tahoe Corridor Connection Plan
MCI	Mass Causality Incident
MHz	(MegaHertZ) One million cycles per second
MOU	Memorandum Of Understanding
NDOT	Nevada Department of Transportation
NENA	National Emergency Number Association
NEU	CAL FIRE - Nevada Yuba Placer Unit
NFPA	National Fire Protection Association
NG9-1-1	Next Generation 9-1-1
NHP	Nevada Highway Patrol
NIEM	National Information Exchange Model
NLTFPD	North Lake Tahoe Fire Protection District
NQCI	Nevada Quad County Interconnect
NSRS	Nevada Shared Radio System
NTIA	National Telecommunications and Information Administration
NVE	NV Energy
OES	Office of Emergency Services
OP	Operations
P25	APCO Project 25
PDCC	Portland Dispatch Centers Consortium
POC	Point of Contact

Acronym	Definition
PSAP	Public Safety Answering Point
PTE	Part Time Employee
PTO	Paid Time Off
PTZ	Pan-Tilt-Zoom
QAM	Quadrature Amplitude Modulation
RCC	Redding Communications Center
REMSA	Regional Emergency Medical Services Authority
REOC	Regional Dispatch & Emergency Operations Center
RETAINS	Responsive Efforts to Assure Integral Needs in Staffing
RF	Radio Frequency
RFP	Request for Proposal
RMS	Records Management Systems
RRRDC	Red River Regional Dispatch Center
RSL	Receive Signal Level
RTC	Regional Transportation Commission
RTOC	Real Time Operational Center
SFIDC	Sierra Front Interagency Dispatch Center
SLT	South Lake Tahoe
SME	Subject Matter Expert
SO	Sheriff Office
SOP	Standard Operating Procedure
SSAP	Secondary Safety Answering Point
S-SV	Sierra –Sacramento Valley EMS Agency
STPUD	South Tahoe Public Utility
TDFPD	Tahoe Douglas Fire Protection District
TIM	Traffic Incident Management
TRPA	Tahoe Regional Planning Agency
TRK	Truckee Tahoe Airport
TTD	Tahoe Transportation District
TX	Transmit
UCADFR	Unified CAD Functional Requirements
USDA	United States Department of Agriculture
USFS	United States Forest Service
VHF	Very High Frequency

Acronym	Definition
WCRCS	Washoe County Regional Communications System

Tahoe Transportation DISTRICT

Connecting our communities

MEMORANDUM

Date: May 4, 2020

To: Tahoe Transportation District (TTD) Board of Directors

From: TTD Staff

Subject: Adopt Resolution 2020-005 Approving the Public Transit Agency Safety Plan for the Tahoe Transportation District

---

Action Requested:
It is requested the Board adopt Resolution 2020-005 approving the Public Transit Agency Safety Plan for the Tahoe Transportation District (Attachment A).

Fiscal Analysis:
All expenditures associated with this item are accounted for in the Work Program and associated budget.

Work Program Analysis:
This project is included in the work program. All future work associated with this effort will be captured under respective elements of the existing Work Program and corresponding allotted staff time.

Background:
On July 19, 2018, the Federal Transit Administration (FTA) published the Public Transportation Agency Safety (PTASP) Final Rule (49 C.F.R. Part 673), which requires certain operators of public transportation systems that receive federal funds under the FTA's Urbanized Area Formula Grants to develop safety plans that include the processes and procedures to implement Safety Management Systems (SMS). A SMS is a comprehensive, collaborative approach to managing safety. It brings management and labor together to better control risk, detect and correct safety problems earlier, share and analyze safety data more effectively, and measure safety performance more precisely. The safety compliance deadline for the PTASP was initially July 20, 2020 and it was recently extended until December 31, 2020.

Discussion:
To ensure TTD's compliance with 49 C.F.R. Part 673, FTA requires the PTASP be approved by the Board of Directors. The draft plan was reviewed by FTA's PTASP Technical Assistance Center in March and a few recommendations were made. Staff has addressed those items in the current Plan.

Specific performance targets are required and are based on the safety performance targets established under the National Public Transportation Safety Plan and any additional performance goals set by TTD. These targets are specific numerical targets set by TTD and must be based on the safety performance measures established by FTA in the National Public

Transportation Safety Plan referenced in the Safety and Security Quick Reference Guide. Below are the safety targets by mode of transit service.

Mode of Transit Service	Fatalities (Total)	Fatalities (Rate)	Injuries (Total)	Injuries (Rate)	Safety Events (Total)	Safety Events (Rate)	System Reliability (miles)
Motor Bus (MB)	0	0	4	1/381,539	1	1/381,539	10,000
Commuter Bus (CB)	0	0	1	1/48,802	1	1/48,802	10,000
Demand Response (DR)	0	0	1	1/13,309	1	1/13,309	10,000

Many of the approaches and elements of the Plan are already in place. The Plan provides an opportunity to bring all of the relevant functions together in a cohesive document. The Plan document will be reviewed and updated as needed each spring.

Additional Information:
If you have any questions or comments regarding this item, please contact George Fink at gfink@tahoetransportation.org or (775) 589-5325.

Attachment:
A. 2020-005 Resolution with attached Public Transit Agency Safety Plan (PTASP)

TS/ja AGENDA ITEM: VIII.C.

TAHOE TRANSPORTATION DISTRICT
RESOLUTION NO. 2020-005

A RESOLUTION APPROVING THE PUBLIC TRANSIT AGENCY SAFETY PLAN FOR THE TAHOE TRANSPORTATION DISTRICT

WHEREAS, the Tahoe Transportation District (TTD) is a public entity eligible to receive local, state, and federal funding for transportation and public works improvement projects, through Article IX of Public Law 96-551; and

WHEREAS, TTD is required by the Federal Transit Administration (FTA) to develop a Public Transit Agency Safety Plan (PTASP) under final rule (49 C.F.R. Part 673); and

WHEREAS, TTD has developed safety plans that include the processes and procedures to implement Safety Management Systems (SMS); and

WHEREAS, TTD has developed safety performance targets in compliance with FTA's PTASP guidance; and

WHEREAS, TTD staff has prepared the PTASP in compliance with the final rule attached hereto as Exhibit A;

NOW, THEREFORE, BE IT RESOLVED, that the TTD Board of Directors hereby adopts the Public Transit Agency Safety Plan for the Tahoe Transportation District.

PASSED AND ADOPTED by the TTD Board of Directors at its regular meeting held on May 8, 2020 by the following vote:

Ayes:

Nays:

Abstained:

Absent:

_____
Steve Teshara
Chairman

Tahoe Transportation District

Public Transit Agency Safety Plan

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Transit Agency Information

Transit Agency:	Tahoe Transportation District (Hereafter referred to as "TTD")
Transit Agency Addresses	
Administrative Office:	128 Market St. Suite 3F, Stateline, NV 89449
Corporation Yard:	1669 Shop St. South Lake Tahoe, CA 96150
Y Transit Center:	1000 Emerald Bay Rd. South Lake Tahoe, CA 96150
Accountable Executive:	Carl Hasty, District Manager
Chief Safety Officer:	George Fink, Transit System Program Manager
Modes of Service:	Motor Bus, Commuter Bus, and Demand Response (all directly operated)
FTA Funding Received:	5307, 5310, 5311, 5339, and 5311(f)

Tahoe Transportation District does not provide transit services to another transit agency or service.

Plan Development, Approval, and Updates

Development

The Tahoe Transportation District drafted this plan. By signature below, the Accountable Executive confirms the development this plan.

_____ _____

Carl Hasty, Accountable Executive Date Signed

Approval

The Tahoe Transportation District Board of Directors approved this plan as so indicated by the signature of the Board of Directors' Chair on the date noted below, and as specified in Resolution Number 2020-005 and the Board of Directors Meeting Minutes from May 8, 2020. The meeting minutes can be reviewed on the Tahoe Transportation District website.

_____ _____

Steve Teshara, Chairman, TTD Board of Directors Date Signed

Certification

The Tahoe Transportation District's Public Transit Agency Safety Plan (PTASP) addresses all applicable requirements. TTD's Agency Plan was certified by George Fink, Transit System Program Manager, on _____, which can be reviewed in Transit Award Management System (TrAMS).

Annual Review and Revisions of the Public Transportation Agency Safety Plan

Each spring, the PTASP will be reviewed by the Chief Safety Office and updated, if needed. All substantive revisions will be presented to the Accountable Executive and TTD Board of Directors for annual approval. A table that records the history of revisions made to the Agency's PTASP is contained in Appendix A of this document.

Glossary and Acronyms

A glossary of terms and acronyms can be found in Appendix B.

Safety Performance Targets

TTD's safety performance targets are reviewed and updated during the annual review. The specific performance targets are based on the safety performance measures established under the National Public Transportation Safety Plan and any additional performance goals set by TTD. These targets are specific numerical targets set by TTD, and must be based on the safety performance measures established by FTA in the National Public Transportation Safety Plan referenced in the Safety and Security Quick Reference Guide in Appendix C.

TTD fleet vehicles are interchanged between modes. TTD uses the Predominant Use Rule when an event affects more than one mode. If two or more transit modes are affected by an event, TTD will report the event in only one mode. Most passengers are served by the fixed routes (motor buses). When an event affects more than one mode, the event will be assigned to a motor bus.

Fatalities: Total number of reportable fatalities and rate per total vehicle revenue miles by mode in a calendar year.

Injuries: Total number of reportable injuries[1] (defined in the NTD Safety and Security Reporting Manual) and rate per total vehicle revenue miles by mode in a calendar year.

[1]NTD: *An injury (employee or passenger) requiring immediate medical attention away from the scene for one or more persons.*

Safety Events: Total number of reportable events[2] and rate per total vehicle revenue miles by mode in a calendar year.

[2]NTD: *Preventable events that occur at transit revenue facilities, on transit infrastructure, or during a transit maintenance activity.*

Total injuries and safety events are calculated by averaging previous year totals and the rates are indicated as a fraction with the total over the estimated ridership per mode.

System Reliability: Mean distance, in miles, between major mechanical failures by mode in a calendar year.

System reliability is calculated using the Predominant Use Rule. The miles between road calls are averaged for previous years and the total is divided by the percentage assigned to each mode.

Mode of Transit Service	Fatalities (Total)	Fatalities (Rate)	Injuries (Total)	Injuries (Rate)	Safety Events (Total)	Safety Events (Rate)	System Reliability (miles)
Motor Bus (MB)	0	0	4	1/381,539	1	1/381,539	10,000
Commuter Bus (CB)	0	0	1	1/48,802	1	1/48,802	10,000
Demand Response (DR)	0	0	1	1/13,309	1	1/13,309	10,000

Safety Performance Target Coordination

TTD's safety performance targets are provided to California Department of Transportation (Caltrans), Nevada Department of Transportation (NDOT), and Tahoe Metropolitan Planning Organization (TMPO), along with the safety plan.

Targets Transmitted

Organization	Date Transmitted
TMPO	May 5, 2020
NDOT	May 5, 2020
Caltrans	May 5, 2020

Safety Management System (SMS)

A Safety Management System (SMS) is a comprehensive approach to managing safety within the transit system. Management and staff work together to control risk, identify and correct hazards, measure and analyze safety performance metrics, and disseminate safety information. The SMS helps transit agencies apply resources to risk and ensure they have an organizational infrastructure to support decision-making at all levels regarding the assignment of resources.

Key components include:

- Effective policies and procedures
- Strong executive leadership focused on safety
- Clearly defined safety roles and responsibilities
- Safety accountabilities and communication
- Active employee involvement

Safety Management Policy

Safety Management Policy Statement

TTD is committed to the management of safety. TTD will develop, implement, maintain, and constantly improve processes to ensure that all the transit service delivery activities take place under a balanced allocation of organizational resources. As a core business function, TTD is aimed at achieving the highest level of safety performance and meeting established standards.

All levels of management and all employees are accountable for the delivery of this highest level of safety performance, starting with the District Manager.

TTD is committed to:

- Support safety management through the provision of appropriate resources. This will result in a District culture that fosters safe practices, encourages effective employee reporting and communication;

- Integrate the management of safety among the primary responsibilities of all managers and employees;

- Clearly define for all staff and managers alike their accountabilities and responsibilities for the delivery of the District's safety performance and the performance of the safety management system;

- Establish and operate hazard identification and analysis, and safety risk evaluation activities, including an employee safety reporting program in order to eliminate or mitigate the safety risks resulting from operations or activities consistent with acceptable level of safety performance;

- Ensure that no action will be taken against any employee who discloses a safety concern through the employee safety reporting program, unless disclosure indicates, beyond any reasonable doubt, an illegal act, gross negligence, or a deliberate or willful disregard of the collective bargaining agreement, regulations, policies, or procedures;

- Comply with, and wherever possible exceed, legislative and regulatory requirements and standards;

- Ensure that sufficient skilled and trained staff are available to implement safety management processes;

- Ensure that all staff are provided with adequate and appropriate safety-related information and training, are competent in safety management matters, and are allocated only tasks commensurate with their skills;

- Establish and measure safety performance against realistic and data-driven safety performance indicators and safety performance targets;

- Continually improve safety performance through management processes that ensure appropriate safety management action is taken and is effective; and

- Ensure externally supplied systems and services to support operations are delivered meeting safety performance standards.

Safety Management Policy Communication

The Safety Management Policy is posted at TTD's Administrative Office and in the employee breakroom at the Corporation Yard. The Safety Management Policy was first shared with employees after the completion of the PTASP. TTD disseminated the Safety Management Policy to the public in the following manner:

- TTD Board of Directors meeting (Date of Publication: May 4, 2020)
- TTD website (Date of Publication: May 15, 2020)
- Staff intranet (Date of Publication: pending)
- Employee newsletter (Date of Publication: June)
- New hire orientation-ongoing
- TTD email blasts (Date of Publication: on-going)

In addition to the Safety Management Policy, TTD has numerous standard operating procedures (SOPs) and operational policies to supplement, detail, and support the overall the SMS. Examples of TTD's policies include Smoking, Cash Variance, Appearance, Vehicle Backing/Spotters, Lost and Found, and Reasonable Modification. Each policy includes safety components to ensure the wellbeing of TTD staff, passengers, and the greater community. Similarly, there are various SOPs (e.g. Snow Routes and Detours, Chaining, Boarding and Securement, Post Collision) for maintenance and operations to safeguard everyone. Staff sign acknowledgments for all policies and procedures after they receive training and have an opportunity to ask questions. Staff participation in all safety trainings and the safety committee meetings is recorded through a sign-in sheet. TTD will maintain documentation

related to the implementation of the SMS; the programs, policies, and procedures used to carry out the PTASP; and the results from its SMS processes and activities for three years after creation. This documentation will be available to the FTA or other Federal or oversight entity upon request.

Authorities, Accountabilities, and Responsibilities

Safety is everyone's responsibility at TTD. Anyone may observe a hazard that could result in an event. All employees must remain alert and observant to ensure hazards are mitigated to the greatest extent possible. Below are the authorities, accountabilities, and responsibilities of the following individuals in the development and management of TTD's SMS.

Accountable Executive

The Accountable Executive may delegate specific responsibilities, but not their accountability for the transit agency's safety performance and PTASP in accordance with 49 U.S.C. 5329(d) and 49 U.S.C. 5326.

TTD's Accountable Executive reviewed the draft policy after it had been developed by staff. Comments and recommended changes were taken into account when the final document was developed. The Accountable Executive then submitted the policy to the TTD Board of Directors for approval. Once approved, the Accountable Executive signed the policy. Additional responsibilities include, but are not limited to:

- Decision-making regarding resources (e.g. staff and funds) to support asset management, SMS activities, and capital investments;
- Signing SMS implementation planning documents; and
- Endorsing SMS implementation team membership.

Chief Safety Officer

The Chief Safety Officer oversaw the development of the Safety Management Policy. The Chief Safety Officer worked with Chief Financial Officer, Human Resources/Risk Manager, Controller, Fleet and Facilities Manager, Operations Manager, and safety committee to develop the plan. TTD's Chief Safety Officer was the team's liaison with the Accountable Executive. The Chief Safety Officer's duties include, but are not limited to:

- Developing and maintaining SMS documentation;
- Directing hazard identification and safety risk assessment;
- Monitoring safety risk mitigation activities;
- Providing periodic reports on safety performance;
- Briefing the Accountable Executive and Board of Directors on SMS implementation progress; and
- Planning safety management training.

Key Staff

Below are TTD's managers and supervisors who play leadership roles in providing important data or resources to accomplish the agency's safety goals and ensure the day to day safe operation of TTD's modes of transportation.

District Manager (Accountable Executive)

- Provides guiding direction to staff on TTD's mission, vision, and goals. Leads the organization's safety culture
- Makes decisions regarding resources (e.g. staff and funds) to support asset management, SMS activities, and capital investments
- Signs SMS implementation planning documents and endorses SMS implementation and team participation

Transit System Program Manager (Chief Safety Officer)

- Leads all transit efforts
- Allocates funds to transit safety programs (capital and operating)
- Participates in root cause investigations
- Reviews route development for safety consideration
- Ensures compliance to include monitoring the industry for best practices, new regulations, and even trainings

Chief Financial Officer and Controller

- Reports to funding agencies on revenue mileage, insurance costs, and experience modification
- Reports expenditures on safety and security
- Oversees insurance claims
- Ensures financial securities including:
    - Daily backups, both to the physical server and cloud
    - Security cameras inside the vault
    - Armored truck collection for cash collection; related protocols
    - Separation of financial duties
    - Limited access and privileges to accounting software and cash account
    - Bank verification of expenses
    - Annual financial audits

Human Resources/Risk Manager

- Records the employee retention rates
- Recordkeeping and reporting OSHA injury and illness
- Coordinates and tracks worker's compensation cases

- Participates on the safety committee
- Coordinates safety meeting facilitators for staff
- Reviews standard operating procedures with staff
- Directs the risk management program, including insurance and liability
- Sets up and monitors records and program functions for risk management activities relating to proper appraisal and insuring of District properties, fixed assets and other items
- Recommends and implements policy/procedure updates as they relate to legal, legislative and other developments concerning risk management matters and related impacts on operations

Fleet and Facility Manager

- Supervisory and administrative responsibility for the maintenance and safety of all revenue and non-revenue vehicles, equipment, and facilities
- Administers the Transit Management Plan
- Inspects buildings, equipment, utility systems and facilities to determine needed repairs and maintenance and ensure they are kept in a State of Good Repair, consistent with FTA guidance and TTD adopted standards
- Maintains the collection and provision of maintenance data, such as frequency, cost of materials, and cost of labor for repairs
- Provides training to maintenance staff, assists in safety meeting deliverables, contributes to the safety committee, and participates in root cause investigations
- Establishes and monitors work policies, procedures and safety standards; trains assigned staff accordingly; executes corrective disciplinary actions, as required
- Prepares and maintains records, logs, and reports related to activities, inventory, MSDS (materials data safety sheet) documentation, work requests, accident and safety issues

Operations Manager

- Monitors and supervises operator performance and policy adherence to assure a safe, high quality, fixed-route and paratransit service is provided to the public
- Assesses, develops, and provides appropriate training as necessary
- Visits the field to interact and develop positive rapport with operators, road supervisors and the public to assure safe, courteous and reliable service
- Conducts investigations and interviews, levies discipline for operators concerning performance issues, up to and including termination
- Updates the PTASP
- Responds to employee incident reports and safety concerns in the Operations Department
- Participates in root cause investigations, manages safety related data collection
- Assists with the development of routes, including timing and safety considerations
- Assists in safety meeting deliverables, coordinates facilitators for safety meetings, contributes to the safety committee, and participates in root cause investigations

- Leads customer complaint investigation
- Leads the develop of SOPs; trains and reviews with staff
- Distributes information to external partners and passengers
    - Rider alerts posted on social media
    - Rider alerts on the TTD website
    - Transit app alerts

Operations Supervisor

- Leads root cause investigations, tracks safety events, identifies trends or patterns, and oversees training and retraining of all operations staff
- Leads in route development, including timing and safety considerations
- Schedules road supervisors, operators, and dispatchers; monitors hours per DOT regulations
- Inspects and verifies work in progress and completed work of assigned employees and contractors for accuracy, proper safe work methods, techniques, and compliance with applicable safety standards and specifications
- Participates in the Safety Committee
- Assists in the customer complaint investigation
- Assists in the development of SOPs
- Assists with distribution of external information

Road and Maintenance Supervisors

- Responsible for self-inspections and reporting unsafe work practices/conditions to one or more of the above parties, ensures operators properly complete pre/post-trip inspections
- Observes driving skills and work habits of operators in the field; evaluates and trains operators; responds to problems in the field, such as equipment failures and incidents
- Makes work practice observations to all areas under their supervision
- Completes accident investigation forms and participates in determining the root cause of an accident/incident; assists in investigating and resolving customer complaints
- Oversees and provides input to route changes/emergency needs due to inclement weather or other situations that demand attention
- Ensures all TTD policies and procedures are followed by staff; models safe practices
- Routinely utilizes video management system (VMS) software to document incidents and submit reports and statements as necessary

Shop Stewards

- Assist in achieving buy-in from frontline staff, monitor safe practices on a daily basis, and provide input from the membership

Trainers

- Observations of unsafe trends or patterns
- Provisions training needs

- Ensures acceptable pass rates for new operators
- Performs evaluations of new operators

Transit Planner/Analyst

- Reports to the National Transit Database (NTD)
- Participates in route development, including timing and safety considerations
- Leads Short Range Transit Plan (SRTP) development

Safety Sensitive Staff (Operators, Mechanics, Dispatchers, and Utility Workers)

- Responsible for self-inspections and reporting safety concerns immediately, either to a supervisor, Human Resources/Risk Manager, one or more of the above parties, or anonymously by way(s) per the agency's policy
- Responsible for participating in mandatory safety meetings; voluntary participation in safety committee
- Responsible for all aspects related to fitness for duty
- Abides by all Department of Transportation (DOT) regulations
- Obeys all traffic laws
- Monitors passengers' behavior to ensure their safety and the safety of other passengers

Employee Safety Reporting Program

TTD's system of communication (management, supervisors, and employees), is designed to facilitate a continuous flow of two-way safety information in a form that is readily understandable to, and between, all affected personnel. This two-way communication may include language interpreters, when appropriate. Safety information is entered, aggregated, and queried through an information management system, The Reporting Solution. Below are the current methods of information sharing:

- All TTD staff participate in a new staff orientation, including a discussion of site-specific safety and health policies and procedures; the policies and procedures are referenced throughout training to ensure understanding, implementation, and retention
- Transit staff attend monthly safety training meetings which encourage employee participation and dialog, including topic suggestions
- Routine completion of the Daily Vehicle Inspection Reports (DVIRs) of operators to alert maintenance of any mechanical defect
- Staff are trained and encouraged to enter the following in The Reporting Solution (Appendix D):
    - Fleet and Facility Requests for maintenance
    - Service Incidents to alert all staff of impacts on the routes (e.g. detours, hazards, snow routes, etc.)
    - Employee Incident Reports are required for all near misses and other safety events

- Staff may anonymously report safety concerns and inform management of work place hazards though safety suggestion boxes or the safety concern entry screen in The Reporting Solution (Appendix D)
- Dispatchers, Road Supervisors and management make safety announcements over the two-way radio
- Staff may review safety promotional materials on the safety communication board, agency e-mails, memorandums, and employee newsletter
- Monthly Safety Committee Meetings
    - New policies/procedures are discussed to help determine implementation
    - Workplace hazards are discussed in detail on how to prevent events from re-occurring
    - Root cause investigation outcomes are discussed
    - Internal Controls and Personal Protective Equipment (PPE) are evaluated to assist in reducing injuries/illnesses
    - All employees are invited and attendees are urged to suggest ways to maintain a safe working environment and serve as role models for the entire team
    - Anonymous safety concerns are documented in the Safety Committee minutes; the appropriate manager(s) address the concern, and the resolution is documented in the Safety Committee minutes
    - Safety Committee minutes are posted on the Safety Communication Board

Depending on the method in which the safety concern was communicated will dictate how the manager responds, including how the employee will receive updates, and how the resolution will be communicated. If the report was made to a manager or entered into The Reporting Solution with the employee's name in the "reported by" field, the manager may review the report with the employee to ensure all information is clear and understood. In this situation, the manager will follow-up directly with the employee with status updates and the resolution. If the report was made anonymously, the receipt of the concern is documented in the safety committee meeting minutes, as well as the outcome.

The Collective Bargaining Agreement (CBA) outlines the disciplinary process for all representative staff. Management encourages honest accountability when safety events occur. Unless there is an egregious violation of a serious safety infraction, the employee's honesty in reporting will be considered as a mitigating factor in the disciplinary process.

Safety Risk Management Process

Safety Risk Management is an essential process within TTD's SMS for identifying hazards, assessing, and reducing safety risk.

Safety Hazard Identification

Routine inspections are an important source of information about safety concerns. Results from inspections may also help identify areas where mitigations were designed and adopted to manage safety risk, but have not been carried out as required. Inspections include personnel, vehicles, facilities, and data that identify potential safety concerns:

Personnel:

- Operations personnel fitness-for-duty checks, which may identify:
  - Impairment
  - Fatigue
  - Absence of corrective lenses
  - Missing credentials (e.g. medical certification, driver's license, VTT)
  - Apparent injuries, and
  - Uniform or equipment issues
- Operator gate/field checks; operator evaluations
- Customer complaints
- Radio or digital communication checks

Vehicles:

- Routine Preventive Maintenance Inspections (PMIs)
- Pre/Post trip vehicle inspections
- Fleet and Facility Requests and Service Incidents
  - Facilities inspections
  - Bus stop inspections
  - Employee observations
- Federal Transit Administration (FTA) notices and announcements
- Transit industry publications

Facilities:

- Targeted inspections to identify and evaluate workplace hazards are performed by management when the following situations occur:
  - New substances, processes, procedures, or equipment that presents the potential for new safety concerns are introduced into the workplace
  - New or previously unidentified hazards are recognized
  - New job duties are introduced or assigned
  - Facility conditions warrant an inspection
  - Transit Asset Management (TAM) assess condition assessments

Administrative:

- Rules compliance checks, which may identify:
  - Non-compliance with safety rules
  - Challenges in complying with safety rules

- Emerging practices
- Incident reports, including near misses
  - Trend and pattern identification
- Electronic Pull Notice (EPN) program
- Third Party Administrators for Worker's Compensation and for Liability Claims
  - Cal-OSHA lost and restricted days reported on the Cal-OSHA 300
  - Occupational illnesses/ injuries occurrence (i.e. workers compensation claims)

Safety Risk Assessment

Methods and processes used to assess the safety risks associated with identified safety concerns and prioritizing the hazards are based on the level of safety risk. Safety risk must be assessed in terms of likelihood or the probability of a consequence occurring and the severity or seriousness of the consequence, if it occurs. On the safety risk matrix, the Y axis is the likelihood/probability and the X axis is the severity/seriousness. Events are analyzed by using the relevant number on the X and Y axis. The square where the relevant X and Y axis score meet is used. The corresponding numbers on the X and Y axis are multiplied and this number is used to identify the score on the risk score legend.

For example, an event that is both definite (5) and catastrophic (5) it will result in a score of 25 and rank the highest on the matrix. Conversely, if the event was rare (1) and insignificant (1), it will result in a score of one and rank lowest on the matrix. Most events will rank somewhere in the middle and as the matrix is utilized, the tool may be refined to better suit the application at TTD. TTD's Safety Risk Matrix and Risk Score Legend is located in Appendices E and F, respectively. When a safety concern is identified, the affected supervisors and/or managers use the matrix and legend to understand when actions are necessary to reduce or mitigate the safety risk and the urgency of the mitigation.

TTD assesses safety risk by evaluating unsafe work conditions, practices or procedures at the facility. Safety risks shall be corrected in a timely manner, based on the severity of the hazards and according to the following procedures:

- When observed, or discovered
- When an imminent hazard exists, which cannot be immediately abated without endangering employees(s) and or property, TTD will remove all exposed employees from the area except those necessary to correct the existing condition. Employees required to remain available to correct the hazardous condition shall be provided with the necessary PPE.
- All such actions taken and dates of the completed corrections will be documented

Investigation of workplace events, hazards, and near misses are completed by the affected employee's supervisor, and include:

- Visiting the scene as soon as possible
- Interviewing affected worker and any witnesses

- Examining the workplace for factors associated with the event/hazard/near miss
- Determine the root cause and any associated causes of event/hazard/near miss
- Near misses are be treated with the same urgency as an actual event
- Take corrective actions to prevent the event from reoccurring
- Document findings and actions taken
- Management is notified immediately of a fatality or serious injury or illness and notifies the nearest office of the Division of Occupational Safety and Health by phone or fax within eight (8) hours (CCR Title 8, Section 342)

Safety Risk Mitigation

The goal of risk mitigation is to reduce the risk to an acceptable level; however, mitigations do not typically eliminate the risk entirely. The methods or processes to identify mitigations or strategies necessary will depend on the event and who in the agency is qualified to select appropriate safety risk mitigations. TTD may survey other transit agencies to ensure any proposed safety mitigation is appropriate and there are no unintended effects (i.e. new hazards).

The team who evaluates the risk and the mitigation will be determined based on the risk. If an event occurs at the facility, it is likely the Fleet and Facility Manager will be involved in the mitigation assessment to offer insights about the building or property. Facility risks may be mitigated by improved snow removal or upgrades to the building and property.

As TTD identifies operational risks, the operations manager and other operations staff will assess mitigation strategies. New trainings may be implemented or existing training curriculum may be revised to address operational risks. If risks emerge on an existing route, TTD may opt to engage a planner to gather perspective on changes to the path of travel. Each mitigation will depend on the circumstances of the risk and practical, yet creative, options available. TTD will monitors the effectiveness of the approach and make adjustments as needed.

Safety Assurance

Safety Performance Monitoring and Measurement

Safety hazards are identified in a number of ways as outlined in the previous sections. TTD's activities to monitor compliance with operations and maintenance procedures are described below.

Direct observation is the most valuable method of monitoring the safety of the system. All TTD employees are responsible for this observation as they navigate through the facilities and greater service area. Environmental challenges such as icy roads, inadequate snow removal, traffic, malfunctioning traffic signals, road construction, and road closures are all common when operating in a mountainous

environment with high visitation. To stay current on all conditions, road supervisors continuously check the service area with heightened attention to the more dangerous regions. Two-way radio communication is the most immediate method to alert operators of potential hazards, move to a detour or snow route, or suspend service.

Operators and road supervisors have the most first-hand opportunities to recognize hazards in the field. As hazards are identified, they are recorded in The Reporting Solution as service incidents or fleet and facility requests. The system emails notifications to supervisors and management when a service incident or fleet and facility request is entered, which can be updated as conditions change. This allows all key personnel to respond as necessary and stay current on the situation. Service incidents and fleet and facility requests can be aggregated and reports are generated to identify patterns. Fleet and facility requests are used to create work orders or to create a ticket with the local Public Works Department for facilities leased by TTD. All of The Reporting Solution entries are saved indefinitely and can be queried at any time.

Employees are encouraged to complete employee incident reports any time something out of the ordinary occurs, including near misses. Each employee incident report is entered into The Reporting Solution. After review of the employee incident report, at least two supervisor(s) or manager(s) will review the video of the incident, depending on the seriousness and probability using the Safety Risk Matrix. If the initial review of the event creates concern around the employee's performance, the deficiency is addressed with retraining and coaching. Depending on the situation, this may include video review of the unsafe behavior with the employee, review of training materials, and hands-on behind the wheel training. All training is documented on a coaching form and, if necessary, disciplinary action is included in the file. All training, coaching, and disciplinary records are retained for at least three years.

Every collision, regardless of how minor, is evaluated using a notice of collision determination form. At least two supervisor(s) or manager(s) review all of the information related to the event and make a determination if it was preventable, non-preventable, or undeterminable. A root cause investigation may be conducted for preventable and undeterminable safety events.

A root cause investigation is an in-depth analysis of all possible causal factors. A root cause investigation is usually conducted by a team, which may include supervisors, operators, risk management, and union representatives. The following factors are evaluated to determine causation or contribution:

- TTD and other vehicle(s)
- Environment (weather, time of day, road conditions)
- Passengers
- Policies & Procedures
- Mobility device, if applicable
- Pedestrians
- Operator's training, previous coaching, and active discipline

All members of the team share their perspectives and a final root cause report is drafted. Root cause reports are shared at the safety committee meetings to reduce the likelihood of the event reoccurring and this information is saved at least three years.

Per TTD standard operating procedure, and in alignment with DOT regulations, operators complete pre-trip and post-trip inspections on the vehicles driven over the course of the day using a DVIR. The completed DVIRs are turned into the maintenance department and reviewed for safety defects. Work orders are generated through The Reporting Solution for each defect noted on the DVIR. Each vehicle has a designated clipboard with all open work orders attached, the clipboards are accessible to all staff. This allows operators to see the progress on the defect they reported.

TTD's maintenance department monitors road calls, fleet and facility requests, DVIRs, service incidents, and routinely visually inspects the vehicles. Preventive maintenance inspections are regulated based on a calculation of miles (i.e. annual miles each subfleet traveled divided by the inspection interval miles for that subfleet) and the results of oil analyses. The PMI schedule is tracked in The Reporting Solution and the PMI includes a multi-item checklist, followed by a road test to verify serviceability of the vehicle. PMIs assess the conditions of TTD's assets on a routine basis. TTD's inspections include a multi-item check list that touches on every wearing item/system on the bus and is followed by a road test to verify the serviceability of the bus. Inspection of all electrical equipment including video cameras, farebox, destination signs, and radios are also performed at this time.

Operational Safety Inspections are also tracked through The Reporting Solution and are performed every 90 days in compliance with the California Highway Patrol, California Vehicle Code. The maintenance department monitors technical bulletins, manufacturing notifications, and recall notifications. Defects identified will be handled in-house within TTD's resources and its personnel's scope of training. All other defects are contracted with professionals who specialize in the area of expertise.

All maintenance work, regardless of the source, is entered into The Reporting Solution. Data can be aggregated in various ways to query different reports depending on the need. Updates are entered for ongoing repairs, providing electronic documentation of the full evolution of the repair.

The Reporting Solution allows management to search key words and create reports on any fleet and facility requests, service incidents, employee incidents, or customer comments entered into the software. Custom reports may also be made when a unique situation arises. Key performance indicator reports are available to outline the number of work orders created and closed, labor hours, road calls, bus availability, and part requests. This level of monitoring allows management to identify safety risk mitigations that are ineffective or inappropriate. The Reporting Solution maintains an indefinite retention of data, entries, and reports at this time.

All safety concerns and suggestions, anonymous or not, are reviewed at the monthly safety committee meeting. The concerns/suggestions are documented in the meeting minutes for all staff to review. If the topic requires immediate attention, the approach will be documented in the meeting minutes (i.e. fleet and facility request will be entered to initiate a work order or an investigation will commence). If the suggestion has a limited likelihood of occurring and the severity is negligible, the appropriate person will investigate the issue and report back at the next safety meeting. Depending on the complexity of the matter, the issue might be mitigated or it might require more group input at the next meeting. Regardless of the process, it is documented through the safety committee meeting minutes.

The Cal-OSHA 300 Log is a record of work-related injuries and illnesses. The log classifies work-related injuries and illnesses and notes the extent and severity of each case. When an incident occurs, the log is used to record specific details about what happened and how it occurred. TTD has logs for each physical location. An annual summary shows the totals for the year in each category. The annual summary is posted for employees to be aware of the injuries and illnesses occurring at their workplace. After the Cal-OSHA 300 Log is posted for two months, the Human Resources/Risk Manager retains the log for at least three years.

Safety Promotion

Competencies and Training

TTD requires employees including the Accountable Executive, Chief Safety Officer, and contractors, to complete training to be able to fulfill their safety-related roles and responsibilities. Initial training will be completed at hire/assignment, refresher training will be provided when behaviors indicate a need, and/or there are changes to the PTASP, operations, procedures, organizational structure, or when new safety concerns are identified and mitigation measures are developed. Each new Director on the TTD Board of Director's receives an orientation packet and the plan will be included.

All transit staff are required to participate in Harassment, Distracted Driving, Injury and Illness Prevention Program, Hazardous Communication, Stress Management, Workplace Violence, Active Shooter, and Ethics. All safety sensitive staff are required to complete the National Rural Transit Assistance Program (RTAP) Substance Abuse Awareness Training Program.

The Transit and Paratransit Company, or TAPTCO, training is the foundation of TTD's road supervisors, dispatchers, and operators. It is augmented with several specialized trainings for TTD's environment, policies/procedures, PASS: Passenger Assistance Safety and Sensitivity, and technologies (i.e. winter driving, chaining, passenger policies, paratransit policies and procedures, sensitivity and securement, electronic farebox procedures, paratransit training with a mobile data terminal (MDT)). The road supervisor and dispatcher training includes more emphasis on the office technologies such as Computer Aided Dispatch and Automatic Vehicle Locator software (CAD-AVL), paratransit scheduling software, and

The Reporting Solution software. The road supervisors also receive training on farebox troubleshooting, video review, and supervisor-specific reasonable suspicion and harassment trainings. All of the training is also available in an open format for retraining to ensure all staff feel confident in their skills.

All CDL holders have a minimum of 15 hours of classroom training and 20 hours of behind the wheel training. The exact number of training hours varies depending on the operator's license and endorsements. Operators who have a CDL with passenger endorsement and no air brake restriction generally receive fewer hours of training. Those who already possess a CDL, but need the air brake restriction removed or need to add the passenger endorsement may require less training. New employees training with TTD to obtain their CDL average over 100 hours of training.

Maintenance staff (Mechanics and Utility Workers) must complete the following trainings:

- Preventive Maintenance checklist training
- Personal Protective Equipment (PPE) selection and use
- Shop cleaning procedures
- Removal of coolant from clothing
- Proper hydration during summer months
- Tire training
- Cold vehicle pull out
- Removing motor oil and grease from hands
- Eye wash use and procedure
- Proper use of a fire extinguisher
- Spill prevention
- Proper air conditioning refrigerant recovery
- Safety Data Sheet (SDS) location and understanding
- Walking safely in shop
- Proper lifting, bending, carrying
- Moving/test driving vehicles
- Use of hydraulic lift
- Working under vehicles
- Use of powered hand tools
- Use of compressed air tools
- Use of air hoses
- General use of electric machinery
- Charging and cleaning batteries
- Battery jump starting

TTD's insurance companies: California Transit Indemnity Pool (CalTIP), CSAC Excess Insurance Authority, and Nevada Public Agency Insurance Pool all provide various in-person and online safety training

opportunities. TTD also prioritizes training for staff through the Transit Safety Institute (TSI) and National Transit Institute (NTI).

Monthly safety meetings are held for all maintenance and operations staff. The topics of the safety trainings are often suggested by staff, as a result of a pattern identified within TTD, or something that is a current transit trend or update.

Safety Communication

Passengers and Community Communication

External communication occurs through email distribution lists, social media, TTD website, and mobile application alerts. Additionally, informational flyers and public notices are posted in the buses, bus shelters, and transit centers. Rider guides and passenger policies are distributed to local medical centers, government and non-profit agencies, lodging properties, recreation centers, and other popular destinations in the community.

Internal Communication

The following is TTD's system of communication, designed to facilitate a continuous flow of two-way (management, supervisors & employees) safety and health information in a form that is readily understandable to and between all affected personnel:

- New worker orientation, including a discussion of site-specific safety and health policies and procedures
- Follow through by supervision to ensure effectiveness
- Monthly safety training meetings that encourages employee input
- Posted and distributed safety information
- Paper and electronic systems for employees to anonymously inform management about workplace hazards or safety concerns
- Safety Communication Board
- Agency e-mails, memorandums, and agency employee newsletter with a safety column
- Posters, notices, memos, white board announcements
- Safety messages over the two-way radio
- Quarterly transit reports to the Board of Directors
- Monthly Safety Committee Meetings
    - All employees are encouraged to attend
    - New policies/procedures are discussed to help determine employee safety
    - Workplace hazards addressed throughout the month are discussed in detail on how to prevent events from re-occurring

- Status of on-going safety-related improvements
- Root Cause solutions are discussed
- Internal Controls and Personal Protective Equipment (PPE) are discussed to assist in reducing injuries/illnesses
- Attendees are urged to contribute to suggestions on how to maintain a safe working environment and serve as role models for the entire team

Appendices

Appendix A: Record of Revisions

A table that records the history of revisions made to the agency's PTASP is contained in the table that follows. The history of the changes was placed in this appendix to help preserve the page numbering to the extent possible.

Plan Version Number and Updates			
Version Number	**Section/Pages Affected**	**Reason for Change**	**Date Issued**

Appendix B: Glossary of Terms and Acronyms

Term	Definition
Accident	Accident means an Event that involves any of the following: a loss of life; a report of a serious injury to a person; a collision of public transportation vehicles; a runaway train; an evacuation for life safety reasons; or any derailment of a rail transit vehicle, at any location, at any time, whatever the cause. (per **§ 673.5)**
Accountable Executive	**§ 673.5 Definitions –** Accountable Executive means a single, identifiable person who has ultimate responsibility for carrying out the Public Transportation Agency Safety Plan of a public transportation agency; responsibility for carrying out the agency's Transit Asset Management Plan; and control or direction over the human and capital resources needed to develop and maintain both the agency's Public Transportation Agency Safety Plan, in accordance with 49 U.S.C. § 5329(d), and the agency's Transit Asset Management Plan in accordance with 49 U.S.C. § 5326. **§ 673.23(d)(1) –** The transit agency must identify an Accountable Executive. The Accountable Executive is accountable for ensuring that the agency's SMS is effectively implemented throughout the agency's public transportation system. The Accountable Executive is accountable for ensuring action is taken, as necessary, to address substandard performance in the agency's SMS. The Accountable Executive may delegate specific responsibilities, but the ultimate accountability for the transit agency's safety performance cannot be delegated and always rests with the Accountable Executive. *Each transit agency must identify an Accountable Executive within its organization who ultimately is responsible for carrying out and implementing its Safety Plan. A State that drafts a plan on behalf of another recipient or sub-recipient is not the Accountable Executive.*
Chief Safety Officer/SMS Executive	**§ 673.31 Definitions –** Chief Safety Officer means an adequately trained individual who has responsibility for safety and reports directly to a transit agency's chief executive officer, general manager, president, or equivalent officer. A Chief Safety Officer may not serve in other operational or maintenance capacities, unless the Chief Safety Officer is employed by a transit agency that is a small public transportation provider as defined in this part, or a public transportation provider that does not operate a rail fixed guideway public transportation system. Safety Management System (SMS) Executive means a Chief Safety Officer or an equivalent. **§ 673.23(d)(2) –** The Accountable Executive must designate a Chief Safety Officer or SMS Executive who has the authority and responsibility for day-to-day implementation and operation of an agency's SMS. The Chief Safety Officer hold a direct line of reporting to the Accountable Executive. A transit agency may allow

Term	Definition
	the Accountable Executive to also serve as the Chief Safety Officer or SMS Executive. *Each transit agency must identify a Chief Safety Officer within its organization who has the authority and responsibility for day-to-day implementation and operation of the agency's SMS. The Chief Safety Officer must meet the requirements specified in § 673.31 and § 673.23(d)(2). For SMS to be successful and effective, this person should have a strong working relationship with the operations and asset management functions at the transit agency.* *Small public transportation providers may designate a Chief Safety Officer or SMS Executive who also manages other functions, such as operations, maintenance, and grant administration. For these transit agencies, the Chief Safety Officer may be a full-time employee of the transit system who has responsibility for duties other than safety, a part-time employee of the transit system, or a contracted employee.* *Bus transit systems that operate more than 100 vehicles in peak revenue service should have a dedicated Chief Safety Officer, given the increased safety risk of those systems. However, this is not a requirement.*
Consequence	Consequences are outcomes or what those conditions can cause. Transit agencies should assess the likelihood and severity of the *consequences* of a hazard, not of the hazard itself (per **§ 673.5)**
Event	Event means any Accident, Incident, or Occurrence. (per **§ 673.5)**
Hazard	Hazard means any real or potential condition that can cause injury, illness, or death; damage to or loss of the facilities, equipment, rolling stock, or infrastructure of a public transportation system; or damage to the environment. Hazard are conditions. (per **§ 673.5)**
Incident	Incident means an Event that involves any of the following: A personal injury that is not a serious injury; one or more injuries requiring medical transport; or damage to facilities, equipment, rolling stock, or infrastructure that disrupts the operations of a transit agency. (per **§ 673.5)**
Occurrence	Occurrence means an Event without any personal injury in which any damage to facilities, equipment, rolling stock, or infrastructure does not disrupt the operations of a transit agency. (per **§ 673.5)**
Performance Target	Performance target means a quantifiable level of performance or condition, expressed as a value for the measure, to be achieved within a time period required by the Federal Transit Administration (FTA). (per **§ 673.5)**
Safety Performance Target	Safety performance target means a Performance Target related to safety management activities. (per **§ 673.5)**

Term	Definition
Serious Injury	Serious injury means any injury which: (1) Requires hospitalization for more than 48 hours, commencing within 7 days from the date the injury was received; (2) Results in a fracture of any bone (except simple fractures of fingers, toes, or noses); (3) Causes severe hemorrhages, nerve, muscle, or tendon damage; (4) Involves any internal organ; or (5) Involves second- or third-degree burns, or any burns affecting more than 5 percent of the body surface. (per **§ 673.5)**

Acronyms:

Caltrans: California Department of Transportation

Cal-OSHA: California Department of Occupational Safety and Health

CB: Commuter Bus

CSO: Chief Safety Officer

DR: Demand Response

FTA: Federal Transit Administration

MB: Motor Bus

NTD: National Transit Database

NDOT: Nevada Department of Transportation

PPE: Personal Protective Equipment

PTASP: Public Transit Agency Safety Plan

SMS: Safety Management System

SOP: Standard Operating Procedure

TMPO: Tahoe Metropolitan Planning Organization

TTD: Tahoe Transportation District

TrAMS: Transit Award Management System

Appendix C: 2018 NTD Safety & Security Quick Reference Guide – Non-Rail Mode Reporting

Reportable Event: A safety or security event occurring: on transit right-of-way or infrastructure, at a transit revenue facility, at a maintenance facility or rail yard, during a transit-related maintenance activity, or involving a transit revenue vehicle. Excluded from this event reporting requirement are events that occur off transit property where affected persons, vehicles, or objects come to rest on transit property after the event, OSHA events in administrative buildings, deaths that are a result of illness or other natural causes, other events (assault, robbery, non-transit vehicle collisions, etc.) occurring at bus stops or shelters that are not on transit-controlled property, collisions that occur while travelling to or from a transit-related maintenance activity, collisions involving a supervisor car, or other transit service vehicle operating on public roads.

Alaska (AR) and Commuter rail (CR) modes report only SECURITY events that meet a Major event threshold.

S&S-40 Major Event Report	**S&S-50 Non-Major Monthly Summary**
MAJOR THRESHOLDS	**NON-MAJOR THRESHOLDS**
An event meeting the reportable event definition AND meeting *one or more* of the following reporting thresholds: • A fatality confirmed within 30 days (including suicide) • An injury requiring transport away from the scene for medical attention for one or more persons (partial exception in the case of Other Safety Events) • Estimated property damage equal to or exceeding $25,000 • An evacuation for life safety reasons • Collisions involving transit roadway revenue vehicles that require towing away of a transit roadway vehicle or other non-transit roadway vehicle **Reports are due within 30 days of the date of the event.**	Less severe Other Safety Occurrence Not Otherwise Classified (OSONOC) injuries meeting the reportable event definition that is NOT a result of a collision, derailment, evacuation, security event, hazmat spill, or Act of God and non-major fires. OSONOC: • Single injury event requiring transport away from the scene for medical attention (do not report “minor” collisions on S&S-50) **Fires:** • Requires suppression that does not meet a major incident reporting threshold *injury, fatality, evacuation, or property damage of $25,000 or more)* **Reports due by the end of the following month (e.g., January data due by end of February)**

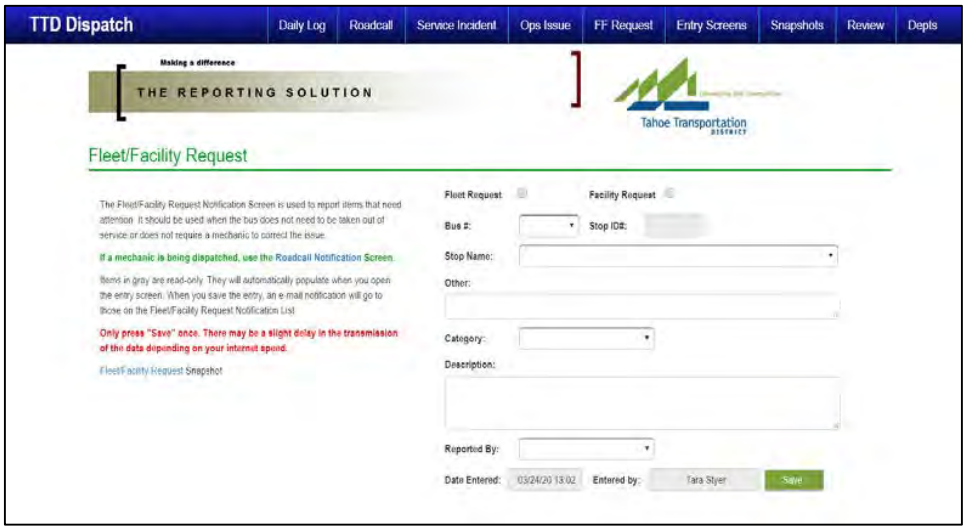
S&S-40 Major Event Report	S&S-50 Non-Major Monthly Summary
EVENT TYPES	**EVENT TYPES**

• A collision (including suicide/attempted suicide)
• A fire
• A hazardous material spill (requires *specialized* clean-up)
• Acts of God (nature)
• System security:
  o Arson
  o Bomb threat/bombing
  o Burglary/vandalism
  o Chemical/biological/radiological/nuclear release
  o Cyber security event
  o Hijacking
  o Sabotage
  o Suspicious package
  o Other security event (shots fired, projectiles, etc.)
• Personal Security:
  o Assault
  o Homicide
  o Robbery
  o Larceny/theft
  o Motor vehicle theft
  o Rape
  o Other personal security events (non-collision suicide/attempted suicide, etc.)
• OSONOC (two injuries and/or another threshold)
  o Miscellaneous events that meet a threshold
	OSONOC:
	Injury due to:
	• Slip/trip
	• Fall
	  o Including person making contact with a non-moving transit vehicle
	• Injury to maintenance workers
	• Boarding/alighting
	• Electric shock/burns
	• Abrupt or evasive transit vehicle maneuvers
	• Mobility device (e.g. wheelchair) securement issues
	• Injury sustained on a mobility device lift
	• Stairs/elevator/escalator injury
	Fire:
	• Requires suppression but no major threshold is met
	  o Small fire in transit station
	  o Small engine fire on transit vehicle

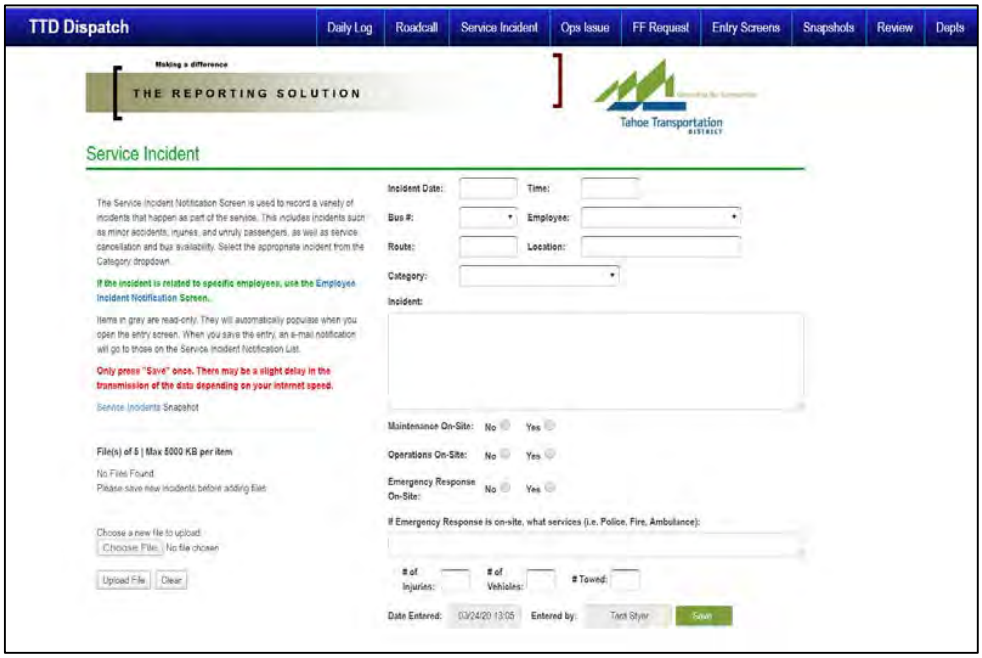
Appendix D: The Reporting Solution Entry Screens

The Reporting Solution screen shots illustrating the entry screens for safety information collection and ultimately aggregation and reporting

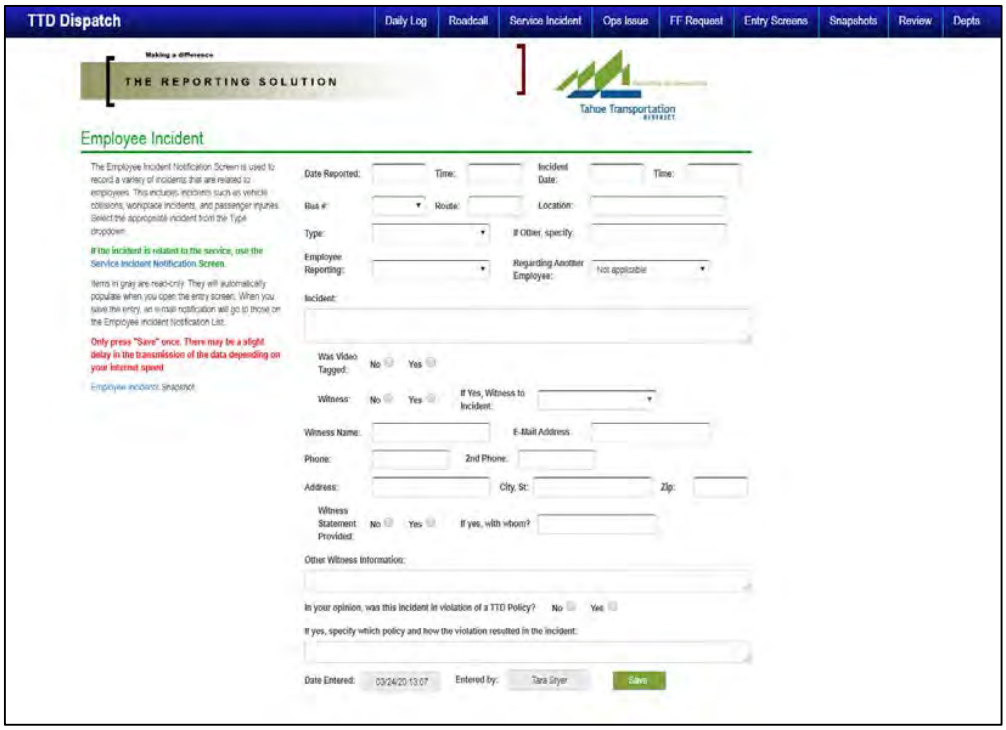
Fleet and Facility Request Entry Screen



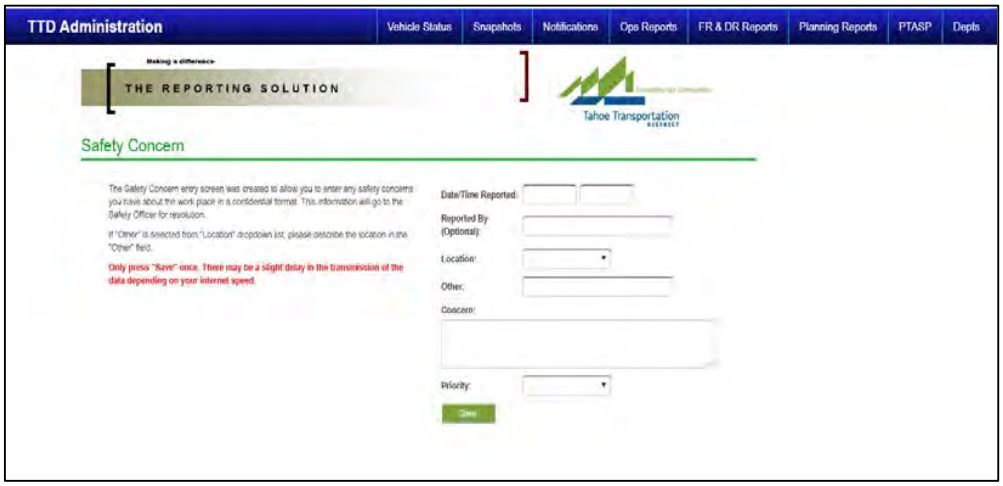
Service Incident Entry Screen



Employee Incident Report Entry Screen



Safety Concern Entry Screen (anonymous)



Appendix E: Safety Risk Matrix

Safety Risk Matrix

Likelihood/Probability						
Rare (1)						Avalanche
Unlikely (2)						
Possible (3)					Fire	Boulder Slide
Likely (4)		Power Outage			Visitor traffic	Passenger Threat	Serious Injury
Definite (5)		Cold Temperatures Snow Fall	Icy Roads midweek	Icy Roads weekend with visitor traffic	Serious Injury	
		Insignificant (1)	Marginal (2)	Moderate (3)	Critical (4)	Catastrophic (5)

Severity/Seriousness

Appendix F: Risk Score Legend

Risk Score Legend

Risk Score	Risk Level Category	Description
1-4 (green)	Low Risk	Manage by routine procedures and operations; should not require much attention.
5-9 (yellow)	Moderate Risk	Manage by specific monitoring or response procedures.
10-14 (orange)	High Risk	Requires escalation to management.
15-25 (red)	Critical Risk	Requires escalation to Accountable Executive.