DECEMBER 2021

INITIAL STUDY/MITIGATED NEGATIVE DECLARATION

56 Acres Master Plan and South Lake Tahoe Recreation and Aquatics Center Project – A Multigenerational Center

PREPARED FOR:

CITY OF SOUTH LAKE TAHOE

City of South Lake Tahoe
Development Services Department
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South Lake Tahoe, CA 96150
530.542.7472

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Prepared for:

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TABLE OF CONTENTS

Appendices

Figures

Tables

LIST OF ABBREVIATIONS

ADA	Americans with Disabilities Act
afy	acre-feet per year
ALUCP	Airport Land Use Compatibility Plan
ASCE	American Society of Civil Engineers
Basin Plan	Water Quality Control Plan for the Lahontan Region
BMP	best management practice
BP	before present
C&D	Construction and demolition
CAL FIRE	California Department of Forestry and Fire Protection
CAL OES	Governor's Office Emergency Services
Cal/OSHA	California Occupational Safety and Health Administration
Caltrans	California Department of Transportation
CBC	California Building Code
CCR	California Code of Regulations
CDFW	California Department of Fish and Wildlife
CEQA	California Environmental Quality Act
CESA	California Endangered Species Act
CFR	Code of Federal Regulations
CHP	California Highway Patrol
CHRIS	California Historical Resources Information System
City	City of South Lake Tahoe
CNDDB	California Natural Diversity Database
CNEL	Community Noise Equivalent Level
Community Plan	Bijou/Al Tahoe Community Plan
Conservancy	California Tahoe Conservancy
County	El Dorado County
CRHR	California Register of Historical Resources
CUPA	Certified Unified Program Agency
CWA	Clean Water Act
dB	decibels
dBA	A-Weighted Decibels
dbh	diameter at breast height

DTSC	California Department of Toxic Substances Control
DVTE	daily vehicle trip ends
EDCEMD	El Dorado County Environmental Management Department
EIR	environmental impact report
EPA	U.S. Environmental Protection Agency
ESA	federal Endangered Species Act
federal OSHA	federal Occupational Safety and Health Administration
FGC	California Fish and Game Code
FHSZ	Fire Hazard Severity Zone
GIS	Geographic Information System
IS/MND	Initial Study/Mitigated Negative Declaration
JPA	Joint Powers Authority
KBSRA	Kings Beach State Recreation Area
Lahontan RWQCB	Lahontan Regional Water Quality Control Board
LCD	Land Capability District
L_{eq}	Equivalent Continuous Sound Level
LOS	level of service
LRA	Local Responsibility Area
LTUSD	Lake Tahoe Unified School District
Master Plan	56 Acres Master Plan
mgd	million gallons per day
mph	miles per hour
MRF	Materials Recovery Facility
NAHC	Native American Heritage Commission
NCIC	North Central Information Center
NPDES	National Pollutant Discharge Elimination System
OPR	Governor's Office of Planning and Research

PIA	Tahoe Regional Planning Agency Project Impact Assessment Guidelines
plan area	56 Acres Master Plan area
PPV	peak particle velocity
PRC	Public Resources Code
RCRA	Resource Conservation and Recovery Act of 1976
RMS	root-mean-square
SLF	Sacred Lands File
SLTFR	South Lake Tahoe Fire Rescue
SLTPD	South Lake Tahoe Police Department
SPL	sound pressure level
sq. ft.	square-foot
STPUD	South Tahoe Public Utility District
STR	South Tahoe Refuse and Recycling Services
SWPPP	storm water pollution prevention plan
SWRCB	State Water Resources Control Board
Technical Advisory	*Technical Advisory on Evaluating Transportation Impacts in CEQA*
Transportation Analysis	*56 Acres Master Plan Transportation Analysis*
TRPA	Tahoe Regional Planning Agency
TTD	Tahoe Transportation District
US 50	U.S. Highway 50
USC	U.S. Code
USDOT	U.S. Department of Transportation
UWMP	Urban Water Management Plan
VdB	velocity decibel
VMT	vehicle miles travelled

1 INTRODUCTION

1.1 INTRODUCTION AND REGULATORY GUIDANCE

This Initial Study/Mitigated Negative Declaration (IS/MND) has been prepared by the City of South Lake Tahoe to evaluate potential environmental effects of the proposed 56 Acre Master Plan (Master Plan) and South Lake Tahoe Recreation and Aquatics Center referred to herein as the Multigenerational Center Project. Chapter 2, "Project Description," presents the detailed project information.

This document has been prepared in accordance with the California Environmental Quality Act (CEQA) (Public Resources Code Section 21000 et seq.) and the State CEQA Guidelines (California Code of Regulations Section 15000 et seq.). An initial study is prepared by a lead agency to determine if a project may have a significant effect on the environment (State CEQA Guidelines Section 15063[a]), and thus to determine the appropriate environmental document. In accordance with State CEQA Guidelines Section 15070, a "public agency shall prepare…a proposed negative declaration or mitigated negative declaration…when: (a) The initial study shows that there is no substantial evidence…that the project may have a significant impact on the environment, or (b) The initial study identifies potentially significant effects but revisions to the project plans or proposal are agreed to by the applicant and such revisions would reduce potentially significant effects to a less-than-significant level." In this circumstance, the lead agency prepares a written statement describing its reasons for concluding that the project would not have a significant effect on the environment and, therefore, does not require the preparation of an environmental impact report (EIR). By contrast, an EIR is required when the project may have a significant environmental impact that cannot clearly be reduced to a less-than-significant effect by adoption of mitigation or by revisions in the project design.

1.2 PUBLIC INVOLVEMENT

A Public Engagement Plan was developed and implemented for development of the Master Plan and to ensure communication with the public throughout the project.

Opportunities for public involvement were presented as "engagement windows" during which goals were established for obtaining information that would be used to develop different aspects of the Master Plan. Each engagement window provided opportunities for public input. Updates to the City and County's Parks and Rec Commissions, City Planning Commission, and City Council were provided by the Planning Team, in coordination with City and County staff, at the end of each engagement window.

- Engagement Window One
  - November 2 – 22, 2020: An online survey was coordinated with workshop information to get input from locals, part-time residents, and visitors on project vision, goals, and program elements.
  - November 10, 2020: Public workshop to provide an overview of the Master Plan; receive input on program elements, opportunities, and challenges; and introduce the public survey.
- Engagement Window Two
  - December 14, 2020 – January 22, 2021: An online survey was made available to collect feedback on conceptual alternatives, coordinate feedback and events with the Multigenerational Center project, and gather input on implementation priorities.
  - January 20, 2021: Virtual Public workshop to provide an update on survey responses, present three Master Plan concepts, and provide an update on the Multigenerational Center project.

- Engagement Window Three
  - March 31, 2021: Virtual Public workshop to answer questions and receive feedback on the preferred Master Plan concept.
  - May 4, 2021: Public presentation to a joint meeting between City Council and County Board of Supervisors for approval of the master plan.

Project content and involvement opportunities were made available and regularly updated in a web-based story map for the Master Plan. A link to the story map is available on the city website.

Public involvement for the Multigenerational Center included community meetings on the following days:

- December 8, 2015
- March 31, 2016
- October 21, 2020 (virtual meeting)
- January 20, 2021 (virtual co-meeting with the 56 Acres Master Plan)
- March 31, 2021 (virtual co-meeting with the 56 Acres Master Plan)

Stakeholder meetings to support planning efforts for the Multigenerational Center occurred with various community groups on the following days:

- January 29, 2020: jurisdictional stakeholders
- October 2, 2020: arts/athletic and community stakeholders
- October 2, 2020: local business stakeholders
- October 28, 2020: swim team stakeholders

1.3 WHY THIS DOCUMENT?

As described in the environmental checklist (Chapter 3), the project would not result in any unmitigated significant environmental impacts. Therefore, an IS/MND is the appropriate document for compliance with the requirements of CEQA. This IS/MND conforms to these requirements and to the content requirements of State CEQA Guidelines Section 15071.

This IS/MND evaluates the potential environmental effects associated with adoption and implementation of the proposed Master Plan, and construction and operation of the Multigenerational Center. The Master Plan provides a conceptual site plan and identifies facility improvements that will be designed and constructed in multiple phases over the next approximately 20 years. The conceptual nature of the proposed facility designs in the Master Plan is such that the impact analysis is prepared at a programmatic level—that is, a more general analysis with a level of detail and degree of specificity commensurate with that of the Master Plan itself. The Multigenerational Center, however, is assessed at a project level in this IS/MND. Project details are developed to a sufficient degree that environmental effects can be identified and assessed with greater certainty, and specific mitigation measures developed to address potentially significant effects.

Under CEQA, the lead agency is the public agency with primary responsibility over approval of the project. The City of South Lake Tahoe is the CEQA lead agency because they are responsible for approval of the Master Plan and the Multigenerational Center. The purpose of this document is to present to decision-makers and the public information about the environmental consequences of implementing the project. This disclosure document is being made available to the public for review and comment. This IS/MND will be available for a 32-day public review period from December 10, 2021 to January 10, 2022.

Supporting documentation referenced in this document is available for review at:

Development Services Department
1052 Tata Lane
South Lake Tahoe, CA 96150

Comments should be addressed to:

John Hitchcock
Development Services Department
1052 Tata Lane
South Lake Tahoe, CA 96150

E-mail comments may be addressed to: jhitchcock@cityofslt.us

If you have questions regarding the IS/MND, please call John Hitchcock at: (530) 542-7472. If you wish to send written comments (including via e-mail), they must be postmarked by January 10, 2022.

After comments are received from the public and reviewing agencies and considered by the City, the City may (1) adopt the MND and approve the Master Plan and Multigenerational Center project; (2) undertake additional environmental studies; or (3) abandon the project. If the Master Plan and Multigenerational Center project is approved and funded, the City may adopt the Master Plan and proceed with the Multigenerational Center Project.

1.4 SUMMARY OF FINDINGS

Chapter 3, "Environmental Checklist," of this document contains the analysis and discussion of potential environmental impacts of the project. The full range of environmental issues in the Appendix G checklist of the State CEQA Guidelines have been analyzed. Based on the issues evaluated in that chapter, it was determined that the project would have no impact related to the following issue area:

- mineral resources

Project impacts were determined to be less than significant for the following issue areas:

- aesthetics
- agriculture and forest resources
- air quality
- biological resources
- energy
- geology and soils
- greenhouse gas emissions
- hydrology and water quality
- land use and planning
- population and housing
- public services
- recreation
- transportation
- utilities and service systems
- wildfire

Potentially significant impacts were identified for the following issue areas; however, mitigation measures included in the IS/MND would reduce all impacts to a less-than-significant levels:

- cultural resources
- hazards and hazardous materials
- tribal cultural resources
- noise

1.5 ENVIRONMENTAL PERMITS

In addition to project approval, construction of the Multigenerational Center Project and future facilities proposed in the Master Plan would require permits or approvals from California Department of Transportation, Lahontan Regional Water Quality Control Board, and Tahoe Regional Planning Agency. These permits and approvals are identified in Chapter 2 "Project Description."

1.6 DOCUMENT ORGANIZATION

This IS/MND is organized as follows:

Chapter 1: Introduction. This chapter provides an introduction to the environmental review process. It describes the purpose and organization of this document as well as presents a summary of findings.

Chapter 2: Project Description and Background. This chapter describes the project objectives and provides a detailed description of the project.

Chapter 3: Environmental Checklist. This chapter presents an analysis of a range of environmental issues identified in the CEQA Environmental Checklist and determines if project actions would result in no impact, a less-than-significant impact, a less-than-significant impact with mitigation incorporated, or a potentially significant impact. If any impacts were determined to be potentially significant, an EIR would be required. For this project, however, none of the impacts were determined to be significant after implementation of mitigation measures.

Chapter 4: References. This chapter lists the references used in preparation of this IS/MND.

Chapter 5: List of Preparers. This chapter identifies report preparers.

2 PROJECT DESCRIPTION

2.1 PROJECT OVERVIEW

The proposed 56 Acres Master Plan (Master Plan) and South Lake Tahoe Recreation and Aquatics Center referred to herein as the Multigenerational Center Project (collectively, proposed project) is a collaborative vision of the City of South Lake Tahoe (City) and El Dorado County (County). The California Tahoe Conservancy (Conservancy) is providing support for the Master Plan and contributing funding to prepare the Master Plan. Each agency is supporting this effort to turn the 56 Acres Master Plan area (plan area) into a locally and nationally renowned civic space for the enjoyment of residents and visitors alike. The City is the lead agency for the purposes of CEQA. The plan area encompasses the property in the vicinity of the City's Recreation and Swim Complex, South Lake Tahoe Ice Arena, Campground by the Lake, and Lakeview Commons. The goals of the Master Plan focus on environmental sustainability, cultural preservation, provisions for recreational/civic needs, water quality, mobility improvements, aesthetic improvements, habitat preservation, and creating meaningful world-class facilities and public open space.

The purpose of the Master Plan is to develop a comprehensive strategy for the project site, facilities, programs, and services that is responsive to the community's demographics, social background, and multigenerational recreational needs. The Master Plan would serve to guide the City in capital improvement planning, programmatic planning, maintenance and operational planning, and budgetary decision making. The first project to be implemented under the Master Plan would be the Multigenerational Recreation and Aquatics Center (Multigenerational Center).

This IS/MND provides a program-level analysis for the Master Plan and a project-level analysis for the Multigenerational Center.

2.2 PROJECT LOCATION

The plan area is centrally located in the City of South Lake Tahoe between Lake Tahoe to the north; U.S. Highway 50 (US 50) (Lake Tahoe Boulevard) to the west; Al Tahoe Ballfields, South Tahoe Middle School, Boys and Girls Club and another residential neighborhood to the south; and Rufus Allen Boulevard and a residential neighborhood to the east (Figure 2-1). The proposed site for the Multigenerational Center is within the plan area, west of the library and the area that currently contains the northern portion of the existing campground.

The plan area includes four parcels totaling approximately 56 acres. The County owns 73 percent of the plan area (40.87 acres), while the City owns 27 percent (15.48 acres). US 50 is located in the northern portion of the plan area and separates Lakeview Commons and Champions Plaza from the rest of the plan area.

Figure 2-1 Project Location

2.3 EXISTING USES AND FACILITIES

The plan area is located in the center of the City of South Lake Tahoe where US 50 meets the shores of Lake Tahoe. The property contains some of the largest remaining public open spaces within the city limits. It hosts a variety of existing features, including various recreational facilities, a museum, highway frontage, and a scenic lakefront park that drops off steeply leading to the beaches of Lake Tahoe. Just to the west of the project site is the Harrison Avenue business zone, which was improved by a streetscape project in 2015. The plan area provides for a variety of year-round community and recreational uses including community events, camping, and a new snow play concession.

In 1973, the grant deed conveying the 15.48 acres from the County to the City was executed, stating the "property should be used exclusively for a public park, recreation, cultural and visitor information purposes." An on-site campground, Campground by the Lake, occupies 22.5 acres of the forested center of the site. Usage is seasonal from May through October.

The plan area is within the boundaries of the Bijou/Al Tahoe Community Plan, which includes policies, allowable land uses, and development standards applicable to the project site. A cornerstone of the Community Plan is that the Bijou/Al Tahoe area should serve as a family-oriented and recreation center, as well as a town center for the local community. Goals of the Bijou/Al Tahoe Community Plan also include reducing dependency on the automobile and improving the movement of people, goods, and services within the Bijou/Al Tahoe area, and the Lake Tahoe region. The City General Plan also provides policy direction for the expansion of recreation and civic center facilities within the Bijou/Al Tahoe Community Plan area.

Existing features in the plan area that would be upgraded or reconfigured as part of the Master Plan include:

- campground by the Lake, a 22.5-acre campground with 172 campsites for RV and tent camping and seven tent cabins,
- Recreation and Swim Complex (proposed for removal),
- Lakeview Commons/El Dorado Beach (addition of a multi-use path),
- playground,
- Champions Plaza,
- park maintenance facility within the campground (proposed for relocation within plan area),
- City Public Works maintenance yard (proposed for downsizing),
- shared-use paths, and
- parking (321 parking stalls).

Existing features in the plan area that would be relocated off-site include:

- fire training facility, and
- El Dorado County Vector Control.

Existing features in the plan area that would be retained with no planned changes include:

- indoor ice arena,
- library,
- Lake Tahoe History Museum,
- senior center,
- Tahoe Art League Art Center, and
- Joint Powers Authority (JPA) ambulance facility (former Lake Tahoe Visitor's Authority building).

2.4 PROJECT OBJECTIVES

2.4.1 Master Plan Project Objectives

The Master Plan is intended to achieve the following objectives:

- Create a plan for future improvements, development, and operation of a locally and nationally renowned civic and recreational space for enjoyment of residents and visitors alike;
- Provide a wide range of facilities, such as a multigenerational recreation center and aquatic complex, city government center, outdoor event venue, beach/lakefront public facilities (Lakeview Commons), and active and passive recreation facilities;
- Improve pedestrian and bicycle circulation and access, including pedestrian access throughout the plan area and the beach/lakefront area and connections to surrounding destinations and the regional network;
- Preserve cultural and environmental resources in future development and operations;
- Provide a clear plan for implementation including project phasing, necessary technical studies, regulatory challenges, permitting requirements, and potential funding sources;
- Implement robust community participation and achieve stakeholder support; and
- Be consistent with the architecture and engineering design of the Multigenerational Center.

2.4.2 Multigenerational Center Project Objectives

The Multigenerational Center is intended to achieve the following objectives:

- Utilize funding provided by Measure P to provide recreational amenities to residents and visitors;
- Expand recreation and fitness opportunities with enhanced gymnasium space with an expanded indoor/outdoor aquatic facility, multi-sport options, and fitness space for cardio classes;
- Provide flexible spaces that could be adapted to a variety of uses and recreation trends;
- Provide opportunities to accommodate programming for seniors and older adults;
- Provide high-quality support amenities, such as family changing rooms, locker rooms and showers;
- Commit to a fiscally and operationally responsible facility with an affordable fee structure now and in the future; and
- Develop an environmentally sustainable facility that is efficient in design, layout, and energy use.

2.5 56 ACRES MASTER PLAN

The 56 Acres Master Plan would create a signature park for the enjoyment of residents and visitors. Located in the heart of South Lake Tahoe, the Master Plan would build upon the success of Lakeview Commons.

The Master Plan focuses on recreational and civic needs, creation of meaningful world-class facilities and public open space, environmental sustainability, cultural preservation, water quality, traffic mitigation, aesthetic improvements, and habitat preservation.

Development of the Master Plan has been influenced by numerous public meetings and workshops (see Section 1.2 in Chapter 1 of this IS/MND for a summary of public involvement) to gauge interest by the public in proposed amenities and to receive input on site design. Development of the Multigenerational Center has also been guided by public input from dating back to 2015. Public input on final design refinements for the Master Plan and Multigenerational Center will continue to be sought.

The alternatives evaluation process resulted in the development of a preferred site design depicted in Figure 2-2.

The site design plan will guide facility development and replacement and other physical upgrades over the duration of the plan. It identifies the type, location, and size of site features that should be developed in the plan area and includes a level of detail that allows for the planning and environmental review of specific site improvements. As described in Section 1.3, "Why This Document?," in Chapter 1 of this IS/MND, the Master Plan provides a conceptual plan for facility improvements that would be implemented over 20 years and, thus, this IS/MND includes a programmatic analysis of the potential environmental effects of facilities implemented under the Master Plan. The Master Plan will be implemented in phases as resources become available for specific site improvements, and as such improvements are proposed, additional design, engineering, and permitting will be required in addition to project-specific environmental review that would tier from the analysis in this IS/MND. Individual site improvement projects would be consistent with the Master Plan and environmental analysis included in this document.

2.5.1 Multigenerational Center

The existing South Lake Tahoe Recreation and Swim Complex was built in 1971, has never had a major renovation, and many building systems and components are reaching the end of their usable life. The facility is inadequate for the current and future needs and demands of the City's recreation programs.

The new Multigenerational Center would be the first project in the Master Plan area to be built and would replace the existing Recreation and Swim Complex, although at a location in the northern part of the plan area west of the existing library. The new location would provide a closer connection to the main highway and Lakeview Commons and offer views of the lake. The approximately 64,220-square-foot Multigenerational Center would include a variety of recreational and community uses described below and would be designed to meet Leadership in Energy and Environmental Design (LEED) standards, which is a widely used green building rating system. A site plan showing the layout of the proposed Multigenerational Center is shown in Figure 2-3. Design of the building would be characteristic of mountain modern style and would use a mixture of metal, wood, stone, and concrete (Figure 2-4). The building height would be up to 38 feet.

The Multigenerational Center would offer space and services for all ages, including a commercial kitchen and dining space for the purpose of accommodating the County Senior Nutrition Program and could be used by others.

AQUATICS

The new aquatic facilities would include a lap pool and activity pool. The 2,500-square-foot activity pool could include spray features and a lazy river. The six-lane, 25-yard lap pool would accommodate swim meets and a variety of recreation and fitness uses. The deck around the pool would include space to accommodate tip-and-roll bleachers for approximately 80 spectators.

GYMNASIUM AND FITNESS

The proposed multi-purpose gymnasium space would include two high school-sized courts and four middle school-sized courts. Court striping would also include two volleyball courts and four pickleball/badminton courts. Circulation around the courts would be appropriately sized to accommodate tip-and-roll bleachers for approximately 320 spectators. A three-lane suspended walk/jog track located above the circulation area of the gym would be sized at approximately 12 laps per mile. An aerobics/dance studio would be provided as well as outside spaces for fitness and small group events.

COMMUNITY SPACES AND USE

As a community facility, the Multigenerational Center would provide an arts and crafts classroom, wet classroom by the pools, rooftop event space, rooftop outdoor patio, and a commercial kitchen for community use, including for the County Senior Nutrition Program.

Senior programs are anticipated to be provided at the Multigenerational Center, including both active recreation uses as well as passive, social spaces. The spaces programmed for senior activities would also be made available to other user groups to maximize facility use in the multi-purpose design. The existing senior center located at 3050 Lake Tahoe Blvd would remain accessible to senior groups. Additional services for senior patrons beyond the lunch program include arts and craft classes, gardening (which seniors may teach), as well as various recreational exercise activities.

A child watch service is being considered for this facility as part of the flexible space design. Specifically, the party room may serve as a location for children requiring supervision while their parents participate in fitness programs. Other multi-use spaces may also be activated for child watch as identified through the final design process.

The Multigenerational Center would include several offices to support the various uses, including the commercial kitchen, aquatics, and fitness uses.

PARKING

The proposed location of the Multigenerational Center would take advantage of proximity to the library and associated access from Rufus Allen Boulevard. As part of the project, the existing library parking lot and would be expanded to accommodate the parking needs for the Multigenerational Center and Civic Center (see Figure 2-3).

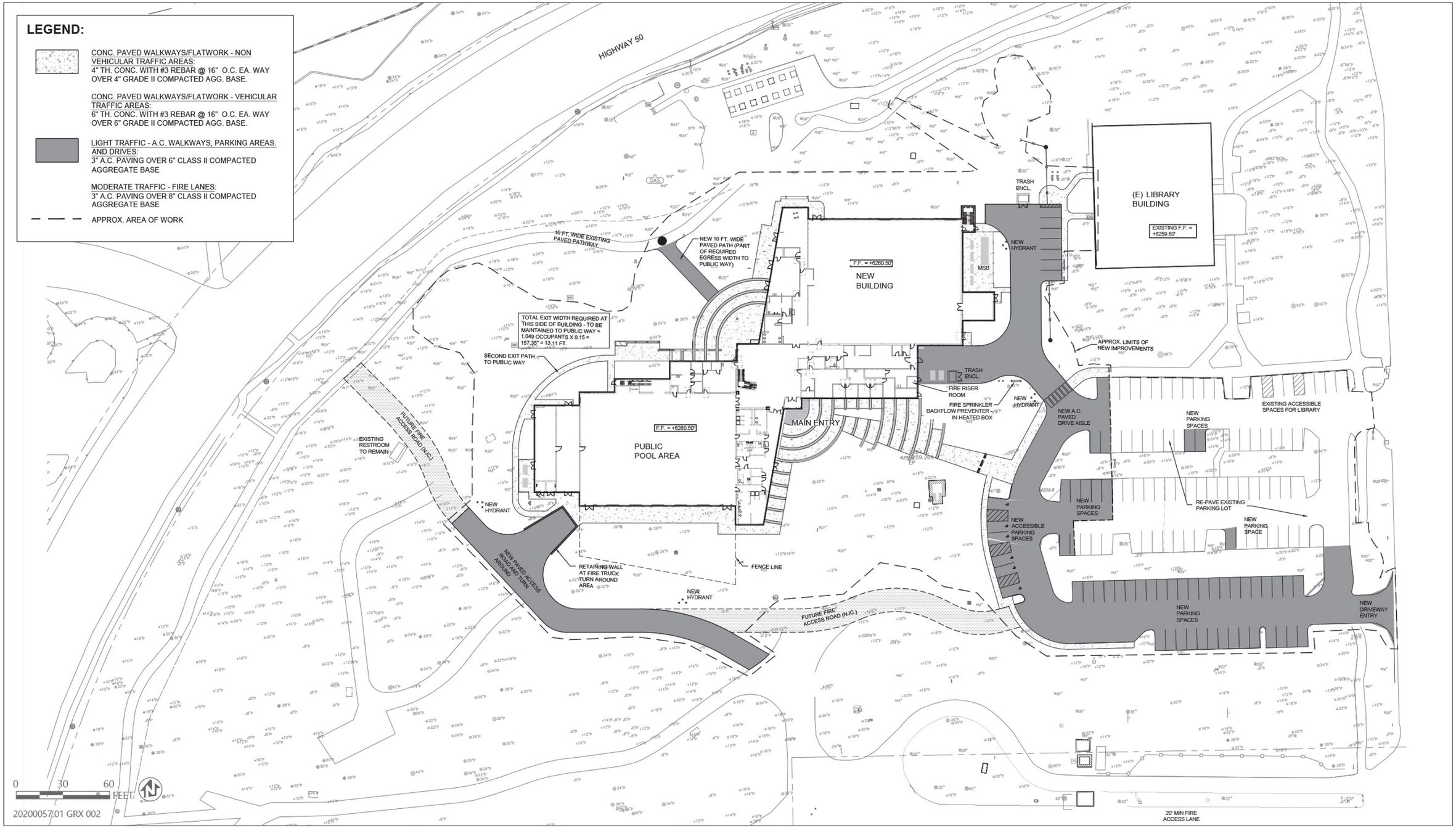
CONSTRUCTION

Construction of the Multigenerational Center would require removal of a portion of the existing Campground by the Lake (including tent cabins), relocation of an existing restroom at the campground, removal of two existing campground buildings (original camp store and garage/storage shed) next to US 50, and utility infrastructure for the new building. An estimated 309 trees, 97 of which are greater than 14 inches diameter at breast height, would require removal for construction of the building and expanded parking lot. Additionally, some trees near the library would be removed for defensible space purposes. The site design would carefully consider removal of trees larger than 30 inches in diameter to save as many as trees as possible and in close coordination with TRPA.

Construction activities would comply with conditions of regulatory permits including the TRPA Standard Conditions of Approval for Grading Projects (TRPA Permit Attachment Q). These standard conditions include required construction best practices to minimize air quality, noise, erosion, and other construction related impacts. Standard conditions of approval include, but are not limited to:

- Restricting grading to May 1 through October 15
- Requiring Construction BMPs
- Limiting idling time for heavy equipment to 5 minutes
- Limiting noise-generating construction to between 8:00 a.m. to 6:30 p.m.

Figure 2-2 56 Acres Master Plan



Source: JK Architects and Engineering

NORTH PLAZA VIEW

SOUTH ENTRY VIEW

NORTH VIEW BIKE PATH

NORTHWEST GYM VIEW

SOUTHEAST AQUATICS VIEW

NORTHEAST GYM VIEW

20200057.01 GRX 003

Source: JK Architects and Engineering

Figure 2-4 Multigenerational Center Preliminary Architectural Renderings

2.5.2 Campground

The Campground by the Lake is operated by the City and has been a part of the plan area since the 1960s. It is one of the most popular campgrounds in the area. With implementation of the Master Plan, the Campground by the Lake would be reconfigured, and the location shifted toward the south. The reconfigured campground would have approximately 135 sites, with 118 spur sites for RVs and tents and 17 tent cabin sites. This would be an overall reduction in overnight accommodations from 172 campsites and six tent cabins at the campground. The upgraded campground would accommodate year-round camping in the tent cabins and have RV hook ups for water and electricity at all sites. The tent cabins would have electrical service and an estimated 20 percent of campsites could have sewer hookups. The campground may continue to have an on-site dump station service. One existing restroom would remain in place, one would be relocated, and a new restroom would be constructed for a total of three restrooms in the campground. Additionally, an existing maintenance yard near the existing campground would be relocated within the plan area. Access to the updated campground would be provided from a driveway off the new Main Street (see Section 2.5.7, "Circulation and Connectivity," below).

The campground would continue to have fire rings at each campsite. Use of the fire rings would continue to be subject to fire restrictions during periods of elevated wildfire risk. As under existing conditions, the City and/or the campground host would provide notice to campers regarding campfires during periods of restricted use.

2.5.3 Civic Uses

A new Civic Center would be located in the center of the planning area, immediately south of the Multigenerational Center, creating a courtyard between the buildings that could be used for community events. The Civic Center would consist of two buildings connected with one roof and a breezeway between them. One two-story, 18,000-square-foot (sq. ft.) building for administration offices and a separate single-story 7,000-sq.-ft. building for council chambers. The smaller building would include space for restrooms, catering kitchen, and other support spaces and could be leased for private functions or used for municipal gatherings.

2.5.4 Play and Gather Spaces

A key element of the Master Plan is ensuring a wide variety of amenities that support diverse types of play and various community events and gatherings. Play and gather spaces in the park would be flexible, welcoming, and encourage residents and visitors alike to relax, socialize, and stay active.

Lakeview Commons would be retained as is, but Champions Plaza would be expanded. The parking area immediately adjacent to the existing Champion's Plaza would be reclaimed for more pedestrian space with an expansion of the plaza including new landscaping and pavers. On-street parking would be formalized along Harrison Avenue and vehicular access to the boat ramp would be retained.

An approximately 70,000-sq.-ft. flexible event space for community events would be included to the west of the Civic Center. The proposed Main Street could be closed temporarily to also provide an opportunity for gatherings.

Opportunities for nature, adventure, and fitness play would also be available. A nature and adventure play area would be located immediately west of the flexible event space under the existing trees and would incorporate new earthwork, including berming and sculpting landforms. Nature and adventure play amenities could include slides, landform manipulation, nature-based play areas, rock climbing walls, and other activities that teach new skills and help to cultivate appreciation and excitement for the outdoors. Other amenities would include interactive play elements such as sculptures, engagement-based interpretive material, and fitness play features. Fitness play features are proposed for the area west of the Multigenerational Center.

2.5.5 Cultural Hub

The existing senior center, Lake Tahoe History Museum and cabins, and Tahoe Art League Art Center would remain. The former Lake Tahoe Visitor's Authority building would remain. It is currently being used as a JPA ambulance facility (i.e., California Tahoe Emergency Services Operations Authority JPA [Cal Tahoe JPA]). The historic cabins would be incorporated into a community green for small events and tours. There are no proposed changes to these buildings or uses as part of the Master Plan.

2.5.6 Ice Arena

With implementation of the Master Plan, the ice arena would be unchanged. It would continue to provide opportunities for educational recreational programs (e.g., learn to skate, introduction to hockey), figure skating, public skate, private rentals.

2.5.7 Circulation and Connectivity

The plan area is centrally located and provides several local and regional trail connections and a pedestrian network with connections to numerous public beaches and lake access.

The Master Plan proposes public spaces that would be open and accessible to everyone in the community. Its implementation would expand on these existing facilities with additional shared-use paths within the park to connect key access points as well as circulate users throughout the site itself. This includes trails that would be accessible for users of all abilities, seniors, families, and pet owners among others.

Implementation of the Master Plan would also include Lakeview Commons Phase 2. This would include improvements to the shared-use path and beach accessibility east of Lakeview Commons, connecting to public land owned by the California Tahoe Conservancy, and would create more useable space at the park and improve bicycle/pedestrian access. These improvements would include a cantilevered boardwalk connecting from the existing Lakeview Commons improvements to the existing stair access to the lake across from Rufus Allen Boulevard. The cantilevered boardwalk would be constructed outside of the high water mark (6,229.1 feet Lake Tahoe Datum).

The plan area east of the highway would be bisected by a new "Main Street" that would extend from Tallac Avenue on the west to Rufus Allen Boulevard on the east. This would serve as the primary spine of vehicular access through the site with a new entry to the campground and civic center. Approximately 50 parallel parking spaces would be located along the two-lane access road. The Main Street could also be closed to be used for community events.

Enhanced at-grade pedestrian crossings at Rufus Allen Boulevard, Lakeview Avenue, and Tallac Avenue are proposed by Caltrans as part of a separate project. While these crossings are not part of the Master Plan, they would benefit circulation through the plan area if and when they are constructed.

2.5.8 Events

Currently, community events in the plan area are generally limited to the Live at Lakeview concerts that are held during the summer at Lakeview Commons. Lakeview Commons has also hosted community rallies and sporting events. Implementation of the Master Plan would provide opportunities to expand community event space offerings in the portion of the plan area east of the highway. Community events could be held in the new 70,000 sq. ft. outdoor flexible event space located west of the Civic Center. The new Main Street could also be closed to vehicle traffic and used for community events.

Typically, the existing Live at Lakeview concerts receive an estimated 500-1,000 attendees, which would continue under the Master Plan. Up to 10 events per year are anticipated at the new outdoor flexible event space with 250-500 attendees at each event. Additionally, the proposed Main Street could be closed to vehicle traffic for up to 10 events each year with up to 250–500 attendees at each event.

The schedule of events at the new outdoor event space, Main Street, Lakeview Commons, Multigenerational Center, Civic Center, and Ice Arena would be managed by the City through the event application process such that overlapping events would not be scheduled that would have parking demand that would exceed available on-site parking. The Special Event Application Guidelines provide a list of requirements for event planners to meet that would minimize adverse effects related to traffic, parking, alternative transportation, notifications to surrounding residents and businesses, and accessibility for all abilities. Some of these requirements include preparation of a Traffic Plan for minimizing disruptions to business and residential traffic flows and encouragement and facilitation of alternative transportation methods. Additionally, outdoor music and entertainment would be limited to performing between the hours of 10:00 a.m. and 10:00 p.m. and proposed outdoor events with expected noise impacts are required to provide a Sound Management Plan for controlling the type and volume of sound produced by the event. Special event applications would be subject to review and approval by the Special Events Committee.

2.5.9 Parking

The Master Plan would not decrease parking in the plan area and would be designed to provide sufficient parking to meet of the parking demand in the plan area. Special events would be planned such that they would not overlap to generate parking demand that could not be met within the plan area. The existing and proposed parking capacity in the plan area is shown in Table 2-1.

Table 2-1 Existing and Proposed Parking Supply

Parking Location	Existing	Proposed
Lakeview Commons/Champion's Plaza	45	9
Library	78	78
Multigenerational Center Lot (expansion of Library parking lot)	NA	56
Civic Center	NA	117
Campground	NA	97
Southeastern Lots	160	147
Cultural Hub	38	63
Proposed Main Street	NA	50
Total Parking	**321**	**617**

Note: NA = not applicable.

Source: compiled by Design Workshop in 2021

2.5.10 Utilities

The plan area includes existing utilities service including water, sewer, electricity, and natural gas. The proposed facilities would connect to existing utility infrastructure in the plan area. Excavation, on-site utility extensions and connections would occur as each facility is constructed.

2.5.11 Construction and Phasing

Multigenerational Center grading and site work is planned to begin in 2022, vertical construction would occur in 2023, and the building would be operational in 2024. Buildout of the plan area would occur over an estimated 20 years in the following phases:

- Phase 1 (2022 – 2024): Multigenerational Recreation and Aquatics Center,
- Phase 2: Half of main street from Rufus Allen into the center of the site, ending in a temporary cul de sac,
- Phase 3: Campground tent and RV sites,

- Phase 4: Camping cabins,
- Phase 5: Event space and play area, and
- Subsequent Phases: connecting main street to Highway 50, civic center, cultural hub, and removal of the existing Recreation and Aquatics Center.

All construction would take place between the hours of 8:00 a.m. and 6:30 p.m. as stated in Chapter 68.9 of the TRPA Code of Ordinances.

PRECONSTRUCTION SURVEYS FOR NESTING BIRDS

Native nesting birds are protected under California Fish and Game Code Sections 3503 and 3503.5 and the federal Migratory Bird Treaty Act. To minimize and avoid potential construction-related loss of active bird nests and comply with these regulations, the City and/or its construction contractor would implement the following resource protection measure as part of the project.

- Conduct Preconstruction Survey for Nesting Birds and Implement Protective Measures. A qualified biologist will conduct pre-construction surveys for nesting birds during the nesting season and implement protection measures, if needed. For project-related removal of trees and other vegetation suitable for nesting during the bird nesting season (generally March 1 through August 31, depending on species, weather, and snowpack), and for other substantial ground disturbance that may disturb or cause failure of nests in adjacent areas, a qualified biologist will conduct focused surveys for active nests of native bird species before and within 14 days of initiating the disturbance activity. Additionally, if project activities are suspended for more than 2 weeks, subsequent (i.e., repeat) surveys for nesting birds will be conducted. Generally, the survey area will include potential nesting habitat within 500 feet of the proposed disturbance areas.

If no active nests are found, no further action will be required. If an active bird nest is located, the biologist will document the nest location and notify the City of the finding. Modifications to the project design to avoid removal of occupied habitat while still achieving project objectives will be evaluated, and implemented to the extent feasible. If avoidance is not feasible or conflicts with project objectives, construction or other disturbance activity will initially be prohibited within a minimum of 500 feet of a raptor nest and 250 feet of a non-raptor nest to minimize disturbance until the nest is no longer active. A qualified biologist will monitor the nest during project activities, to determine whether the exclusionary buffer is appropriately sized to minimize impacts to the nest during the start of disturbance activities. The qualified biologist will have the authority to stop work if project activities cause the nesting birds to vocalize, make defensive flights, displace from a brooding position, or fly off the nest. The buffer may be increased or decreased depending on the birds' level of tolerance to the disturbance. The results of the monitoring efforts and the professional judgement of the qualified biologist will be used to determine whether the exclusionary buffer can be modified or if other performance-based modifications are necessary. Other protective actions may include visible screens between the nest and project activities. The exclusionary buffer and/or other performance-based modifications will remain in place until the chicks have fledged or as otherwise determined by a qualified biologist.

2.6 APPROVALS AND FUTURE USE OF THIS DOCUMENT

This IS/MND will be used in the planning and decision-making process for adoption and implementation of the proposed project. After reviewing this IS/MND and other information related to the proposed project, the City Council will consider IS/MND certification and approval of the Master Plan and Multigenerational Center project. The permits, reviews, and approvals required for Master Plan and Multigenerational Center implementation are listed in Table 2-2.

A responsible agency under CEQA is a public agency with some discretionary authority over a project or a portion of it, but which has not been designated the lead agency (State CEQA Guidelines Section 15381). If a project would require discretionary actions by more than one agency, one agency must be selected as the lead agency pursuant to State CEQA Guidelines Section 15051, and the others would become responsible agencies that could rely on a CEQA

document prepared by the lead agency to meet their CEQA compliance requirements. In addition to those agencies listed in Table 2-2, the following agencies may be responsible agencies for future discretionary approvals or actions included in the Master Plan:

- California Tahoe Conservancy
- El Dorado County

Under CEQA, a trustee agency is a state agency that has jurisdiction by law over natural resources that are held in trust for the people of the State of California (State CEQA Guidelines Section 15386). The California Department of Fish and Wildlife is a trustee agency with jurisdiction over resources potentially affected by the Master Plan and Multigenerational Center project.

Table 2-2 Permits and Approvals

Agency	Permits or Approvals
California Department of Transportation	Encroachment permit for placement of encroachments within, under, or over the state highway rights-of-way
Lahontan Regional Water Quality Control Board	National Pollutant Discharge Elimination Construction General Permit
City of South Lake Tahoe	CEQA compliance, Master Plan approval
Tahoe Regional Planning Agency	Permits for the Multigenerational Center and other individual facilities

Source: Compiled by Ascent Environmental in 2021

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3 ENVIRONMENTAL CHECKLIST

PROJECT INFORMATION

1. Project Title: 56 Acres Master Plan and South Lake Tahoe Recreation and Aquatics Project – A Multigenerational Center

2. Lead Agency Name and Address: City of South Lake Tahoe
Development Services Department
1052 Tata Lane
South Lake Tahoe, CA 96150

3. Contact Person and Phone Number: John Hitchcock, Planning Manager, (530) 542-7472

4. Project Location: City of South Lake Tahoe, California

5. Project Sponsor's Name and Address: City of South Lake Tahoe (address same as above)

6. General Plan Designation: Recreation

7. Zoning: Commercial/Public Service

8. Description of Project: (Describe the whole action involved, including but not limited to later phases of the project, and any secondary, support, or off-site features necessary for its implementation. Attach additional sheets if necessary.)

   See Chapter 2, "Project Description."

9. Surrounding Land Uses and Setting: (Briefly describe the project's surroundings) Town center (including commercial uses) and residential uses are located to the east, recreation uses are located to the southeast, commercial and residential uses are located to the west, and Lake Tahoe is located to the north.

10. Other public agencies whose approval is required: (e.g., permits, financing approval, or participation agreement) See Table 2-2 in Chapter 2, "Project Description."

11. Have California Native American tribes traditionally and culturally affiliated with the project area requested consultation pursuant to Public Resources Code section 21080.3.1? If so, is there a plan for consultation that includes, for example, the determination of significance of impacts to tribal cultural resources, procedures regarding confidentiality, etc.?
    Note: Conducting consultation early in the CEQA process allows tribal governments, lead agencies, and project proponents to discuss the level of environmental review, identify and address potential adverse impacts to tribal cultural resources, and reduce the potential for delay and conflict in the environmental review process. (See Public Resources Code section 21083.3.2.) Information may also be available from the California Native American Heritage Commission's Sacred Lands File per Public Resources Code section 5097.96 and the California Historical Resources Information System administered by the California Office of Historic Preservation. Please also note that Public Resources Code section 21082.3(c) contains provisions specific to confidentiality.

    The City sent Assembly Bill (AB) 52 consultation letters to the Ione Band of Miwok Indians, the Shingle Springs Band of Miwok Indians, the United Auburn Indian Community of the Auburn Rancheria, and the Washoe Tribe of Nevada and California on June 8, 2021. No responses were received, and AB 52 consultation is complete.

ENVIRONMENTAL FACTORS POTENTIALLY AFFECTED:

The environmental factors checked below would be potentially affected by this project, involving at least one impact that is a "Potentially Significant Impact" as indicated by the checklist on the following pages. Where checked below the topic with a potentially significant impact will be addressed in an environmental impact report.

☐ Aesthetics	☐ Agriculture and Forest Resources	☐ Air Quality
☐ Biological Resources	☐ Cultural Resources	☐ Energy
☐ Geology / Soils	☐ Greenhouse Gas Emissions	☐ Hazards / Hazardous Materials
☐ Hydrology / Water Quality	☐ Land Use / Planning	☐ Mineral Resources
☐ Noise	☐ Population / Housing	☐ Public Services
☐ Recreation	☐ Transportation	☐ Tribal Cultural Resources
☐ Utilities / Service Systems	☐ Wildfire	☐ Mandatory Findings of Significance
	☐ None	☒ None with Mitigation Incorporated

DETERMINATION (To be completed by the Lead Agency)

On the basis of this initial evaluation:

☐ I find that the proposed project could not have a significant effect on the environment, and a **NEGATIVE DECLARATION** will be prepared.

☒ I find that although the proposed project COULD have a significant effect on the environment, there WILL NOT be a significant effect in this case because revisions in the project have been made by or agreed to by the project proponent. A **MITIGATED NEGATIVE DECLARATION** will be prepared.

☐ I find that the proposed project **MAY** have a significant effect on the environment, and an **ENVIRONMENTAL IMPACT REPORT** is required.

☐ I find that the proposed project **MAY** have a "potentially significant impact" or "potentially significant unless mitigated" impact on the environment, but at least one effect 1) has been adequately analyzed in an earlier document pursuant to applicable legal standards, and 2) has been addressed by mitigation measures based on the earlier analysis as described on attached sheets. An **ENVIRONMENTAL IMPACT REPORT** is required, but it must analyze only the effects that remain to be addressed.

☐ I find that although the proposed project could have a significant effect on the environment, because all potentially significant effects (a) have been analyzed adequately in an earlier **EIR** or **NEGATIVE DECLARATION** pursuant to applicable standards, and (b) have been avoided or mitigated pursuant to that earlier **EIR** or **NEGATIVE DECLARATION**, including revisions or mitigation measures that are imposed upon the proposed project, nothing further is required.

	December 10, 20221
Signature	Date

John Hitchcock	Planning Manager
Printed Name	Title

City of South Lake Tahoe

Agency

EVALUATION OF ENVIRONMENTAL IMPACTS

1. A brief explanation is required for all answers except "No Impact" answers that are adequately supported by the information sources a lead agency cites in the parentheses following each question. A "No Impact" answer is adequately supported if the referenced information sources show that the impact simply does not apply to projects like the one involved (e.g., the project falls outside a fault rupture zone). A "No Impact" answer should be explained where it is based on project-specific factors as well as general standards (e.g., the project will not expose sensitive receptors to pollutants, based on a project-specific screening analysis).
2. All answers must take account of the whole action involved, including off-site as well as on-site, cumulative as well as project-level, indirect as well as direct, and construction as well as operational impacts.
3. Once the lead agency has determined that a particular physical impact may occur, then the checklist answers must indicate whether the impact is potentially significant, less than significant with mitigation, or less than significant. "Potentially Significant Impact" is appropriate if there is substantial evidence that an effect may be significant. If there are one or more "Potentially Significant Impact" entries when the determination is made, an EIR is required.
4. "Negative Declaration: Less Than Significant with Mitigation Incorporated" applies where the incorporation of mitigation measures has reduced an effect from "Potentially Significant Impact" to a "Less-than-significant impact." The lead agency must describe the mitigation measures, and briefly explain how they reduce the effect to a less than significant level (mitigation measures from "Earlier Analyses," as described in (5) below, may be cross-referenced).
5. Earlier analyses may be used where, pursuant to the tiering, program EIR, or other California Environmental Quality Act (CEQA) process, an effect has been adequately analyzed in an earlier EIR or negative declaration. Section 15063(c)(3)(D). In this case, a brief discussion should identify the following:
   a) Earlier Analysis Used. Identify and state where they are available for review.
   b) Impacts Adequately Addressed. Identify which effects from the above checklist were within the scope of and adequately analyzed in an earlier document pursuant to applicable legal standards, and state whether such effects were addressed by mitigation measures based on the earlier analysis.
   c) Mitigation Measures. For effects that are "Less than Significant with Mitigation Measures Incorporated," describe the mitigation measures which were incorporated or refined from the earlier document and the extent to which they address site-specific conditions for the project.
6. Lead agencies are encouraged to incorporate into the checklist references to information sources for potential impacts (e.g., general plans, zoning ordinances). Reference to a previously prepared or outside document should, where appropriate, include a reference to the page or pages where the statement is substantiated.
7. Supporting Information Sources: A source list should be attached, and other sources used or individuals contacted should be cited in the discussion.
8. This is only a suggested form, and lead agencies are free to use different formats; however, lead agencies should normally address the questions from this checklist that are relevant to a project's environmental effects in whatever format is selected.
9. The explanation of each issue should identify:
   a) the significance criteria or threshold, if any, used to evaluate each question; and
   b) the mitigation measure identified, if any, to reduce the impact to less than significance.

3.1 AESTHETICS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-than-Significant Impact	No Impact
I. Aesthetics.				
Except as provided in Public Resources Code section 21099 (where aesthetic impacts shall not be considered significant for qualifying residential, mixed-use residential, and employment centers), would the project:				
a) Have a substantial adverse effect on a scenic vista?	☐	☐	☒	☐
b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?	☐	☐	☒	☐
c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?	☐	☐	☒	☐
d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?	☐	☐	☒	☐

3.1.1 Environmental Setting

VISUAL CHARACTER

The plan area is located in the southern portion of the Tahoe Basin. The basin in which Lake Tahoe is situated characterizes the general landform of the Region. Steep-sided mountains rise above the Lake. The landform immediately adjacent to Lake Tahoe consists of narrow beaches or steep slopes meeting the lake's edge. Lake Tahoe is located north of the plan area.

The predominant vegetation type in the plan area is Jeffrey pine. Occasional understory vegetation includes white fir, greenleaf manzanita, bitterbrush, Woods' rose, and nonnative ornamental/landscaped vegetation. Views of Lake Tahoe from within the plan area range from direct views in the area north of U.S. Highway 50 (US 50) to limited views obscured by trees to no views of the lake in the portions of the plan area further away from the lake.

The scenic environment of the plan area includes an urban setting and a more natural appearing forest landscape. Views within the plan area are dominated by urban Jeffrey pine forest. The urban elements consist of US 50, Public Works maintenance yard, park maintenance facility, the various buildings in the plan area (e.g., library, Lake Tahoe History Museum, senior center, art center, Recreation and Swim Complex), overhead power lines, and nearby commercial and residential development. The aesthetic character defined primarily by the existing forest intermixed with the campground and urban elements.

BUILT ENVIRONMENT

The existing facilities within the plan area include a mix of structures, some of which have a positive effect on the aesthetic quality of the plan area, others of which detract from it. Facilities in the plan area are described under

Section 3.16, "Recreation." The redesign of the entire shoreline portion of the plan area, including the amphitheater, rocks and vegetation along the shoreline, restrooms, snack stand, walkways, landscaping, boat ramp, expanded picnic area, relocated and reconfigured parking and bike trail, patios and paved walkways, railing with open visual access, low-level unobtrusive lighting, campground better connected with crosswalks, and tent cabins added to the campground have all had a positive effect on scenic quality as documented in the 2015 Threshold Evaluation (TRPA 2016).

STATE SCENIC HIGHWAY

In the plan area, US 50 is an Eligible State Scenic Highway (Caltrans 2021), but it has not been officially designated as such.

TRPA THRESHOLDS

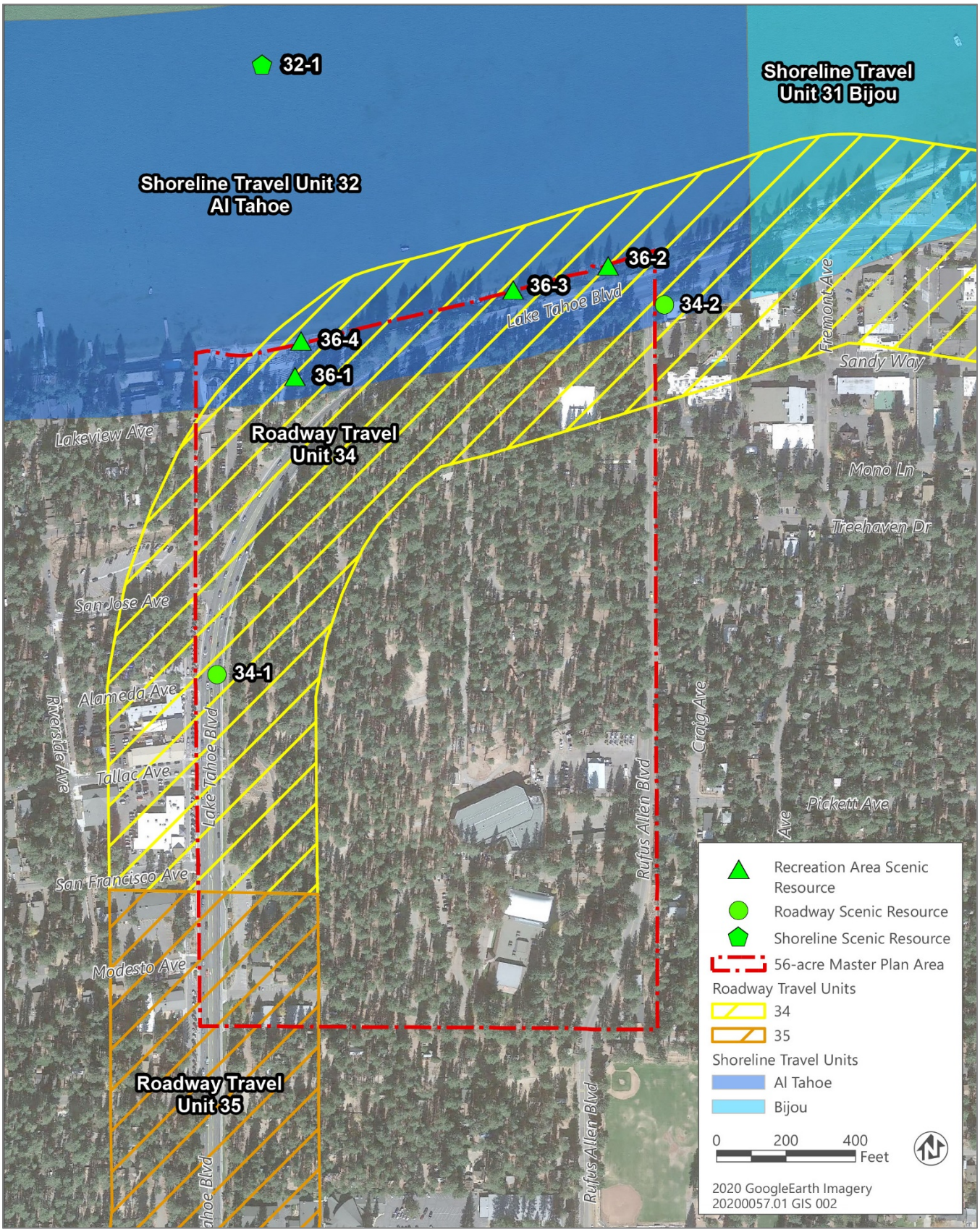
The Tahoe Regional Planning Agency (TRPA) adopted environmental thresholds in August 1982 for the purpose of maintaining and improving the various resources of the Tahoe Basin. Scenic quality is an exceptional attribute of the Tahoe Basin, and specific threshold carrying capacities were developed to protect and improve the scenic resources of the area. TRPA threshold standards require maintenance of threshold rating values for roadway and shoreline travel routes, individually mapped scenic resources, recreation area scenic resources, and compatibility with the natural environment.

Shoreline Travel Unit and Shoreline Scenic Resource

The plan area contains a TRPA-designated shoreline travel unit for Al Tahoe (Unit 32), which extends along the shore from the Truckee marsh on the west to just west of Rufus Allen Boulevard to the east (see Figure 3.1-1). Additionally, Scenic Resource 32-1 is located on the lake approximately 800 feet north of the shoreline and the plan area.

View of the plan area from Lake Tahoe at Shoreline Scenic Resource 32-1 (see Figure 3.1-2) shows shoreline support structures (i.e., retaining wall, rip rap), concrete stairs, beach, Lakeview Commons, and boat ramp in the foreground, dense forest in the middle ground, and mountains in the background. This portion of the shoreline is within the visual character type identified as visually modified shoreline, which indicates there is a mixture of human-made development and vegetation. Visually modified shoreline areas are considered less visually sensitive than visually sensitive and natural dominated shoreline areas but has less visual clutter than visually dominated shoreline areas. The plan area contributes positively to views of this area of shoreline, as it provides a visual break in the surrounding development and provides a more natural character to this section of shoreline.

In 1982, the shoreline travel route composite rating for Unit 32 was 9. In 2001, the composite rating increased to 10 and in 2011 the score increased to 11 and has remained there through the most recent evaluation in 2019 (TRPA 2021). Improvements in the composite rating in this shoreline travel route resulted from improvements in shoreline revetment and revegetation along El Dorado Beach, redesign and rehabilitation of El Dorado Beach shoreline, and Lakeview Commons. Similarly, the increase in rating for Scenic Resource 32-1 was a result of maturing vegetation along the shoreline and completion of Lakeview Commons that improved scores related to unity and intactness in this resource (TRPA 2016). To be in attainment of the threshold standard, the composite rating of any shoreline travel unit must be at least 7.5 and must also be at least equal to the rating originally assigned in 1982. The composite scores of shoreline scenic resources must be at or higher than they were in 1982. As of the 2019 Threshold Evaluation, Shoreline Unit 32 and Shoreline Scenic Resource 32-1 remained in attainment of TRPA's threshold standard for shoreline travel units (Lake Tahoe Info 2021a).



Source: Data downloaded from TRPA in 2015; adapted by Ascent in 2021

Figure 3.1-1 Scenic Resources

Source: Lake Tahoe Info 2021a

Figure 3.1-2 View of the Plan Area from Shoreline Scenic Resource 32-1 in Al Tahoe Shoreline Travel Unit (Unit 32)

Roadway Travel Units and Roadway Scenic Resources

Views of the plan area from the roadway in the plan area are generally high quality, as there are filtered views of Lake Tahoe and distant mountains when traveling along the roadway. Other views along this roadway travel unit include the forested portion of the plan area to the south and southeast of US 50 and commercial development west of US 50.

The plan area contains the TRPA-designated Roadway Travel Unit 34 (El Dorado Beach) (see Figure 3.1-1), which extends along US 50 from Takela Drive to the east to San Francisco Avenue on the west. In 1982, the roadway travel route composite rating for Unit 34 was 16. To be in attainment of the TRPA Roadway Travel Route Scenic Threshold, the unit must have a composite rating of 15.5 or greater. Between 1996 and 2011, the rating fluctuated between 16 and 17. In 2015 and 2019, the roadway travel route composite rating was 18 (TRPA 2021). Decreases in the ratings over the years was due to an increase in commercial activity along Harrison Avenue; however, installation of curbs and gutters, sidewalks, new road paving, improvements to the area around El Dorado Beach, and removal of the Alta Mira building have resulted in increases in the ratings for man-made features, roadway distractions, and lake views (TRPA 2016). These aesthetic improvements have made this portion of South Lake Tahoe a more pedestrian-friendly area. To be in attainment with the threshold standard, the current composite rating of each roadway travel unit must be at least 15.5 and equal or exceed the rating originally assigned in 1982. As of the 2019 Threshold Evaluation, the roadway unit is in attainment of TRPA's threshold standard (Lake Tahoe Info 2021b).

The plan area also contains a portion of Roadway Travel Unit 35 (Al Tahoe) (see Figure 3.1-1), which begins at San Francisco Avenue across the street from the Joint Powers Authority (JPA) ambulance facility building (former Lake Tahoe Visitor's Authority building) and extends through the Y and south to C Street. Views along this roadway travel unit in the plan area include urban development along Harrison Avenue along the west side of US 50 and the Lake Tahoe History Museum, senior center, Tahoe Art League Art Center, and JPA ambulance facility. The buildings within the plan area on the east side of this roadway travel unit are set back from the road and appear nestled within the trees that are part of the surrounding forest. In 1982, the roadway travel route composite rating for Unit 35 was 7. Over the years, incremental improvements in the composite rating have increased the score to 9.5 in 2019. Changes along this roadway travel unit near the plan area that have contributed to increases in the ratings include new

sidewalks, and redeveloped buildings near the Harrison Avenue area. Although the rating of Roadway Travel Unit 35 has increased over the 1982 score, the composite rating is still below the 15.5 rating and, thus, is in nonattainment with the threshold standard (Lake Tahoe Info 2021b).

Roadway Scenic Resource 34-1 includes views of Campground by the Lake in the plan area as viewed from US 50 facing southeast. This is a typical view of the forested portion of the plan area located adjacent to US 50 to the south and is therefore important to travelers on US 50 and pedestrians in South Lake Tahoe. Scenic Resource 34-1 is in attainment of the TRPA threshold standard (Lake Tahoe Info 2021b).

Roadway Scenic Resource 34-2 includes panoramic views of Lake Tahoe as viewed from vehicles traveling west on US 50 or from pedestrians walking along the north side of US 50. This view is the least obstructed view of Lake Tahoe from the roadway within the plan area and is therefore important to travelers on US 50 and pedestrians in South Lake Tahoe. Scenic Resource 34-2 is in attainment of the TRPA threshold standard (Lake Tahoe Info 2021b).

Recreation Area Scenic Resources

El Dorado Beach and the Campground by the Lake are a recreation area documented in the 1993 Recreation Areas Inventory and Evaluation (TRPA 1993), and subsequently included in TRPA's Other Areas Scenic Threshold category.

The TRPA inventory identified important views from the recreation area and designated these as scenic resources, as shown in Figure 3.1-1. It identified panoramic views of the lake from the picnic area above the Lakeview Commons amphitheater as Resource 36-1, and panoramic views of the lake from the eastern end of the plan area as Resource 36-2. El Dorado Beach and the campground are currently in attainment of TRPA's scenic threshold standard (Lake Tahoe Info 2021c).

The Recreation Areas Inventory and Evaluation (TRPA 1993) also identified elements that contribute to and detract from the scenic quality of El Dorado Beach, and it included recommendations for preserving the scenic quality of KBSRA. The positive and negative elements that still affect the scenic quality of El Dorado Beach are listed below:

Elements that Detract from the Scenic Quality of El Dorado Beach

- The proximity of US 50 to the picnic area and the constant movement and noise of automobiles significantly affects the use of this area.
- The hotel and casino development east of the recreation area stands out boldly above the forest cover and is completely out of scale with its surroundings.
- The motel just west of the recreation area is an unattractive foreground element that projects out in front of one of the more distinctive landscape features in the viewshed (i.e., Emerald Bay area).
- The boat launch area is a major structure where it passes under the roadway. The mass of concrete and the cyclone fencing around it visually dominate the west end of the beach. The combined effect of this area with the motel adjacent to it is distinctly unappealing visually.
- The erosion of the bank at the east end of the beach is undercutting existing trees and preventing the establishment of new vegetation.

3.1.2 Discussion

a) Have a substantial adverse effect on a scenic vista?

56 Acres Master Plan

Less-than-significant impact. Implementation of the Master Plan would result in several changes that could affect views toward Lake Tahoe and views from the lake. In addition to the Multigenerational Center, implementation of the Master Plan would result in improvements along the shoreline in the form of circulation and access improvements as part of Lakeview Commons Phase 2. Other aspects of the Master Plan, such as the Civic Center, campground changes, and new outdoor event space, would be set back from US 50 in the plan area on the south and southeast

side of US 50 such that views of them would be obscured or hidden by the trees in the forested portion of the plan area. Implementation of various components of the Master Plan would include removal of some trees for defensible space purposes and to make space for new facilities. Thinning of some of the trees in the plan area would potentially improve views of the lake from within the plan area because removal of trees would open up views to the lake. Because the area would remain forested, views of this portion of the plan area from the lake would not substantially change. The impacts specific to the Multigenerational Center are further discussed below.

Between the shoreline and US 50, implementation of Lakeview Commons Phase 2 would result in a cantilevered boardwalk connecting from the existing Lakeview Commons improvements to the existing stair access to the lake across from Rufus Allen Boulevard. This structure would be visible from the lake but its appearance and character would be designed to be compatible with and complement the setting, which includes human-made features that currently exist along the shoreline and are visible from the lake, including a retaining wall, rip rap, a concrete stairway at the eastern end of the shoreline portion of the plan area, and the Lakeview Commons concrete amphitheater and boat launch at the western end of the shoreline portion of the plan area (see Figure 3.1-2). Lakeview Commons Phase 2 improvements would not result in substantial changes to views of Lake Tahoe from within the plan area or from US 50 because they would consist of enhancing the existing shared-use path and beach accessibility east of Lakeview Commons by constructing the boardwalk at or below the level of the existing path, which is at or slightly below street level.

Shoreline scenic travel unit for Al Tahoe (unit 32) consists of a view from Lake Tahoe of the area between the Truckee marsh on the west to just west of Rufus Allen Boulevard to the east, which includes the portion of the plan area along the shoreline (see Figure 3.1-1). Components that make up the composite score of shoreline travel units include human-made features along the shoreline, views of the general landscape and background, and the variety of scenery. The addition to the shoreline of the cantilevered boardwalk to the shoreline would introduce a new human-made feature in a portion of shoreline with a visually dominated shoreline character, which generally contains intensive human-made development (such as Lakeview Commons and the stairs down to the beach).

After detailed design plans are prepared for the boardwalk, the City of South Lake Tahoe (City) would obtain permits from TRPA, which would require a TRPA environmental review and scenic assessment including an evaluation of the visual magnitude of the project area as required by TRPA Code Section 66.3. As documented in the 2015 Threshold Evaluation Report, the visual magnitude requirements of the TRPA Code have resulted in improved scenic conditions along the shoreline (TRPA 2016). The TRPA Code limits construction of structures in areas with high sensitivity to visual quality degradation, limits potential sources of light and glare, and requires design elements such as color, material, and visible mass requirements to reduce the impacts of construction visible from the lake. Compliance with these requirements would prevent scenic degradation from the boardwalk and would maintain the current threshold rating for Shoreline Scenic Travel Unit 32 and Shoreline Scenic Resource 32-1.

As described above, the Master Plan would modify human-made features along the shoreline resulting in potential changes in views of the lake from US 50 or within the plan area and would modify views of the shoreline from the lake. However, these human-made features would be of a similar character as existing features along that segment of US 50 and the shoreline, and the visual quality of human-made features would be no worse than existing features because they would comply with TRPA Code requirements. Thus, the impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. Construction of the Multigenerational Center would result in a new building within the portion of the plan area south of US 50 and greater than 300 feet from the lake at its closest point. The new Multigenerational Center building would be mostly screened from view from the lake by existing trees within the plan area along both sides of US 50. The Multigenerational Center would also be required to comply with the (Bijou/Al Tahoe Community Plan) Community Plan Standards and Guidelines (South Lake Tahoe City Code Section 6.10.060 for site design, architectural treatment, and signage) in addition to citywide design standards (Article V in South Lake Tahoe City Code Chapter 6.10) for setbacks, site design, architectural treatment. The Community Plan Standards and Guidelines include the following standards:

1. Buildings shall be designed with interest (no box forms, variations in elevations, etc.) and shall incorporate architectural features which blend with the surrounding buildings.
2. Wood siding or natural appearing siding shall be used on the exterior of all remodeled newly constructed buildings.
3. Roofs shall have a minimum pitch of 5:12 and a maximum pitch of 12:12. Roofs may have a minimum pitch of 0:12 on public and quasi-public owned buildings within El Dorado County and City properties located in the 56-Acre project area.
4. Real stone shall be incorporated into the building design. Manufactured stone may be used on a project only if the applicant demonstrates the application of the stone will appear "real."
5. All projects shall incorporate day use amenities, including outdoor furniture, bicycle racks and trash receptacles.

Accordingly, the exterior of the building would utilize materials and colors (e.g., metal, wood, stone, and concrete) that would help the building blend in with the natural forest setting. Because of the distance of the proposed Multigenerational Center from the shoreline, the existing trees that would provide screening, and design of the building to utilize materials and colors similar to its surroundings, there would be limited to no view of the new building from the lake. Thus, construction of the Multigenerational Center would not result in a change to the views of the shoreline from the lake or result in a change to the current threshold rating for Shoreline Scenic Travel Unit 32 and Shoreline Scenic Resource 32-1.

The existing campground where the Multigenerational Center would be located has filtered views towards the lake. The Multigenerational Center would replace the campground and result in a shift in the location of the campground to the south. The Multigenerational Center would serve as a public gathering point and would continue to provide public views towards the lake; therefore, while there would be a change in the type of gathering area from a campground to a recreation center, there would be no change in the potential for the public to have access to lake views from this location. Furthermore, the Multigenerational Center would shift the existing Recreation and Swim Complex users to the new location next to the library, which could result in increasing the number of year-round local recreation users and visitors with views of the lake than those associated with the existing campground at that location.

For the reasons described herein, the new Multigenerational Center would result in a less-than-significant impact on scenic views from the lake and scenic views of the lake.

b) Substantially damage scenic resources, including, but not limited to, trees, rock outcroppings, and historic buildings within a state scenic highway?

56 Acres Master Plan

Less-than-significant impact. Implementation of the Master Plan would not substantially damage scenic resources within a designated state scenic highway because US 50 through the plan area is not an officially designated state scenic highway.

The existing views from Roadway Travel Unit 34 along US 50 near the location of the proposed Multigenerational Center building include the heavily forested campground area. The library is located adjacent to the campground to the east. The portion of the plan area north of US 50 that is visible from the highway includes a linear park, shared-use path, and picnic area. This area includes mature trees and grass and views of the lake. West of the plan area on the west side of US 50, the Harrison Avenue commercial district includes continuous urban development that is accented by trees and landscaping. The area along US 50 to the east of the plan area contains a motel and other commercial uses.

As described above, the southern portion of the plan area is adjacent to Roadway Travel Unit 35. Because no changes are proposed to the existing buildings in the plan area adjacent to this Roadway Travel Unit (i.e., Lake Tahoe History Museum, senior center, Tahoe Art League Art Center, and JPA ambulance facility), implementation of the Master Plan would not change the visual character of this roadway or result in changes to the roadway travel route composite rating for Unit 35.

Analysis of the potential impacts from the Multigenerational Center on Roadway Travel Unit 34 is discussed below. On the northwest side of US 50, implementation of the Master Plan would expand Champion's Plaza to the south, which would remove the existing parking area south the plaza. Replacing parking with a pedestrian plaza including new landscaping and pavers would be a benefit to views from the roadway.

The addition of the boardwalk along the shoreline side of the linear park and shared-use path north of US 50 would include a minimal change in the number of human-made features from the existing slatted wood fence that can be seen from the road. The cantilevered boardwalk would not have a profile that would inhibit views of the lake from the roadway. Because of the scenic requirements for development in the shoreline discussed under a), above, the boardwalk would not include design features that would increase visual clutter or create physical distractions to drivers.

The Master Plan proposes fitness play and nature and adventure play areas that would be adjacent to Roadway Travel Unit 34. The location of these amenities currently includes the campground. In the existing views of the campground, travelers on US 50 have views of visitors to the campground and their tents and RVs. While the proposed fitness play and nature play components may result in some tree removal for the footprint of these facilities, the area would remain forested and the new components would consist of small-scale human-made equipment (e.g., slides, sculptures, engagement-based interpretive material, fitness play equipment). The visual magnitude of these features would not be substantially different than what currently exists at the campground.

The Master Plan would also include development of a new "Main Street" that would extend from Tallac Avenue on the west to Rufus Allen Boulevard on the east. This would be a new human-made component along Roadway Travel Unit 34 but would provide a symmetrical view with Tallac Avenue on the other side of the road and would not be a new type of feature along this section of the road. Thus, the new Main Street would not substantially increase physical distractions to driving along the road and would not substantially change the general landscape views from the road.

Changes in the plan area from implementation of the Master Plan that are located in the interior of the plan area and set back from the roadway include the flexible event space, civic center, and relocated campground. Because of the distance these components are set back from the roadway and the trees that would be retained on-site that would screen these uses, these components would not be visually evident to a traveler along the roadway and, thus, these components would not change views from Roadway Travel Unit 34.

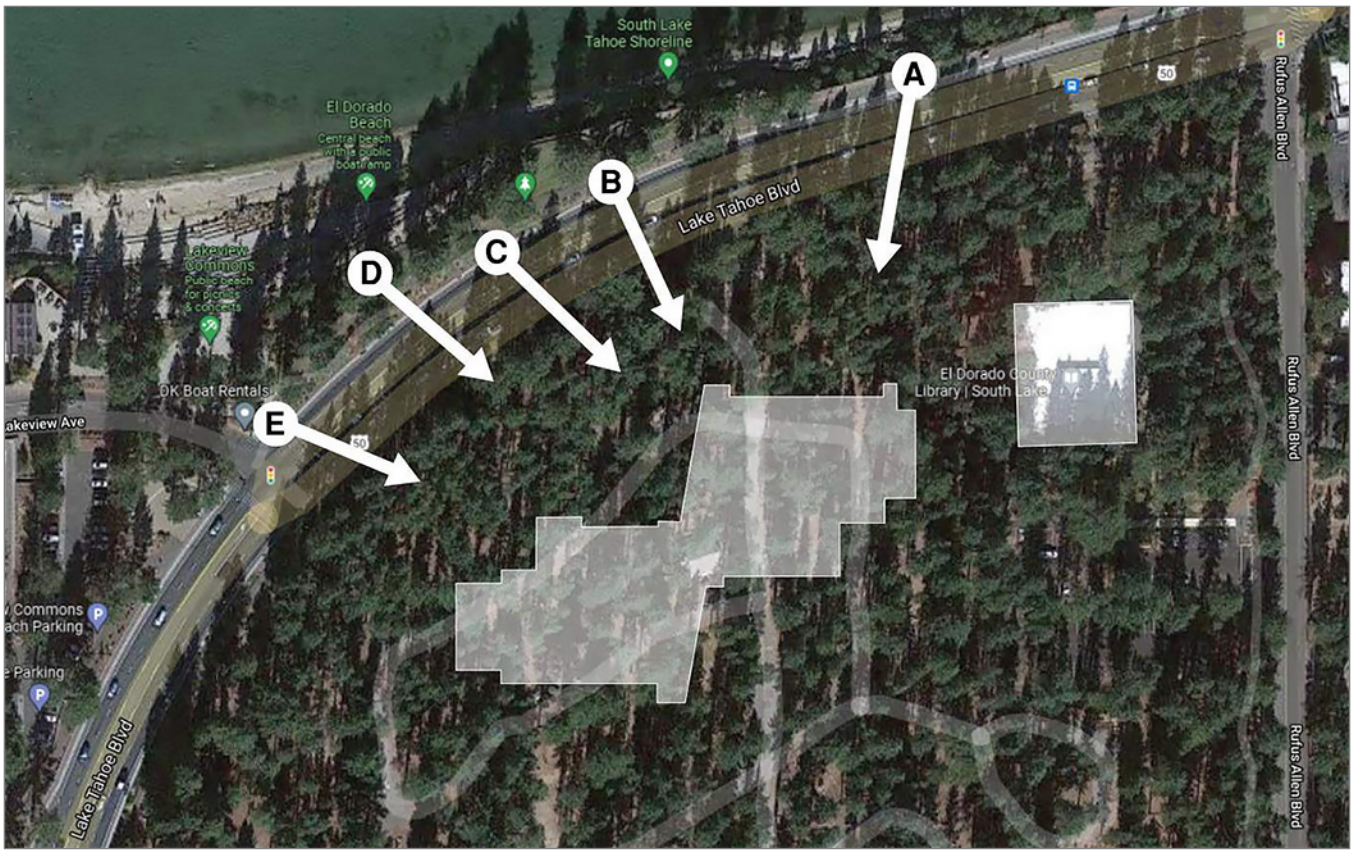
For the reasons described herein, implementation of the Master Plan would not substantially damage scenic resources within a state scenic highway or decrease the TRPA travel route rating for Roadway Travel Unit 34 and this impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. The Multigenerational Center project would not substantially damage scenic resources within a designated state scenic highway because US 50 through the plan area is not an officially designated state scenic highway.

As described above for the 56 Acres Master Plan, the northern portion of the plan area where the Multigenerational Center would be located is adjacent to Roadway Travel Unit 34. The locations of existing viewpoints of the plan area at the location of the proposed Multigenerational Center along Roadway Travel Unit 34 are identified in Figure 3.1-3 and images of these viewpoints compared with visual simulations of the proposed Multigenerational Center building are shown in Figures 3.1-4 through 3.1-8.

With implementation of the proposed project, the campground (a sparsely developed use that has a continuing rotation of tents and RVs throughout the summer season) would be replaced with a two-story building that would be set back from US 50 by over 100 feet along approximately 450 feet of the roadway (see visual simulations in Figures 3.1-4 through 3.1-8). The building articulation would provide visual interest that would break up the façade and avoid the creation of a monotonous visual mass. Dark colors and natural materials would be used to help it blend into the natural environment. The colors and materials used would be consistent with the setting and type and scale of existing nearby buildings (see Figures 3.1-4 through 3.1-8).



Source: Provided by JK Architecture in 2021

Figure 3.1-3 Multigenerational Center Viewpoints

Roadway Travel Unit 34 includes a mixture of urban and natural settings, with the commercial district along Harrison Avenue west of the plan area as well as the human-made features of Lakeview Commons (e.g., picnic area, restroom, parking lot), Lake Tahoe History Museum, senior center, Tahoe Art League Art Center, and JPA ambulance facility, and the library. The human-made features within the plan area south and east of US 50 are set within a heavily forested area while the urban and human-made features on the north and west of US 50 have more sparse trees and vegetation. Because the site for the Multigenerational Center is within an urban area with nearby developed commercial uses, the addition of the Multigenerational Center would be consistent with the existing visual character of the area and would not result in a substantial adverse change in the visual quality of human-made features along this roadway travel unit.

Although some trees would be removed to construct the building, the existing trees between the location of the new building and the roadway would be retained to maintain the forested landscape of this portion of the plan area, which would also serve to provide some screening of the new building. Because the Multigenerational Center would be located on the south side of US 50, it would not block views of the lake from this roadway travel unit.

The Multigenerational Center would maintain a variety of scenery from the roadway by replacing the campground with a mountain modern-style recreation facility set within the forested site. Additionally, because the new building would replace the existing campground that is visible from the highway, there would not be a substantial change in physical distractions to drivers along US 50.

For the reasons described herein, construction of the Multigenerational Center would not substantially damage scenic resources within a state scenic highway or decrease the TRPA travel route rating for Roadway Travel Unit 34 and this impact would be less than significant.

Source: Provided by JK Architecture in 2021

Existing view of the library and campground in the plan area looking south from US 50 at viewpoint A.

Source: Provided by JK Architecture in 2021

Simulation of the proposed Multigenerational Center looking south from US 50 at viewpoint A.

Figure 3.1-4 Existing View and Simulation of the Multigenerational Center at Viewpoint A

Source: Provided by JK Architecture in 2021

Existing view of the campground and camp store building looking southeast from US 50 at viewpoint B.

Source: Provided by JK Architecture in 2021

Simulation of the proposed Multigenerational Center looking southeast from US 50 at viewpoint B.

Figure 3.1-5 Existing View and Simulation of the Multigenerational Center at Viewpoint B

Existing view of the campground and camp store building looking southeast from US 50 at viewpoint C.

Simulation of the proposed Multigenerational Center looking southeast from US 50 at viewpoint C.

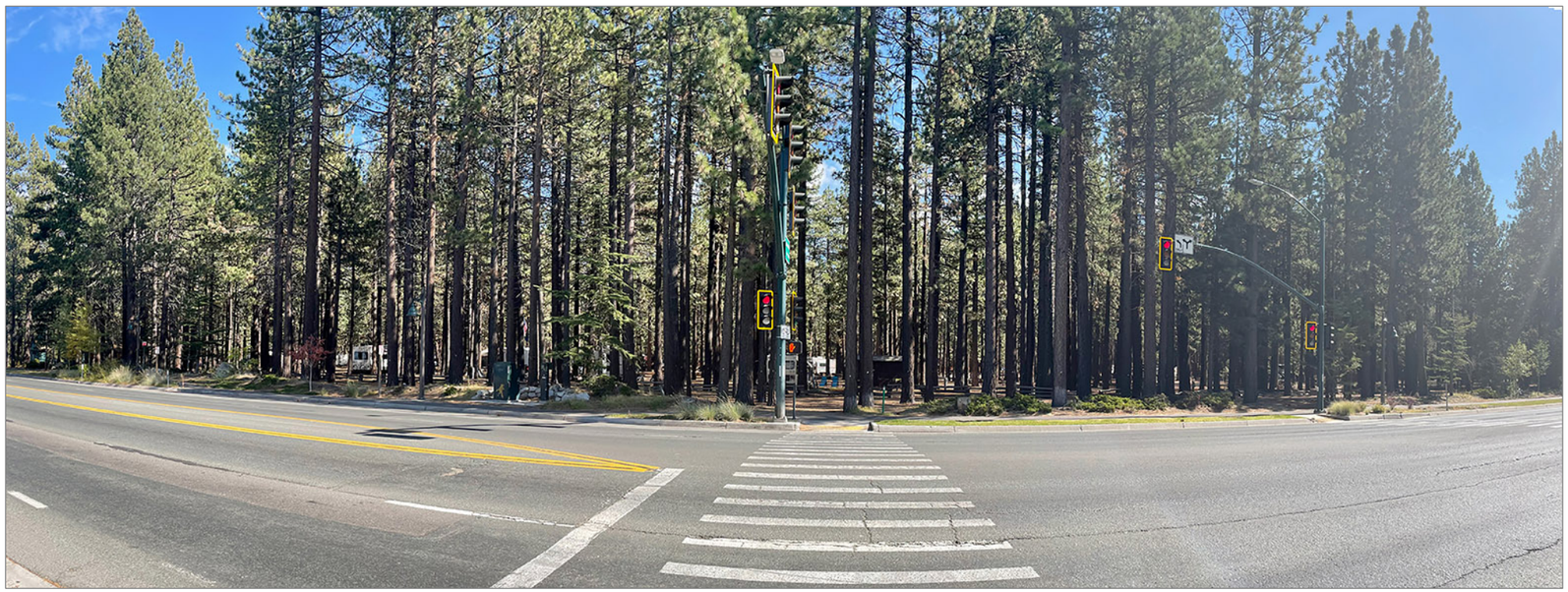
Figure 3.1-6 Existing View and Simulation of the Multigenerational Center at Viewpoint C

Source: Provided by JK Architecture in 2021

Existing view of the campground and camp store building looking southeast from US 50 at viewpoint D.

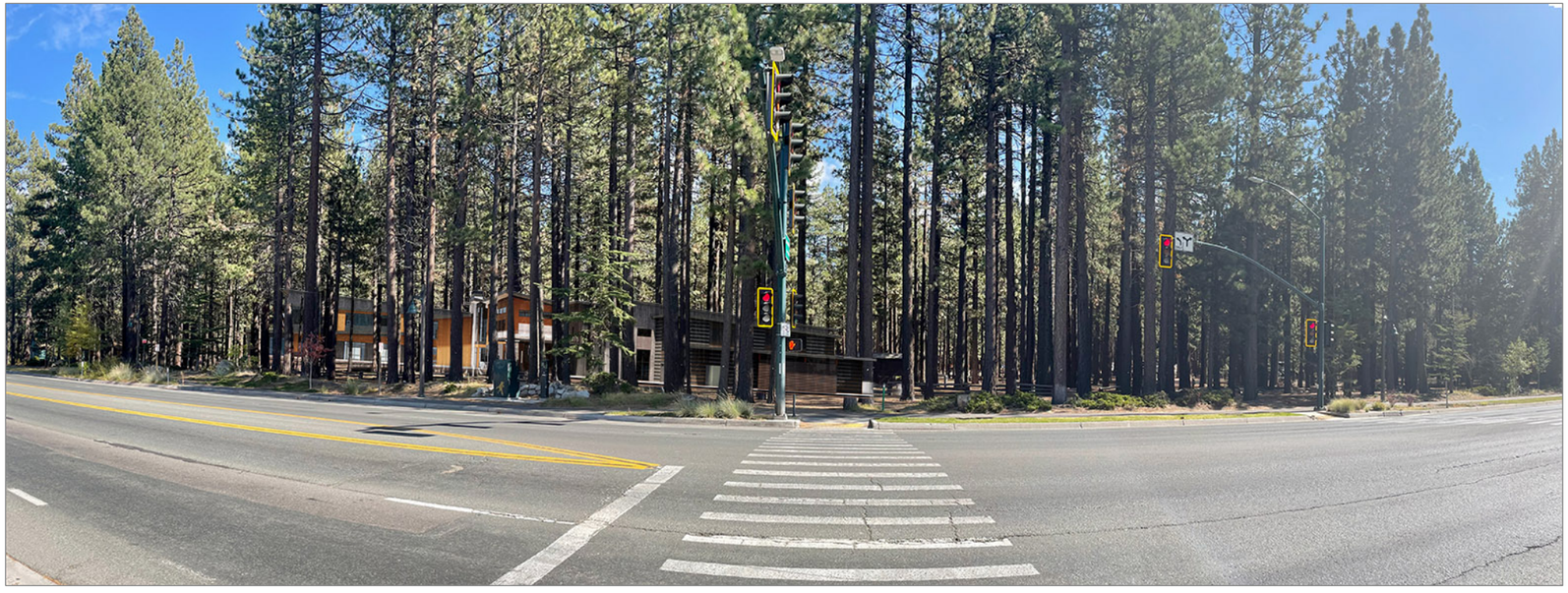
Source: Provided by JK Architecture in 2021

Simulation of the proposed Multigenerational Center looking southeast from US 50 at viewpoint D.



Source: Provided by JK Architecture in 2021

Existing view of the forest and campground in the plan area looking southeast from the intersection of US 50 and Lakeview Avenue at viewpoint E.



Source: Provided by JK Architecture in 2021

Figure 3.1-8 Existing View and Simulation of the Multigenerational Center at Viewpoint E

c) In non-urbanized areas, substantially degrade the existing visual character or quality of public views of the site and its surroundings? (Public views are those that are experienced from publicly accessible vantage points.) If the project is in an urbanized area, would the project conflict with applicable zoning and other regulations governing scenic quality?

56 Acres Master Plan

Less-than-significant impact. The Master Plan includes improvements throughout the plan area that would be visible from public views of the site. Implementation of the Master Plan would result in shifting the campground to the south and adding a number of new amenities that include the Multigenerational Center (further discussed below), Civic Center, and Main Street as well as outdoor recreation and community space. The outdoor recreation amenities (e.g., expanded shared-use paths, nature and adventure play area, fitness play, and outdoor flexible event space) would retain the existing natural character of the plan area and provide balance with the proposed development in the plan area. Removal of the El Dorado County Vector Control building, removal of the existing Recreation and Swim Complex, and downsizing the City's public works facility would help offset addition of the new buildings in the plan area by reducing visual clutter and including facilities that have a more unified design.

Development in the plan area, such as the Civic Center and outdoor event space (Multigenerational Center is discussed separately below) would be required to comply with the Community Plan Standards and Guidelines. These standards and guidelines related to architecture are listed above under item a).

The new Civic Center would be located in the center of the plan area, immediately south of the Multigenerational Center, creating a courtyard between the buildings that could be used for community events. The Civic Center would consist of two buildings connected with one roof and a breezeway between them—a two-story 18,000-square-foot (sq. ft.) building for administration offices and a separate one-story 7,000-sq.-ft. building for council chambers. The building design would use natural materials and colors that could include metal, wood, stone, and concrete, which would help the building to blend in with the natural surroundings.

The flexible event space area would be 70,000 sq. ft. and would be comprised of a landscaped amphitheater area and a stage. The event space would be required to comply with the same architectural and height standards as described above. The specific design of the camping cabins and campground restrooms has not yet been determined; however, their design would comply with the applicable design standards identified above, which are intended to reflect the community character. The existing Recreation and Swim Complex would be demolished, restored to natural conditions similar to the rest of the plan area, and would be retained as open space.

With implementation of the Master Plan, the proposed changes described herein would retain as many trees on-site as possible to maintain the existing forested and natural environment in the plan area. Buildings would also be consistent in scale with other buildings in the vicinity and would reflect modern mountain architectural styles consistent with the surrounding community. For this reason, and because the design of the buildings and built components of the Master Plan would utilize natural materials and colors that would blend in with the surroundings, the visual character of the heavily forested portion of the plan area south and southwest of US 50 would be retained.

Implementation of the Master Plan would not substantially degrade the existing visual character or quality of public views of the plan area and its surroundings and would comply with applicable zoning and other regulations governing scenic quality. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. The exterior of the Multigenerational Center building would utilize materials and colors that would help the building blend in with its surroundings (e.g., rust colored metal, wood, stone, and concrete), which would be consistent with Community Plan Standards and Guidelines and Scenic Quality Improvement Program recommendations in the Community Plan for using building colors that are compatible with the surrounding natural and human-made environment. Compliance with Community Plan Standards and Guidelines and citywide design standards is discussed in item a), above.

The height of the proposed Multigenerational Center at its highest roof line would be 38.75 feet. TRPA Code Section 37.4.1 allows for buildings with a roof pitch greater than 10:12 to have a maximum building height of 36 feet. Per Section 37.5.2.A of the TRPA Code, the maximum building height for the Multigenerational Center building could exceed the maximum height specified in Table 37.4.1-1 of the TRPA Code by up to 4 feet because the proposed use is a recreation center. When seeking permit approval from TRPA, findings 1, 2, 3, 4, and 7 would have to be made (Code Sections 37.5.2.A and 37.5.7). These findings are related to height of the building greater than the height of the surrounding trees, design of the building to minimize interference with existing views within the area, the function of the structure requires a greater maximum height than otherwise provided in the Code, and the additional building height is the minimum necessary to feasibly implement the project and there are no feasible alternatives requiring less additional height. The Community Plan eliminates minimum roof pitch (i.e., allows flat roofs) for public and quasi-public buildings located in plan area and increases the allowable height up to 42 feet for public and quasi-public structures in the plan area if TRPA Code Section 37.7 findings 1, 3, 4, 5, and 7 can be made. For these reasons, the Multigenerational Center would comply with TRPA Code height requirements. The building would comply with the standards set forth in the TRPA Code and Community Plan Standards and Guidelines.

The Multigenerational Center building would comply with the City and TRPA requirements related to building design and height and the building would have some partial screening from public views of the site by existing trees that would be retained around the building. Thus, the Multigenerational Center would not substantially degrade the existing visual character or quality of public views of the site and its surroundings and would comply with applicable zoning and other regulations governing scenic quality. This impact would be less than significant.

d) Create a new source of substantial light or glare which would adversely affect day or nighttime views in the area?

56 Acres Master Plan

Less-than-significant impact. The Master Plan would include new or redeveloped features that could affect light or glare, such as the Multigenerational Center, Civic Center, Main Street, and outdoor event space; however, some of the existing buildings would be removed (e.g., Recreation and Swim Complex, fire training facility, vector control) that would reduce the amount of lighting and materials that may cause glare in the plan area. All new or redeveloped facilities would comply with design standards in Section 32-62.7, "Exterior Lighting," of the Community Plan, which includes the following requirements:

> Illumination utilizing exterior light fixtures is permitted provided the following criteria are met:
>
> a. Lighting shall only be directed downward (not above the horizontal plane) to avoid sky-lighting;
>
> b. The light source (bulbs), within a fixture as seen in elevation, shall not be visible. Exception: In addition to the above, visible light sources (such as globe style decorative light fixtures) may be allowed subject to the following:
>
> 1. The lights are part of a City Redevelopment Plan area streetscape beautification program, and
>
> 2. The lights are located on public property (fee title easement or redevelopment project area), and
>
> 3. The foot-candle readings do not exceed five feet measured within one foot of the base at ground level.
>
> c. No light (freestanding or building mounted) shall spray offsite. The use of cutoff shields, or other devices as approved by staff shall be required.
>
> d. Outdoor lighting shall be used for purposes of illumination only, and not be designed for, or used as, an advertising display. Illumination for aesthetic or dramatic purposes of any building or surrounding landscape utilizing exterior light fixtures is authorized provided the illuminated area does not exceed 20 feet above grade on a vertical wall, and the light source is shielded from public view.

Any new outdoor light sources would comply with these standards that limit the amount, direction, wattage, and spectrum of lighting. Outdoor events may operate until 10:00 p.m.; thus, requiring some additional lighting. Outdoor

lighting associated with special events would be temporary, estimated to be up to 10 events per year at the outdoor event space, and would not be allowed to spill off-site.

Additionally, new structures and facilities in the plan area would comply with Section 36.6.1.B. of the TRPA Code of Ordinances (Code), which requires that roofs, including mechanical equipment and skylights, shall be constructed of non-glare finishes and earth tone colors that minimize reflectivity. Thus, compliance with these design standards and requirements would prohibit the use of reflective materials that could cause excessive daytime glare.

In addition, the surrounding commercial and residential development already contains outdoor lighting that is more intense than lighting that would occur in the plan area, which would remain primarily as a recreation area. Therefore, implementation of the Master Plan would not create new sources of light or glare that are more substantial than other light or glare in the area, cause exterior light to be cast off-site, or adversely affect day or night-time views in the area. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. The lighting proposed for the Multigenerational Center would address the practical lighting needs of the site and comply with the Community Plan and TRPA requirements for exterior lighting and glare, described above. Necessary lighting fixtures would include shields to prevent outward glare and be limited to the minimal outdoor lighting fixtures necessary for safety. Uncontrolled spread of light beyond the property would not occur. Building materials would include wood, stone cladding, dark metal siding and roof, and concrete, which would not result in glare.

The project would achieve Leadership in Energy and Environmental Design (LEED) standards. One of the credits the Multigenerational Center project would seek to achieve this certification is Credit SSc6-Light Pollution Reduction, which provides effective strategies for avoiding impacts related to light and glare through the use of cutoff luminaires and low reflectance surfaces.

Codes and design standards pertaining to lighting and glare described above would limit illumination and use of reflective materials that would cause glare. Therefore, potential impacts related to light and glare for the Multigenerational Center would be less than significant.

3.1.3 Cumulative Impacts

The geographic area for cumulative impacts on aesthetics encompasses the immediate vicinity of the plan area. The topography in this area is relatively flat and includes the shore and views of Lake Tahoe. This area is characterized by urban development in a forest setting and includes commercial, residential, and recreation uses. The cumulative projects listed in Table 3.21-1 that are adjacent to the plan area and could combine with the Master Plan and Multigenerational Center Project that could cumulatively affect aesthetics in the project vicinity include the roadway projects (i.e., Middle School SR2S Project - Rufus Allen Connector and South Lake Tahoe Safety Project) and the Alta Mira Public Access Improvement Project. These projects would result in improvements that would provide safety improvements and enhance the aesthetic environment along the roadway through and adjacent to the plan area. Because the cumulative projects, in combination with the Master Plan and Multigenerational Center, would not change the landscape character, the cumulative impact on aesthetic resources from these projects would be less than significant. Because the Master Plan and Multigenerational Center would not change the landscape character, the project would not result in a considerable contribution to a temporary or permanent cumulative adverse impact on aesthetic resources.

3.2 AGRICULTURE AND FOREST RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
II. Agriculture and Forest Resources.				
In determining whether impacts to agricultural resources are significant environmental effects, lead agencies may refer to the California Agricultural Land Evaluation and Site Assessment Model (1997, as updated) prepared by the California Department of Conservation as an optional model to use in assessing impacts on agriculture and farmland. In determining whether impacts to forest resources, including timberland, are significant environmental effects, lead agencies may refer to information compiled by the California Department of Forestry and Fire Protection regarding the state's inventory of forest land, including the Forest and Range Assessment Project and the Forest Legacy Assessment project; and forest carbon measurement methodology provided in Forest Protocols adopted by the California Air Resources Board. Would the project:				
a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?	☐	☐	☐	☒
b) Conflict with existing zoning for agricultural use or a Williamson Act contract?	☐	☐	☐	☒
c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in Public Resources Code [PRC] Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?	☐	☐	☒	☐
d) Result in the loss of forest land or conversion of forest land to non-forest use?	☐	☐	☒	☐
e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?	☐	☐	☐	☒

3.2.1 Environmental Setting

The plan area, which includes the Multigenerational Center project site, is developed with outdoor and indoor recreational facilities, outdoor public spaces, campground, and public service land uses. The plan area contains an estimated 3,990 trees that are over 8 inches in diameter (Fish, pers. comm., 2021). The plan area is forested but is not designated as forestland or used for forest resources by the City of South Lake Tahoe or El Dorado County (City of South Lake Tahoe 2021, El Dorado County 2021). No areas zoned for timber resources, Timberland Production, or forestland occur within the plan area.

No farmland or agricultural land use exist in the plan area. The plan area is not included in the survey area for the Farmland Mapping and Monitoring Program of the California Resources Agency Important Farmland, and no Important Farmland is identified within the plan area.

3.2.2 Discussion

a) Convert Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (Farmland), as shown on the maps prepared pursuant to the Farmland Mapping and Monitoring Program of the California Resources Agency, to non-agricultural use?

56 Acres Master Plan

No impact. The plan area was not surveyed for Prime Farmland, Unique Farmland, or Farmland of Statewide Importance (DOC 2021). No agricultural land uses exist within the plan area. Therefore, implementation of the Master Plan would not convert Important Farmland into nonagricultural use, and there would be no impact.

Multigenerational Center Project

No impact. See discussion under "56 Acres Master Plan," above.

b) Conflict with existing zoning for agricultural use or a Williamson Act contract?

56 Acres Master Plan

No impact. No parcels under Williamson Act contract are present within the plan area. No parcels within the plan area or on the Multigenerational Center Project site are zoned for agricultural use. Therefore, implementation of the Master Plan or site would not result in conflict with zoning for agricultural use or with Williamson Act contract lands. There would be no impact.

Multigenerational Center Project

No impact. See discussion under "56 Acres Master Plan," above.

c) Conflict with existing zoning for, or cause rezoning of, forest land (as defined in PRC Section 12220(g)), timberland (as defined by PRC Section 4526), or timberland zoned Timberland Production (as defined by Government Code Section 51104(g))?

56 Acres Master Plan

Less-than-significant impact. A majority of the plan area is heavily forested but also contains developed recreation and public services land uses. The plan area is not zoned for forest land, timberland, or Timberland Production. Implementation of the Master Plan would relocate the existing campground to the south of its existing location and may result in removal of up to 309 trees for the Multigenerational Center out of approximately 3,990 trees over 8 inches in diameter found in the plan area (Fish, pers. comm., 2021; Marino, pers. comm., 2021). The precise number of trees by species and size class proposed for removal for the entire plan area has not yet been quantified for the Master Plan. Tree removal is further discussed under e) in Section 3.4.2 below.

"Forest land," as defined in PRC Section 12220(g), is land that can support 10 percent native tree cover of any species, including hardwoods, under natural conditions, and that allows for management of one or more forest resources, including timber, aesthetics, fish and wildlife, biodiversity, water quality, recreation, and other public benefits. Because 67 percent (37.5 acres) of the plan area contains Jeffrey pine (*Pinus jeffreyi*) forest (see the "Existing Biological Resources" section under Section 3.4, "Biological Resources") and the plan area is managed for recreation and other public benefits, the plan area meets the definition of "forest land." However, the plan area is not zoned for timber production and is not available for producing lumber (consistent with the definition of "timberland" in PRC Section 4526). Although implementation of the Master Plan would remove some trees for the purposes of defensible space and to make room for some of the new facilities (e.g., Civic Center, Main Street, Multigenerational Center), the plan area would remain forested such that there would not be a loss of forest land or conversion of forest land to non-

forest use. The Master Plan would not conflict with or cause rezoning of designated forestland, timberland, or for Timberland Production and would not result in the loss of forest land or conversion of forest land to non-forest use. This impact would be less than significant.

Multigenerational Center Project
Less-than-significant impact. See discussion under "56 Acres Master Plan," above.

d) Result in the loss of forest land or conversion of forest land to non-forest use?

56 Acres Master Plan
Less-than-significant impact. See discussion under c), above.

Multigenerational Center Project
Less-than-significant impact. See discussion under c) above.

e) Involve other changes in the existing environment, which, due to their location or nature, could result in conversion of Farmland to non-agricultural use or conversion of forest land to non-forest use?

56 Acres Master Plan
No impact. See discussions under a) and b), above.

Multigenerational Center Project
No impact. See discussions under a) and b), above.

3.2.3 Cumulative Impacts

The Master Plan would result in no impacts on farmland and the plan area would be retained as forest land (as defined by PRC Section 12220(g). No farmland or agricultural uses exist in the region surrounding the plan area and the project site. Therefore, the Master Plan would not combine with other cumulative projects identified in Table 3.21-1 to result in a cumulative loss of farmland or forest land. There would be no cumulative impact.

3.3 AIR QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
III. Air Quality.				
Where available, the significance criteria established by the applicable air quality management district or air pollution control district may be relied on to make the following determinations.				
Are significance criteria established by the applicable air district available to rely on for significance determinations?	☒ Yes		☐ No	
Would the project:				
a) Conflict with or obstruct implementation of the applicable air quality plan?	☐	☐	☒	☐
b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?	☐	☐	☒	☐
c) Expose sensitive receptors to substantial pollutant concentrations?	☐	☐	☒	☐
d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?	☐	☐	☒	☐

3.3.1 Environmental Setting

CLIMATE, METEOROLOGY, AND TOPOGRAPHY

The proposed project is located in the City of South Lake Tahoe in El Dorado County, California within the Lake Tahoe Air Basin (LTAB). The LTAB region comprises portions of Placer and El Dorado counties in California, and Washoe and Douglas counties and the Carson City Rural District in Nevada. Lake Tahoe lies in a depression between the crests of the Sierra Nevada and Carson ranges at a surface elevation of 6,260 feet above sea level. The mountains surrounding Lake Tahoe are approximately 8,000 to 9,000 feet high, with some reaching beyond 10,000 feet.

The bowl shape of the LTAB has significant air quality implications (Tahoe Integrated Information Management System [TIIMS] 2009). There are two meteorological regimes that affect air quality in the LTAB.

First, thermal inversions occur when a warm layer of air traps a cold layer of air at the surface of the land and lake. Locally generated air pollutants are often trapped in the "bowl" by frequent inversions that limit the amount of air mixing, which allows pollutants to accumulate. Inversions most frequently occur during the winter in the LTAB; however, they may occur throughout the year. Often, wintertime inversions result in a layer of wood smoke, mostly from residential heating, which can be seen over the lake.

The second meteorological regime affecting air quality in the LTAB is the atmospheric transportation of pollutants from the Sacramento Valley and San Francisco Bay Area. Lake Tahoe's location directly to the east of the crest of the Sierra Nevada Mountain range allows prevailing easterly winds, combined with local mountain upslope winds, to bring air from populated regions west of the Sierra to the LTAB. The strength of this pattern depends on the amount of heat, usually strongest in summer beginning in April and ending in late October.

CRITERIA AIR POLLUTANTS

Concentrations of ozone, carbon monoxide (CO), nitrogen dioxide (NO_2), sulfur dioxide (SO_2), respirable particulate matter with aerodynamic diameter of 10 micrometers or less (PM_{10}) and fine particulate matter with aerodynamic diameter of 2.5 micrometers or less ($PM_{2.5}$), and lead are used as indicators of ambient air quality conditions and are referred to as criteria air pollutants. Criteria air pollutants are air pollutants for which acceptable levels of exposure can be determined and for which an ambient air quality standard (AAQS) has been set by Environmental Protection Agency (EPA) and California Air Resources Board (CARB). Table 3.3-1 shows national and State ambient air quality standards. Also, Table 3.3-2 shows a brief description of each criteria air pollutant's source types and health effects.

Table 3.3-1 Ambient Air Quality Standards

Pollutant	Averaging Time	California[1,2]	National[3]	
			Primary[2,4]	Secondary[2,5]
Ozone	1-hour	0.09 ppm (180 µg/m^3)	—	Same as primary standard
	8-hour	0.070 ppm (137 µg/m^3)	0.070 ppm (137 µg/m^3)	
Carbon monoxide	1-hour	20 ppm (23 mg/m^3)	35 ppm (40 mg/m^3)	Same as primary standard
	8-hour	9 ppmf (10 mg/m^3)	9 ppm (10 mg/m^3)	
Nitrogen dioxide	Annual arithmetic mean	0.030 ppm (57 µg/m^3)	53 ppb (100 µg/m^3)	Same as primary standard
	1-hour	0.18 ppm (339 µg/m^3)	100 ppb (188 µg/m^3)	—
Sulfur dioxide	24-hour	0.04 ppm (105 µg/m^3)	—	—
	3-hour	—	—	0.5 ppm (1300 µg/m^3)
	1-hour	0.25 ppm (655 µg/m^3)	75 ppb (196 µg/m^3)	—
Respirable particulate matter	Annual arithmetic mean	20 µg/m^3	—	Same as primary standard
	24-hour	50 µg/m^3	150 µg/m^3	
Fine particulate matter	Annual arithmetic mean	12 µg/m^3	12.0 µg/m^3	15.0 µg/m^3
	24-hour	—	35 µg/m^3	Same as primary standard
Lead[6]	Calendar quarter	—	1.5 µg/m^3	Same as primary standard
	30-Day average	1.5 µg/m3	—	—
	Rolling 3-Month Average	—	0.15 µg/m^3	Same as primary standard
Hydrogen sulfide	1-hour	0.03 ppm (42 µg/m^3)	No national standards	
Sulfates	24-hour	25 µg/m^3		
Vinyl chloride[6]	24-hour	0.01 ppm (26 µg/m^3)		
Visibility-reducing particulate matter	8-hour	Extinction of 0.23 per km		

Notes: µg/m^3 = micrograms per cubic meter; km = kilometers; ppb = parts per billion; ppm = parts per million

[1] California standards for ozone, carbon monoxide, SO_2 (1- and 24-hour), NO_2, particulate matter, and visibility-reducing particles are values that are not to be exceeded. All others are not to be equaled or exceeded. California ambient air quality standards are listed in the Table of Standards in Section 70200 of Title 17 of the California Code of Regulations.

[2] Concentration expressed first in units in which it was promulgated. Equivalent units given in parentheses are based on a reference temperature of 25 degrees Celsius (°C) and a reference pressure of 760 torr. Most measurements of air quality are to be corrected to a reference temperature of 25°C and a reference pressure of 760 torr; ppm in this table refers to ppm by volume, or micromoles of pollutant per mole of gas.

[3] National standards (other than ozone, particulate matter, and those based on annual averages or annual arithmetic means) are not to be exceeded more than once a year. The ozone standard is attained when the fourth highest 8-hour concentration in a year, averaged over three years, is equal to or less than the standard. The PM_{10} 24-hour standard is attained when the expected number of days per calendar year with a 24-hour average concentration above 150 µg/m^3 is equal to or less than one. The $PM_{2.5}$ 24-hour standard is attained when 98 percent of the daily concentrations, averaged over three years, are equal to or less than the standard.

[4] National primary standards: The levels of air quality necessary, with an adequate margin of safety to protect the public health.

[5] National secondary standards: The levels of air quality necessary to protect the public welfare from any known or anticipated adverse effects of a pollutant.

[6] The California Air Resources Board has identified lead and vinyl chloride as toxic air contaminants with no threshold of exposure for adverse health effects determined. These actions allow for the implementation of control measures at levels below the ambient concentrations specified for these pollutants.

Source: CARB 2016

Table 3.3-2 Sources and Health Effects of Criteria Air Pollutants

Pollutant	Sources	Acute[1] Health Effects	Chronic[2] Health Effects
Ozone	Secondary pollutant resulting from reaction of ROG and NO_X in presence of sunlight. ROG emissions result from incomplete combustion and evaporation of chemical solvents and fuels; NO_X results from the combustion of fuels	Increased respiration and pulmonary resistance; cough, pain, shortness of breath, lung inflammation	Permeability of respiratory epithelia, possibility of permanent lung impairment
Carbon monoxide (CO)	Incomplete combustion of fuels; motor vehicle exhaust	Reduced capacity to pump oxygenated blood; headache, dizziness, fatigue, nausea, vomiting, death	Permanent heart and brain damage
Nitrogen dioxide (NO_2)	Combustion devices (e.g., boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines), industrial processes, and fires	Coughing, difficulty breathing, vomiting, headache, eye irritation, chemical pneumonitis or pulmonary edema; aggravation of existing heart disease leading to death	Chronic bronchitis, emphysema, decreased lung function
Sulfur dioxide (SO_2)	Combustion devices (e.g., boilers, gas turbines, and mobile and stationary reciprocating internal combustion engines), industrial processes, and fires	Irritation of upper respiratory tract, increased asthma symptoms, aggravation of existing heart disease leading to death	Chronic bronchitis, emphysema
Respirable particulate matter (PM_{10}), Fine particulate matter ($PM_{2.5}$)	Fugitive dust, soot, smoke, mobile and stationary sources, construction, fires and natural windblown dust, and formation in the atmosphere by condensation and/or transformation of SO_2 and ROG	Breathing and respiratory symptoms, aggravation of existing respiratory and cardiovascular diseases, premature death	Alterations to the immune system, carcinogenesis
Lead	Metal processing, piston-engine aircraft or other vehicles operating on leaded fuel	Reproductive/developmental effects (fetuses and children)	Numerous effects including neurological, endocrine, and cardiovascular effects

Notes: NO_X = oxides of nitrogen; ROG = reactive organic gases

[1] "Acute" refers to effects of short-term exposures to criteria air pollutants, usually at fairly high concentrations.

[2] "Chronic" refers to effects of long-term exposures to criteria air pollutants, usually at lower, ambient concentrations.

Source: EPA 2019

ATTAINMENT AREA DESIGNATIONS

Both CARB and EPA use ambient air quality monitoring data to designate the attainment status of an area relative to the California Ambient Air Quality Standards (CAAQS) and National Ambient Air Quality Standards (NAAQS) for each criteria air pollutant. The purpose of these designations is to identify those areas with air quality problems and thereby initiate planning efforts for improvement. The three basic designation categories are "non-attainment," "attainment," and "unclassified." "Unclassified" is used in an area that cannot be classified on the basis of available information as meeting or not meeting the standards. In addition, the California designations include a subcategory of the non-attainment designation, called "non-attainment-transitional." The non-attainment-transitional designation is given to non-attainment areas that are progressing and nearing attainment.

El Dorado County is designated as non-attainment for ozone and PM_{10} with respect to the CAAQS (CARB 2020). El Dorado County is also designated as unclassified for ozone and PM_{10} with respect to NAAQS.

TOXIC AIR CONTAMINANTS

Concentrations of Toxic Air Contaminants (TACs), or Hazardous Air Pollutants (HAPs) in federal parlance, are also used to indicate air quality. A TAC is defined as an air pollutant that may cause or contribute to an increase in mortality or in serious illness, or that may pose a hazard to human health. TACs are usually present in minute

quantities in the ambient air; however, their high toxicity or health risk may pose a threat to public health even at low concentrations. Unlike criteria air pollutants, TACs are pollutants of local concern because they can present harmful effects when they are emitted near sensitive receptors.

Most health risks from TACs are attributed to relatively few compounds, the most prominent being diesel particulate matter (diesel PM) (CARB 2005). In addition to diesel PM, the TACs for which data are available that pose the greatest existing ambient risk in California are benzene, 1,3-butadiene, acetaldehyde, carbon tetrachloride, hexavalent chromium, para-dichlorobenzene, formaldehyde, methylene chloride, and perchloroethylene.

Diesel Particulate Matter

Diesel PM differs from other TACs in that it is not a single substance, but rather a complex mixture of hundreds of substances. Although diesel PM is emitted by diesel-fueled internal combustion engines, the composition of the emissions varies depending on engine type, operating conditions, fuel composition, lubricating oil, and whether an emissions control system is being used. Unlike the other TACs, no ambient monitoring data are available for diesel PM because no routine measurement method currently exists. However, CARB has made preliminary concentration estimates based on a PM exposure method. This method uses the CARB emissions inventory's PM_{10} database, ambient PM_{10} monitoring data, and the results from several studies to estimate area concentrations of diesel PM.

SENSITIVE RECEPTORS

Sensitive receptors are people, or facilities that generally house people (e.g., schools, hospitals, residences), that may experience adverse effects from unhealthful concentrations of air pollutants. Sensitive land uses are land uses that accommodate sensitive receptors, and exposure to pollutants could result in health-related risks to individuals. Existing sensitive land uses that accommodate sensitive receptors throughout the LTAB include residences, schools, hospitals, daycare centers, parks, and playgrounds. Sensitive receptors near the project include a residential neighborhood at approximately 200 feet to the west, El Dorado Beach and Recreation area at approximately 800 feet to the north and a school at approximately 50 feet to the south of the plan area.

AIR QUALITY PLANS

El Dorado County Air Quality Management District

El Dorado County Air Quality Management District (EDCAQMD) attains and maintains air quality conditions in El Dorado County through a comprehensive program of planning, regulation, enforcement, technical innovation, and promotion of the understanding of air quality issues. The clean-air strategy of EDCAQMD includes preparing plans for the attainment of ambient air quality standards for ozone and particulate matter, adopting and enforcing rules and regulations concerning sources of air pollution, and issuing permits for stationary sources of air pollution. Key elements of these plans include emission inventories, emission control strategies and rules, air quality data analyses, modeling, air quality progress and attainment or maintenance demonstrations. EDCAQMD also inspects stationary sources of air pollution and responds to citizen complaints, monitors ambient air quality and meteorological conditions, and implements programs and regulations required by the Clean Air Act (CAA), federal Clean Air Act Amendments of 1990 (CAAA), and California Clean Air Act (CCAA). All projects in El Dorado County, including those in the City of South Lake Tahoe, are subject to adopted EDCAQMD rules and regulations in effect at the time of construction. Specific EDCAQMD rules applicable to the construction of the project may include but are not limited to the following:

1. Rule 202—Visible Emissions,
2. Rule 215—Application of Architectural Coatings,
3. Rule 223-1—Fugitive Dust,
4. Rule 223-2—Asbestos,
5. Rule 224—Cutback and Emulsified Asphalt Paving Materials, and
6. Rule 501—Permit Requirements.

Specifically, Rule 223-1 establishes standards to be met by project activities generating fugitive dust. It applies to all of El Dorado County and addresses fugitive dust generated by construction and grading activities, and by other land uses including recreational uses. Among the standards to be met is a prohibition on visible dust crossing the property boundary, generation of high levels of visible dust (dust sufficient to obscure vision by 40 percent), and controls on the track-out of dirt and mud on to public roads. The regulation also establishes minimum dust mitigation and control requirements. When an area to be disturbed is greater than 1 acre, and if required by a project condition of approval or discretionary permit, a dust control plan must be submitted to and approved by EDCAQMD before any construction activities. Further, Rule 223-2 requires activities to reduce asbestos dust created from earth moving and demolition activities.

City of South Lake Tahoe General Plan

The City of South Lake Tahoe adopted the General Plan on May 17, 2011. Planning and zoning in the City are guided by the City's General Plan, which is implemented through Plan Area Statements, Community Plans, and Area Plans. The policies in this General Plan seek to improve air quality by reducing the number of vehicles on the roadways and encouraging walking, biking, and use of public transit. Here are some of goals and policies applicable for the proposed project:

GOAL NCR-5: To incorporate air quality improvements and emission reductions directly with land use and transportation planning.

- **Policy NCR-5.4:** Public Transit Bus Fleet

  The City shall encourage the use of low-emission technology buses in the public transit fleet.

- **Policy NCR-5.8:** Bicycle, Pedestrian, and Bus Transit Integration

  The City shall encourage interconnected bicycle, pedestrian, and bus transit circulation in the design of all commercial, industrial, and multi-family housing.

- **Policy NCR-5.9:** Mixed-Use Development

  The City shall support appropriately located mixed-use developments that include homes, schools, civic uses, retail and commercial services, and daycare facilities within walking distance of each other.

- **Policy NCR-5.10:** Air Quality-Related Construction Mitigation

  The City shall require discretionary projects that have a significant air quality impact to provide construction mitigation to address short-term construction emissions below EDCAQMD thresholds as part of the review of the project application. This excludes building permits for single-family residential units. This may include the following measures:

  a) Measures currently recommended by the EDCAQMD;

  b) Prohibition of open burning of debris from site clearing unless involved with a fuels reduction project;

  c) Utilization of low-emission construction equipment and/or fuels;

  d) Implementation of best management practices in concert with water quality protection measures; and/or

  e) Restriction of idling of construction equipment or vehicles.

- **Policy NCR-5.11:** Development Project Design Requirements

The City shall impose the following requirements on development projects as part of project design to address air quality impacts:

a) Prohibit the installation of wood-burning hearth devices in proposed residential dwelling units;

b) Require that all feasible EDCAQMD-recommended mitigation measures to reduce operational emissions of criteria air pollutants are incorporated into project design; and

c) Demonstrate compliance with applicable TRPA requirements for air quality mitigation at the time of project consideration that require off-set project and cumulative air quality impacts (e.g., current TRPA Code of Ordinances Chapters 91 [Air Quality Control] and Chapter 93 [Traffic and Air Quality Mitigation Program]).

Bijou/Al Tahoe Community Plan

The Bijou/Al Tahoe Community Plan was adopted in October 1995. The Community Plan established goals and objectives, special policies, programs, and strategies for funding and implementation. Elements of the Plan address land use, transportation, conservation, recreation, and public service. According to the community plan's target, all air quality thresholds must be attained and maintained.

THRESHOLDS OF SIGNIFICANCE

EDCAQMD considers reactive organic gases (ROG) and oxides of nitrogen (NO_X) as the primary pollutants of concern as they are the precursors for ozone, for which the County has a non-attainment status. EDCAQMD has mass emissions thresholds for reactive organic gases (ROG) and oxides of nitrogen (NO_X) of 82 pounds per day for both construction and operations (EDCAQMD 2002). Although EDCAQMD does not have an adopted quantitative threshold for PM_{10}, Chapter 4 of the EDCAQMD Guide to Air Quality Assessment (EDCAPCD 2002) provides guidance on determining significance of PM_{10} from exhaust emissions. This guidance indicates that if ROG and NO_X emissions are not significant then it can be assumed that other components of exhaust emissions, in this case PM_{10}, are also not significant. With respect to fugitive dust PM_{10} emissions, EDCAQMD recommends determining significance based on the consistency of the project with dust control measures in EDCAQMD Rule 223.

3.3.2 Discussion

This discussion of the potential impacts of the project on air quality focuses on the construction and operation of the proposed 56 Acres Master Plan and Multigenerational Recreation and Aquatics Center Project.

a) Conflict with or obstruct implementation of the applicable air quality plan?

56 Acres Master Plan

Less-than-significant impact. The emissions inventories used to develop a region's air quality attainment plans are based primarily on projected population growth and vehicle miles traveled (VMT) for the region that are determined, in part, based on the planned growth identified in regional and community plans. Therefore, projects that would result in increases in population or employment growth beyond that projected in regional or community plans could result in increases in VMT above that planned in the attainment plan, further resulting in emissions that could conflict with a region's air quality planning efforts. Increases in emissions beyond that projected in regional and community plans generally would be considered to have a significant adverse incremental effect on the region's ability to attain or maintain the CAAQS and NAAQS.

The Master Plan is a plan to develop a recreational and community service hub for both the local community and tourists. The Master Plan is expected to be built out over 20 years and would be fully operational by 2040. The project is located within the Bijou/Al Community Plan. A fundamental vision for this Community Plan is that the Bijou/Al Tahoe area should serve as a family-oriented and recreation center, as well as a town center for the local community. Goals of the Bijou/Al Tahoe Community Plan also include reducing dependency on automobiles and improving the movement of people, goods, and services within the Bijou/Al Tahoe area and the Lake Tahoe region. The City's General Plan includes goals to reduce dependency on automobiles and develop infrastructure to support bike and pedestrian access. The Master Plan is consistent with both the General Plan and the Community Plan as it proposes to enhance the existing network for bike and pedestrian access and provides locally serving uses.

The City's General Plan has designated the land use of the plan area as Recreation. The General Plan's Recreation and Open Space Element provides policy direction for the expansion of recreation and civic center facilities within the City of South Lake Tahoe. The Master Plan is consistent with the City's General Plan land use designation as it proposes repurposing existing land use and is consistent with policy direction in the Recreation and Open Space Element.

Construction activities associated with the project would generate temporary criteria pollutant emissions but would not exceed the thresholds of significance adopted by the EDCAQMD as shown in Table 3.3-3. Construction would likely occur up to 20 years, but construction emissions were conservatively modeled to occur over a four-year period to avoid understating the maximum annual emissions. Also, the project would not result in exceedance of long-term operational emissions thresholds (see the discussion of the Master Plan under item b), below). Therefore, the project would not conflict with or obstruct the implementation of the applicable air quality plan. The impact would be less than significant.

Table 3.3-3 Summary of Maximum Daily Emissions of Ozone Precursors and PM_{10} Associated with 56 Acres Master Plan Project Construction Activities from 2025 to 2028 (lb/day)

Construction Year	ROG	NO_X	PM_{10}
2025	3	28	21
2026	2	18	4
2027	45	17	4
2028	45	1	1
Maximum Daily Emissions	45	28	21
EDCAQMD Thresholds	82	82	-
Exceed EDCAQMD Thresholds?	No	No	NA

Notes: See Appendix A for detail on model inputs, assumptions, and project-specific modeling parameters; EDCAQMD = El Dorado County Air Quality Management District, ROG = reactive organic gases, NO_X = oxides of nitrogen, PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less, lb/day = pounds per day, – = No adopted threshold
Source: Modeled by Ascent Environmental, Inc. in 2021

Multigenerational Center Project

Less-than-significant impact. The Multigenerational Center would be the first project to be built under the Master Plan. Construction of the Multigenerational Center is expected to begin in 2022 and is expected to be fully operational in 2024. The project is within the Bijou/Al Community Plan. A fundamental vision for this Community Plan is that the Bijou/Al Tahoe area should serve as a family-oriented and recreation center, as well as a town center for the local community. Goals of the Bijou/Al Tahoe Community Plan also include reducing dependency on the automobile and improving the movement of people, goods, and services within the Bijou/Al Tahoe area, and the Lake Tahoe region. The City's General Plan includes goals to reduce the dependency on automobiles and develop infrastructure to support bike and pedestrian access. The Multigenerational Center is consistent with both the General Plan and the Community Plan as it proposes to provide bicycle and pedestrian connections to the existing network of shared-use paths and provides locally serving uses.

The City's General Plan has designated the land use of the project site as Recreation. The General Plan's Recreation and Open Space Element provides policy direction for the expansion of recreation and civic center facilities within the City of South Lake Tahoe. The Multigenerational Center is consistent with the City's General Plan land use designation as it proposes to repurpose existing land use and is consistent with policy direction in the Recreation and Open Space Element.

The project construction activities would generate temporary criteria pollutant emissions but would not exceed the threshold of significance adopted by the EDCAQMD as shown in Table 3.3-4. Construction of the Multigenerational Center would likely occur up to three years, but construction emissions were conservatively modeled to occur over a 2-year period to avoid understating the maximum annual emissions. Also, the project would not result in exceeding the long-term operational emissions threshold (see the discussion of the Multigenerational Center under item b), below). The operational VMT would increase, which would be due to an increase in visitors and local residents utilizing the Multigenerational Center and not due to growth in the community. Hence, the project would not conflict with or obstruct the implementation of the applicable air quality plan. The impact would be less than significant.

Table 3.3-4 Summary of Maximum Daily Emissions of Ozone Precursors and PM_{10} Associated with Multigenerational Center Project Construction Activities from 2022 to 2023 (lb/day)

Construction Phase	ROG	NO_X	PM_{10}
2022	2	19	8
2023	57	12	1
Maximum Daily Emissions	**57**	**19**	**8**
EDCAQMD Thresholds	**82**	**82**	-
Exceed EDCAQMD Thresholds?	**No**	**No**	**NA**

Notes: See Appendix A for detail on model inputs, assumptions, and project-specific modeling parameters; EDCAQMD = El Dorado County Air Quality Management District, ROG = reactive organic gases, NO_X = oxides of nitrogen, PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less, lb/day = pounds per day, – = No adopted threshold
Source: Modeled by Ascent Environmental, Inc. in 2021

b) Result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or State ambient air quality standard?

56 Acres Master Plan

Less-than-significant impact. El Dorado County is designated as non-attainment for ozone and PM_{10} with respect to the CAAQS (CARB 2020). El Dorado County is also designated as unclassified for ozone and PM_{10} with respect to NAAQS. As shown in Tables 3.3-3 through 3.3-6, the 56 Acres Master Plan would result in construction and operational emissions that would not exceed the thresholds of significance adopted by EDCAQMD.

Construction

Construction emissions are described as "short term" or temporary in duration. Construction-related activities would result in project-generated emissions of ROG, NOX, and PM10 from site preparation, grading, heavy off-road equipment, material delivery, worker commute vehicle travel to and from the site, building construction, paving, architectural coating, and other related activities. Emissions of NOX would be primarily associated with off-road construction equipment exhaust; secondary sources would include on-road trucks for the hauling of materials and equipment, as well as worker vehicles for commuting. Worker commute trips in gasoline-fueled vehicles and the application of architectural coatings would be the principal sources of ROG, with additional ROG coming from off- and on-road construction equipment. Emissions of fugitive PM10 dust are associated primarily with ground-disturbance activities during site preparation, excavation, and grading and may vary as a function of such soil parameters as silt content, soil moisture, wind speed, and the area of disturbance. Exhaust emissions from diesel equipment and worker commute trips also contribute to short-term increases in PM10, but to a much lesser extent than fugitive dust emissions.

Temporary construction-related activities for the proposed 56 Acres Master Plan would include site preparation, grading, building construction, paving, and architectural coatings. The emissions from construction activities were calculated by using California Emissions Estimator Model (CalEEMod) Version 2020.4.0 with design information provided by the City of South Lake Tahoe and CalEEMod defaults where the information was not available. Due to the 20-year buildout horizon of the Master Plan, the exact timing and duration of construction activities for various land uses is unknown. Therefore, CalEEMod default phasing and duration of construction activities were used to provide an estimate of potential construction emissions. CalEEMod estimates a construction duration of four years based on the size and types of land uses under the Master Plan. This is considered conservative as the Master Plan would be built out over a 20-year period. Construction of other facilities under the Master Plan would be expected to occur after the construction of the Multigenerational Center, therefore, early 2025 was assumed as the start date for construction. This construction scenario is intended to provide a representative analysis of maximum construction emissions that could occur under a rapid buildout of the Master Plan. Actually, buildout of the Master Plan is anticipated to occur over a 20-year period. Therefore, full operation of the Master Plan was assumed to be in 2040. Existing land uses in the Master Plan area include an ice arena, campgrounds and cabins, historical museum, library,

senior center, art center, park and outdoor event spaces, maintenance yards, vector control and fire training facility. Under the proposed Master Plan, the campground would be reconfigured; a new chamber office, civic center, and outdoor recreation and event space would be constructed; and the fire training facility, vector control and the two maintenance yards would be relocated. The modeling evaluates air quality emissions from construction of new and expanded uses in the plan area. The construction worker trip numbers and lengths are assumed as CalEEMod defaults. The modeling also assumes the EDCAQMD recommended Volatile Organic Compounds (VOC) limit of 100 grams/liter (g/l) for paints used in architectural coating as the VOC content assumption is not updated for all the regions in CalEEMod. Table 3.3-3 summarizes the estimated construction related annual ozone precursor and PM_{10} emissions over four years of the construction period. Refer to Appendix A of this document for detailed modeling assumptions and results.

The maximum daily emissions would not exceed the EDCAQMD adopted threshold of significance and hence the construction activities of the Master Plan would not have a substantial impact on air quality for which the region is in nonattainment under an applicable federal or State ambient air quality standard. Also, the Master Plan would not have substantial fugitive dust emissions as the future projects under the Master Plan would be consistent with Rule 223-1 as required by EDCAQMD. Therefore, the impact would be less than significant.

Operations

Project operations would result in the generation of emissions of criteria air pollutants and precursors (ROG, NO_X and PM_{10}). Mobile source emissions would be generated from employee commute vehicles traveling to and from the plan area, maintenance vehicles, as well as the public accessing the plan area. For estimating emissions from the mobile source, the change in VMT due to the repurposing of the existing facilities and new construction was used to evaluate emissions related to operations. As estimated in the 56 Acres Master Plan Transportation Analysis (see Appendix C) buildout of the Master Plan would generate an estimated 1,176 additional daily VMT for both the 56 Acres Master Plan and Multigenerational Center. Refer to Section 3.17, "Transportation/Traffic," for a breakdown of net change in VMT by different land uses. The emissions from other sources were also evaluated from the change in the surface area due to the repurposing of existing facilities and construction of new facilities.

Project operation would result in the generation of long-term operational emissions of ROG, NO_X, and PM_{10} because of area-wide, energy, and mobile sources. Area-wide sources would include the periodic application of architectural coatings, the generation of ROG from the use of consumer products, and landscaping. Mobile-source emissions of criteria air pollutants and precursors would result from vehicle trips generated by employee commute trips, and visitor trips.

Table 3.3-5 summarizes the operational emissions of criteria air pollutants and precursors due to the 56 Acres Master Plan. Emissions were calculated using CalEEMod and are based on the proposed land use type and number of trips (Appendix A). As shown in Table 3.3-5, proposed project operational-related emissions would not exceed EDCAQMD's thresholds of significance. Hence the impact would be less than significant.

Table 3.3-5 Summary of Maximum Daily Emissions of Ozone Precursors and PM_{10} Associated with 56 Acres Master Plan Project Operational Activities (lb/day)

Operational Sources	ROG	NO_X	PM_{10}
Area	4	<0.1	<0.1
Energy	<0.1	<1	<0.1
Mobile	5	1	1
Total Daily Emissions	**10**	**2**	**1**
EDCAQMD Thresholds	**82**	**82**	**-**
Exceed EDCAQMD Thresholds?	**No**	**No**	**NA**

Notes: See Appendix A for detail on model inputs, assumptions, and project-specific modeling parameters; EDCAQMD = El Dorado County Air Quality Management District, ROG = reactive organic gases, NO_X = oxides of nitrogen, PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less, lb/day = pounds per day, – = No adopted threshold
Source: Modeled by Ascent Environmental, Inc. in 2021

Multigenerational Center Project

Less-than-significant impact. El Dorado County is designated as non-attainment for ozone and PM_{10} with respect to the CAAQS (CARB 2020). El Dorado County is also designated as unclassified for ozone and PM_{10} with respect to NAAQS. As shown in Tables 3.3-3 through 3.3-6, the Multigenerational Center would result in construction and operational emissions that would not exceed the thresholds of significance adopted by EDCAQMD.

Construction

See the "Construction" discussion for the Master Plan above that summarizes the types of emissions caused by various construction activities.

Temporary construction-related activities for the proposed Multigenerational Center would include site preparation, grading, building construction, paving, and architectural coatings. Emissions from construction activities were calculated using CalEEMod Version 2020.4.0 with design assumptions provided by the City and CalEEMod defaults where the information was not available. Construction of the Multigenerational Center would begin in early 2022, with demolition and site preparation in 2022, and building construction, paving and architectural coatings would begin in 2023. Full operation of the Multigenerational Center would begin 2024. The existing Recreation and Swim Complex would eventually be demolished as part of the Master Plan and its recreation uses would be moved to the new Multigenerational Center. The construction worker trip numbers and lengths are assumed as CalEEMod defaults. The modeling also assumes EDCAQMD recommended VOC limit of 100 g/l for paints used in architectural coating as the VOC content assumption is not updated for all the regions in CalEEMod. Refer to Appendix A for list of assumptions made for this analysis. Table 3.3-4 summarizes the estimated construction related emissions over two years of construction period.

The maximum daily emissions would not exceed the EDCAQMD's adopted threshold of significance and hence the construction activities of the Multigenerational Center would not have any substantial impact on air quality for which the region is nonattainment under an applicable federal or State ambient air quality standard. Also, the project would not have substantial fugitive dust emissions as the project would be consistent with Rule 223-1 required by EDCAQMD. Therefore, the impact would be less than significant.

Operations

Project operations would result in the generation of emissions of criteria air pollutants and precursors (ROG, NO_X and PM_{10}). Mobile source emissions would be generated from employees' commute vehicles traveling to and from the project site, maintenance vehicles, as well as the public accessing the project area. For estimating emissions from the mobile source, the change in VMT due to the repurposing and new construction of the existing facilities was used to evaluate emissions related to operations. As estimated in the traffic study the project would generate an estimated 1,176 additional daily VMT for both the 56 Acres Master Plan and Multigenerational Center. The daily VMT for Multigenerational Center was estimated to be 796. Refer to Section 3.17, "Transportation/Traffic," for a breakdown of net change in VMT by different land uses. The emissions from other sources were also evaluated from the change in the surface area due to the repurposing of existing facilities and construction of new facilities.

Project operation would result in the generation of long-term operational emissions of ROG, NO_X, and PM_{10} because of area-wide, energy, and mobile sources. Area-wide sources would include the periodic application of architectural coatings, the generation of ROG from the use of consumer products, and landscaping. Mobile-source emissions of criteria air pollutants and precursors would result from vehicle trips generated by employee commute trips, and visitor trips.

Table 3.3-6 summarizes the operational emissions of criteria air pollutants and precursors due to the Multigenerational Center. Emissions were calculated using CalEEMod and are based on the proposed land use type and number of trips (Appendix A). As shown in Table 3.3-6, proposed project operational-related emissions would not exceed EDCAQMD's thresholds of significance. Hence the impact would be less than significant.

Table 3.3-6 Summary of Maximum Daily Emissions of Ozone Precursors and PM10 Associated with Multigenerational Center Project Operational Activities (lb/day)

Operational Sources	ROG	NO_X	PM_{10}
Area Source	2	<0.1	<0.1
Energy	<0.1	<0.1	<0.1
Mobile	2	1	<1
Total Daily Emissions	**4**	**1**	**<1**
EDCAQMD Thresholds[1]	**82**	**82**	**-**
Exceed EDCAQMD Thresholds?	**No**	**No**	**NA**

Notes: See Appendix A for detail on model inputs, assumptions, and project-specific modeling parameters; EDCAQMD = El Dorado County Air Quality Management District, ROG = reactive organic gases, NO_X = oxides of nitrogen, PM_{10} = respirable particulate matter with an aerodynamic diameter of 10 micrometers or less, lb/day = pounds per day, – = No adopted threshold
Source: Modeled by Ascent Environmental, Inc. in 2021

c) Expose sensitive receptors to substantial pollutant concentrations?

56 Acres Master Plan

Less-than-significant impact. Sensitive receptors near the plan area include single-family residences, hotels, a church, and a school. The nearest sensitive receptors to the plan area are single-family residences in the Al Tahoe and Bijou neighborhoods. The closest residences in the Al Tahoe and Bijou neighborhoods are located approximately 50 feet south and 55 feet east of the plan area, respectively. The closest hotel (Hotel Azure) is located across Rufus Allen Boulevard 53 feet east of the plan area. Saint Theresa Catholic Church is located approximately 490 feet south of the plan area, and the athletic facilities and closest buildings of South Tahoe Middle School are located approximately 680 and 1,070 feet south of the plan area, respectively. The TAC that is the focus of this analysis is diesel PM because it is known that diesel PM would be emitted during construction activities under the Master Plan. Particulate exhaust emissions from diesel-fueled engines (i.e., diesel PM) were identified as a TAC by CARB in 1998. The potential cancer risk from the inhalation of diesel PM outweighs the potential for all other health impacts (i.e., non-cancer chronic risk, short-term acute risk) and health impacts from other TACs (CARB 2017). Construction activities would result in short-term emissions of TACs in the form of diesel PM emissions (exhaust PM_{10} and $PM_{2.5}$), which would be less than 2 lb/day for the Master Plan. Refer to Appendix A for modeling results. As described above under items a) and b), the project would not conflict with or obstruct implementation of the applicable air quality plan nor result in a cumulatively considerable net increase of any criteria pollutant for which the project region is non-attainment under an applicable federal or state ambient air quality standard.

Construction-related activities that would result in temporary, intermittent emissions of diesel PM would be from the exhaust of off-road equipment used during site preparation and construction and on-road heavy-duty trucks. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they do not operate at any one location for extended periods of time such that they would expose a single receptor to excessive diesel PM emissions.

Based on the construction-related emissions modeling conducted (see Appendix A), maximum daily emissions of exhaust PM_{10} would be less than 2 lb/day during construction. A portion of these emissions would be due to haul trucks traveling to and from the site and would not occur in the plan area. In addition, all construction activities would occur during daytime hours, which is when many residents who are employed or are students typically would not be at home, thus limiting exposure from construction-related emissions to these receptors.

Construction-related TAC emissions would not expose sensitive receptors to an incremental increase in cancer risk greater than 10 in 1 million or a hazard index greater than 1.0. The low exposure level reflects the (i) relatively low mass of diesel PM emissions that would be generated by construction activity in the plan area; (ii) the relatively short duration of diesel PM-emitting construction activity in the plan area; and (iii) the highly dispersive properties of diesel PM. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. Similar to the discussion of construction for the Master Plan, above, construction-related activities for the Multigenerational Center would result in temporary, intermittent emissions of diesel PM from the exhaust of off-road equipment used during site preparation and construction and on-road heavy-duty trucks. On-road diesel-powered haul trucks traveling to and from the construction area to deliver materials and equipment are less of a concern because they do not operate at any one location for extended periods of time such that they would expose a single receptor to excessive diesel PM emissions.

Based on the construction-related emissions modeling conducted (see Appendix A), maximum daily emissions of exhaust PM_{10} would be less than 1 lb/day during construction. A portion of these emissions would be due to haul trucks traveling to and from the site and would not occur on the project site. In addition, all construction activities would occur during daytime hours, which is when many residents who are employed or are students typically would not be at home, thus limiting exposure from construction-related emissions to these receptors.

Construction-related TAC emissions would not expose sensitive receptors to an incremental increase in cancer risk greater than 10 in 1 million or a hazard index greater than 1.0. The low exposure level reflects the (i) relatively low mass of diesel PM emissions that would be generated by construction activity on the project site; (ii) the relatively short duration of diesel PM-emitting construction activity at the project site; and (iii) the highly dispersive properties of diesel PM. This impact would be less than significant.

d) Result in other emissions (such as those leading to odors) adversely affecting a substantial number of people?

56 Acres Master Plan

Less-than-significant impact. Occurrence and severity of odor impacts depends on numerous factors, including: the nature, frequency, and intensity of the source; wind speed and direction; and the sensitivity of the receptors. Implementation of the Master Plan would not result in the introduction of any new operational sources of odors to the area or the introduction of new sensitive receptors that could be exposed to existing odor sources.

The proposed Master Plan could produce odors during construction activities from the use of heavy-duty diesel equipment, and application of architectural coatings. The use of the equipment would be intermittent and temporary, it would dissipate rapidly from the source with an increase in distance. In addition, construction activities would not occur in the vicinity of a particular receptor for an extended period.

Land uses that are major sources of odor typically include wastewater treatment and pumping facilities, sanitary landfills, transfer stations, recycling and composting facilities, and various industrial uses such as chemical manufacturing and food processing. The proposed Master Plan does not include any of these land uses and would not generate objectionable odors affecting a substantial number of people. Further, EDCAQMD Rule 205-Nuisance prohibits the discharge of quantities of air contaminants or other material that can cause injury, detriment, nuisance or annoyance to any considerable number of persons. This would protect citizens from harmful odors should they occur. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. The proposed Multigenerational Center could produce odors during construction activities from the use of heavy-duty diesel equipment, and application of architectural coatings. The use of the equipment would be intermittent and temporary, it would dissipate rapidly from the source with an increase in distance. In addition, construction activities would not occur in the vicinity of a particular receptor for an extended period.

Since the project's land use does not include one of the above-mentioned land uses with major odor generation, it would not have any long-term odor impact. Further, EDCAQMD Rule 205-Nuisance prohibits the discharge of quantities of air contaminants or other material that can cause injury, detriment, nuisance or annoyance to any considerable number of persons. This would protect citizens from harmful odors should they occur. Hence, this impact would be less than significant.

3.3.3 Cumulative Impacts

The plan area is in the El Dorado County portion of the LTAB, which is designated as non-attainment with respect to the CAAQS for PM_{10} (CARB 2020). Also, El Dorado County is designated as unclassified with respect to the NAAQS for Ozone and PM_{10} (CARB 2020). As discussed under item b), above, project emissions of ozone precursors (i.e., ROG and NO_X) and PM_{10} would not exceed 82 lb/day, which is the mass emissions threshold EDCAQMD recommends for determining whether construction and operation-related emissions would be cumulatively considerable.

The potential for the project to expose sensitive receptors to TACs is discussed under item c), above. This analysis concludes that the project would not violate any air quality standard or contribute substantially to an existing or projected air quality violation and emissions-generating project activities would be temporary, limiting the potential for exposure to emissions for an extended period, project-related activity would not expose sensitive receptors to substantial levels of pollutants. Even though the projects listed in the cumulative project list in Table 3.21-1 could include diesel PM-emitting activities in close proximity to any of the same sensitive receptors potentially affected by diesel PM-emitting activities associated with the proposed project, the activities would be short-term and temporary. For this reason, project-related emissions of diesel PM would not be cumulatively considerable.

The project would not create objectionable odors affecting a substantial number or people, as discussed under item d), above. None of the projects listed in Table 3.21-1 would include odor-emitting activities in close proximity to any of the same sensitive receptors near the proposed project. For this reason, project-related odorous emissions would not be cumulatively considerable. As described above, the project would not make a considerable contribution to a significant cumulative impact.

3.4 BIOLOGICAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
IV. Biological Resources.				
Would the project:				
a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☐	☐	☒
b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?	☐	☐	☐	☒
c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?	☐	☐	☐	☒
d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?	☐	☐	☒	☐
e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?	☐	☐	☐	☒
f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?	☐	☐	☐	☒

3.4.1 Environmental Setting

METHODS

To assess and document existing biological resources in the plan area, a biologist with expertise in Tahoe Basin natural resources reviewed existing data and conducted a reconnaissance field survey. Prior to the field survey, existing data were reviewed to preliminarily identify special-status species and other sensitive resources known or with potential to occur in the plan area vicinity. The data review included: a records search of the California Natural Diversity Database (CNDDB) (CDFW 2021); a list of federally proposed, candidate, threatened, and endangered species that may occur in the project region obtained from the U.S. Fish and Wildlife Service Information for Planning and Consultation system (USFWS 2020); TRPA Geographic Information System (GIS) data; and high-resolution aerial imagery.

Plants and animals may be special-status species due to declining populations, vulnerability to habitat change, or restricted distributions. Special-status species include those species legally protected under the California Endangered

Species Act (CESA), federal Endangered Species Act (ESA), or other regulations, as well as species considered sufficiently rare by the scientific community to qualify for such listing. In this document, special-status species are defined as plants and animals in the following categories.

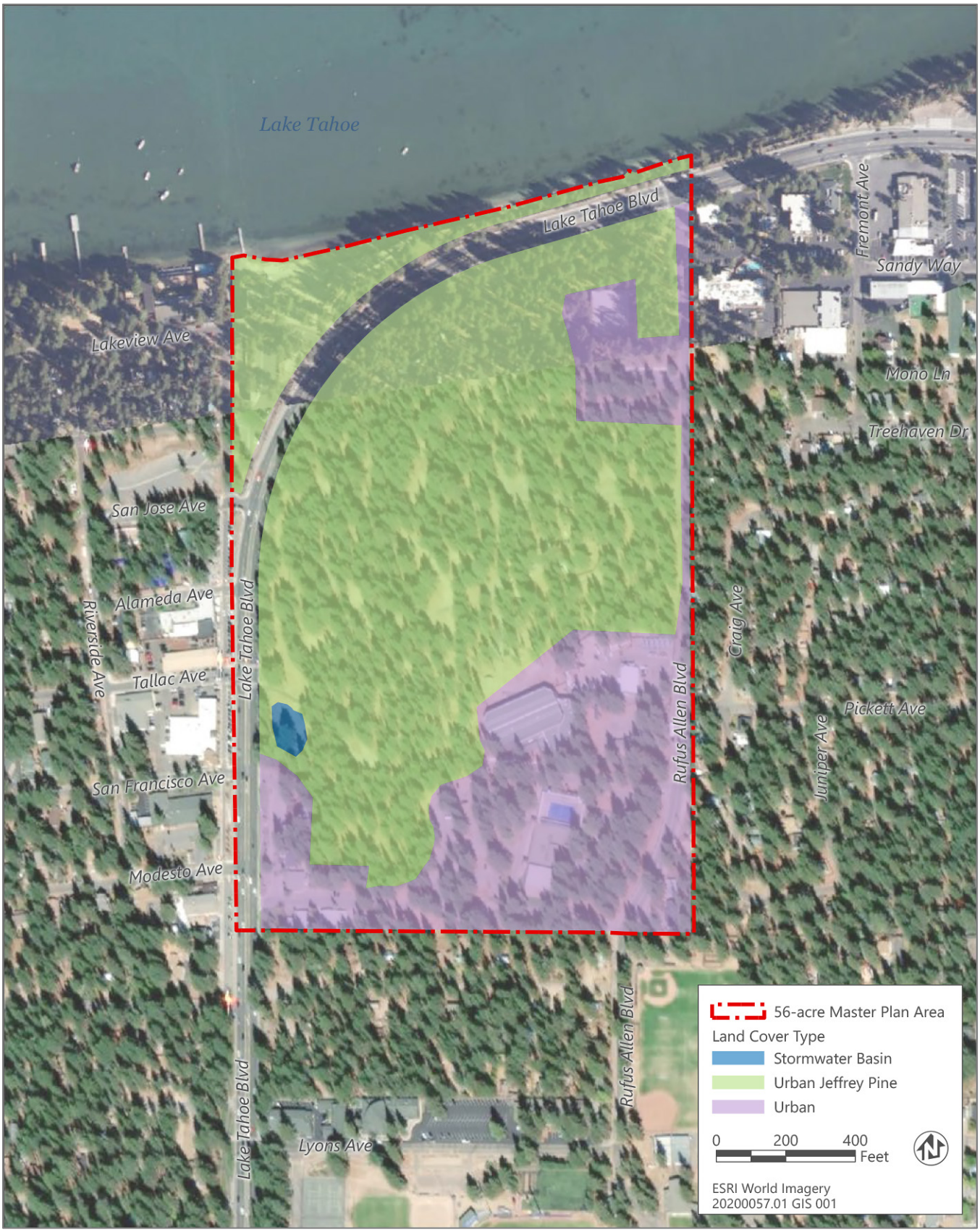
- Species listed or proposed for listing as threatened or endangered under ESA (50 Code of Federal Regulations [CFR] 17.12 for listed plants, 50 CFR 17.11 for listed animals, and various notices in the Federal Register for proposed species) or candidates for possible future listing as threatened or endangered under ESA (75 CFR 69222).
- Species listed or candidates for listing by the State of California as threatened or endangered under CESA (14 Cal. Code Regs., Section 670.5).
- Animals fully protected under the California Fish and Game Code (FGC) (Section 3511 for birds, Section 4700 for mammals, Section 5050 for reptiles and amphibians, and Section 5515 for fish).
- Plants and animals designated as a sensitive, special interest, or threshold species by TRPA (TRPA Code of Ordinances, Chapters 61, 62, and 63).
- Plants listed as rare under the California Native Plant Protection Act (FGC Section 1900 et seq.).
- Plants considered by California Department of Fish and Wildlife (CDFW) to be "rare, threatened or endangered in California" (California Rare Plant Ranks of 1A, presumed extinct in California and either rare or extinct elsewhere; 1B, considered rare or endangered in California and elsewhere; 2A, presumed extinct in California but common elsewhere; and 2B, considered rare or endangered in California but more common elsewhere). Note, that while these rankings do not afford the same type of legal protection as ESA or CESA, the uniqueness of these species requires special consideration under CEQA.
- Animals identified by CDFW as species of special concern.
- Species considered locally significant, that is, a species that is not rare from a statewide perspective but is rare or uncommon in a local context such as within a county or region (State CEQA Guidelines Section 15125 (c)) or is so designated in local or regional plans, policies, or ordinances (State CEQA Guidelines, Appendix G).
- Species that otherwise meets the definition of rare or endangered under CEQA Section 15380.

Sensitive habitats include those that are of special concern to resource agencies or are afforded specific consideration through CEQA, the TRPA Goals and Policies and TRPA Code, Section 1602 of the California Fish and Game Code, Section 404 of the Clean Water Act (CWA), the state's Porter-Cologne Water Quality Control Act, and other applicable regulations. Sensitive natural habitat may be of special concern to agencies and conservation organizations for a variety of reasons, including their locally or regionally declining status, or because they provide important habitat to common and special-status species. Examples of sensitive habitats in the Lake Tahoe Basin include montane riparian, wet meadow, riverine (streams and rivers), and lacustrine (open water).

On September 15 and October 21, 2020, an Ascent Environmental senior biologist conducted a reconnaissance-level field survey of the plan area. During the survey, information about land cover type, hydrology, vegetation stand composition and structure, and habitat suitability for special-status species was evaluated. Other variables examined were proximity of the project site to known sensitive wildlife resources; the plan area's potential to support core breeding areas or movement corridors for wildlife; and sources and levels of existing disturbances.

EXISTING BIOLOGICAL RESOURCES

The 56 Acres Master Plan area is within a commercial core and developed recreation area; the Plan would be implemented mostly on existing developed lands. Land cover types/habitats mapped in the plan area (Figure 3.4-1) are urban Jeffrey pine (*Pinus jeffreyi*) forest (37.5 acres), urban (18.7 acres), and a constructed stormwater basin (0.3 acre). Urban Jeffrey pine forest occurs in developed areas where the understory component of a natural Jeffrey pine community has been mostly eliminated but the overstory component (i.e., mature Jeffrey pine trees) remains mostly intact. Occasional understory species include white fir (*Abies concolor*), greenleaf manzanita (*Arctostaphylos patula*), bitterbrush (*Purshia tridentata*), Woods' rose (*Rosa woodsii*), and nonnative ornamental/landscaped vegetation. The Campground by the Lake encompasses most of the urban Jeffrey pine land cover in the plan area.



Source: Data adapted by Ascent Environmental in 2020

Figure 3.4-1 Land Cover Types in the 56 Acres Master Plan Area

The area surrounding the plan area core includes commercial and residential development, a major highway corridor (US 50/Lake Tahoe Boulevard) and other roadways, and disturbed conifer forest in fragmented undeveloped areas.

Due to the developed conditions and land uses of the plan area and surrounding areas, the existing level of disturbance on and adjacent to the plan area is high. Wildlife species observed or likely to use the project site are common species associated with urban and residential areas in the Tahoe Basin, including Steller's jay (*Cyanocitta stelleri*), pygmy nuthatch (*Sitta pygmaea*) mountain chickadee (*Poecile gambeli*), western gray squirrel (*Sciurus griseus*), and Douglas' squirrel (*Tamiasciurus douglasii*). Because habitats in the plan area are fragmented and highly disturbed, wildlife species occur there in relatively low abundance and diversity.

Special-Status Species and Sensitive Habitats

Based on review of the CNDDB (CDFW 2021) and TRPA GIS data, no special-status plant or wildlife species have been documented in the plan area. No sensitive biological resources were observed during the field assessment, and no suitable habitat for any special-status plant or animal species is present in the plan area. Due to the high level of human disturbance, habitat degradation, and isolation and small size of natural vegetation patches in the plan area from commercial and urban development, presence of major road corridors, and recreational uses, disturbed Jeffrey pine forest or other habitats in the plan area are not expected to support any special-status wildlife or plant species that may otherwise be associated with these habitats in other settings, or any significant movement corridors or core breeding sites for wildlife.

3.4.2 Discussion

a) Have a substantial adverse effect, either directly or through habitat modifications, on any species identified as a candidate, sensitive, or special-status species in local or regional plans, policies, or regulations, or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

56 Acres Master Plan

No impact. As discussed in Section 3.4.1, "Environmental Setting," no special-status plant or animal species are expected to occur regularly in the plan area due to the absence of suitable breeding habitat, high disturbance levels associated with existing urban uses, and no historic documentation of occurrences in the plan area. Therefore, construction and operation of facilities, changes in services and uses, and other features proposed for the Master Plan would result in no impact on special-status plant and animal species.

Multigenerational Center Project

No impact. For the same reasons described above for the Master Plan, construction and operation of facilities for the Multigenerational Center would result in no impact on special-status plant and animal species.

b) Have a substantial adverse effect on any riparian habitat or other sensitive natural community identified in local or regional plans, policies, or regulations or by the California Department of Fish and Wildlife or the U.S. Fish and Wildlife Service?

56 Acres Master Plan

No impact. Vegetation types and habitats in the plan area (Figure 3.4-1) are urban Jeffrey pine forest (37.5 acres), urban (18.7 acres), and a constructed stormwater basin (0.3 acre). The plan area does not contain riparian habitat or other sensitive natural communities. Therefore, construction and operation of facilities, changes in services and uses, and other features proposed for the Master Plan would result in no impact on riparian habitat or other sensitive natural community.

Multigenerational Center Project

No impact. For the same reasons described above for the Master Plan, construction and operation of facilities for the Multigenerational Center would result in no impact on riparian habitat or other sensitive natural community.

c) Have a substantial adverse effect on state or federally protected wetlands (including, but not limited to, marsh, vernal pool, coastal, etc.) through direct removal, filling, hydrological interruption, or other means?

56 Acres Master Plan

No impact. The plan area does not contain state or federally protected wetlands, other sensitive habitats, or natural hydrologic resources or drainage features. Therefore, construction and operation of facilities for the Master Plan would result in no impact on wetlands.

Multigenerational Center Project

No impact. For the same reasons described above for the Master Plan, construction and operation of facilities for the Multigenerational Center Project would result in no impact on state or federally protected wetlands.

d) Interfere substantially with the movement of any native resident or migratory fish or wildlife species or with established native resident or migratory wildlife corridors, or impede the use of native wildlife nursery sites?

56 Acres Master Plan

Less-than-significant impact. As discussed in Section 3.4.1, "Environmental Setting," wildlife species that regularly use the plan area are common species associated with urban and residential areas in the Tahoe Basin. Because habitats in the plan area are fragmented and highly disturbed, wildlife species occur there in relatively low abundance and diversity. The plan area is within a commercial core and developed recreation area; the Master Plan would be implemented mostly on existing developed lands. For example, the Campground by the Lake encompasses most of the urban Jeffrey pine land cover in the plan area.

The area surrounding the plan area core includes commercial and residential development, a major highway corridor (US 50/Lake Tahoe Boulevard) and other roadways, and disturbed conifer forest in fragmented undeveloped areas. Due to the developed conditions and land uses of the plan area and surrounding areas, the existing level of disturbance on and adjacent to the plan area is high. Therefore, the plan area is not expected to support any significant wildlife nursery sites or provide important animal movement functions; and Master Plan implementation would not create any additional barriers to urban wildlife movement locally or regionally.

As described in Chapter 2, "Project Description," to minimize and avoid potential construction-related loss of active bird nests and comply with California Fish and Game Code Sections 3503 and 3503.5 and the Migratory Bird Treaty Act., a qualified biologist would conduct preconstruction surveys and implement protective measures, if needed, for nesting birds. This measure is incorporated into the project. Therefore, potential project-related effects on nesting birds would be avoided or minimized.

Any potential disturbances to the local or regional movements of common wildlife species from Master Plan implementation would be less than significant.

Multigenerational Center Project

Less-than-significant impact. For the same reasons described above for the Master Plan, any potential effects of construction and operation of facilities for the Multigenerational Center on animal movement or native wildlife nursery sites would be less than significant.

e) Conflict with any local policies or ordinances protecting biological resources, such as a tree preservation policy or ordinance?

56 Acres Master Plan

No impact. Construction of the Multigenerational Center would require removal of a portion of the existing Campground by the Lake, relocation of an existing restroom at the campground, removal of two existing campground buildings (original camp store and garage/storage shed) next to US 50, and utility infrastructure for the new building. The plan area contains an estimated 3,990 trees that are over 8 inches in diameter (Fish, pers. comm.,

2021). Although the precise number of trees by species and size class proposed for removal for the entire plan area has not yet been quantified, at the current level of design for the Multigenerational Center an estimated 309 trees, 97 of which are greater than 14 inches diameter at breast height (Marino, pers. comm., 2021), would require removal for construction of the building and expanded parking lot and for defensible space purposes near the library (see "Multigenerational Center Project" below for further discussion related to tree removal for this component of the proposed project). The site design for the Master Plan components and Multigenerational Center project would carefully consider removal of trees larger than 30 inches in diameter to retain as many as trees as possible and in close coordination with TRPA. The extent of potential tree removal required to construct other facilities in the future under the Master Plan has not been identified. This analysis assumes that some tree removal in addition to that proposed for the Multigenerational Center may be required for the Master Plan. During further design and permitting of projects for the Master Plan, the number of trees by species and size class proposed for removal will be quantified through tree surveys and refined project designs.

Tree removal would not occur within late seral/old growth forest habitat, remove riparian vegetation or other sensitive habitat, or occur in areas outside of the permitted development footprint. Because construction of the Multigenerational Center and other facilities for the Master Plan would be focused within areas subject to high levels of existing disturbances and habitat fragmentation, the removal of native trees would have a relatively minor effect on the surrounding environment. Also, facilities would be constructed in areas that support common tree species such as Jeffrey pine and white fir. Stands that consist of these species and their biological functions, particularly those that are disturbed and within developed or semi-urban landscapes, are not considered threatened or vulnerable to decline in the Tahoe Basin. These trees or stands are not considered critical or limiting to the presence or viability of common or sensitive biological resources in the region. Tree removal required for the Master Plan would not substantially affect breeding productivity or population viability of any species or cause a change in species diversity locally or regionally.

Regardless of the magnitude or biological effects of tree removal, native trees are protected in the Tahoe Basin, with special retention standards and protections for large trees in some land-use designations. TRPA regulates the management of forest resources in the Tahoe Basin to achieve and maintain the threshold standards for species and structural diversity, to promote the long-term health of the resources, and to create and maintain suitable habitats for diverse wildlife species. Tree removal is subject to review and approval by TRPA (TRPA 2012).

TRPA's existing policies and Code provisions address tree removal through site-specific environmental review and permitting; require development and implementation of project-specific measures to minimize or avoid impacts through the design, siting, and permitting process; and require compensatory or other mitigation for any significant effects as a condition of project approval. Specifically, the TRPA Goals and Policies and Code of Ordinances include provisions limiting tree removal and protecting late seral/old growth forests, and TRPA's Rules of Procedure require mitigation for any significant impact as a condition of project approval. Additionally, TRPA cannot approve projects that would cause a significant adverse effect on the late seral/old growth ecosystem threshold standard without appropriate mitigation. Specific provisions for tree removal in the Tahoe Basin are provided in the following chapters and sections of the TRPA Code (TRPA 2012): Chapter 61, Vegetation and Forest Health, Section 61.1, Tree Removal, Section 61.3.6, Sensitive and Uncommon Plant Protection and Fire Hazard Reduction, and Section 61.4, Revegetation; Chapter 36, Design Standards; Chapter 33, Grading and Construction, Section 33.6, Vegetation Protection During Construction; and Chapter 62, Wildlife Resources.

Removal of trees greater than 14 inches in diameter at breast height (dbh) requires review and approval by TRPA. Specifically, applicants must obtain a tree removal permit from TRPA prior to removing trees greater than 14 inches dbh, except for certain cases exempt by the TRPA Code. For example, trees of any size marked as a fire hazard by a fire protection district or fire department that operates under a memorandum of understanding with TRPA can be removed without a separate tree permit. A harvest or tree removal plan is required by TRPA where implementation of a project would cause "substantial" tree removal. Substantial tree removal is defined in Chapter 61 of the TRPA Code as activities on project areas of three acres or more and proposing: (1) removal of more than 100 live trees 14 inches dbh or larger, or (2) tree removal that, as determined by TRPA after a joint inspection with appropriate state or federal forestry staff, does not meet the minimum acceptable stocking standards set forth in Chapter 61.

To protect late seral/old growth ecosystems, with limited exceptions, Section 61.1.4, Old Growth Enhancement Protections, of the TRPA Code prohibits the removal of trees larger than 24 and 30 inches dbh in eastside and westside forest types, respectively, for forest management activities and projects located in lands classified by TRPA as conservation or recreation land use or SEZ. The Master Plan would be implemented within the area designated as "westside" but is not within a TRPA-designated conservation or recreation land use area or SEZ. In addition, trees and vegetation not scheduled to be removed must be protected during construction in accordance with Code Chapter 33, Grading and Construction, Section 33.6, Vegetation Protection During Construction.

Because the number of trees by species and size class proposed for tree removal has not been quantified for the Master Plan, the total number of trees 14 inches dbh or greater proposed for removal and subject to a TRPA tree removal permit has not been identified; accordingly, whether Plan implementation would cause substantial tree removal as defined in Chapter 61 of the TRPA Code has not been determined. As part of the required TRPA approval and permitting process for the proposed Master Plan, the applicant would prepare tree removal plans for TRPA review and approval; and, before the removal of any trees 14 inches dbh or greater, the applicant would secure a tree removal permit from TRPA. For any substantial tree removal (as defined in the TRPA Code), a harvest or tree removal plan would be prepared for TRPA review, as required by the TRPA Code, and implemented upon approval. Therefore, approved Plan-related removal of trees would comply with the tree removal and protection provisions of the TRPA Code.

The plan area is not located within late seral/old growth forest, but rather contains patches of open to moderately dense mid-seral forest; and the removal of trees required for the Master Plan would not substantially change the structure or composition of forest habitat in the plan area vicinity. Therefore, the Master Plan would not conflict with TRPA policies or threshold standards for protecting late seral/old growth forest. Additionally, tree removal or other vegetation disturbances would not substantially reduce the size, continuity, or integrity of any common vegetation community or habitat type or interrupt the natural processes that support common vegetation communities in the plan area. Because the plan area is already disturbed and fragmented considerably, potential Plan-related disturbances to the biological functions of common habitats are not considered substantial.

Through compliance with existing tree removal and protection requirements of the TRPA Code, and because Plan-related tree removal would not substantially degrade biological resources, tree removal required for the Master Plan and permitted by TRPA would not conflict with any tree protection policies or ordinances. Master Plan implementation would result in no impact related to potential conflict with local policies or ordinances protecting trees or other biological resources.

Multigenerational Center Project

Less-than-significant impact. Although the precise number of trees by species proposed for removal has not yet been quantified, at the current level of design an estimated 309 trees, 97 of which are greater than 14 inches diameter at breast height (Marino, pers. comm., 2021), would require removal for construction of the building and expanded parking lot and for defensible space purposes near the library. Thus, because fewer than 100 trees greater than 14 inches dbh are estimated for removal, construction of the Multigenerational Center project would not cause substantial tree removal as defined in Chapter 61 of the TRPA Code. As part of the required TRPA approval and permitting process for the Multigenerational Center, the applicant would prepare tree removal plans for TRPA review and approval; and, before the removal of any trees 14 inches dbh or greater, the City would secure a tree removal permit from TRPA. For any substantial tree removal (as defined in the TRPA Code), a harvest or tree removal plan would be prepared for TRPA review, as required by the TRPA Code, and implemented upon approval. Therefore, approved Plan-related removal of trees would comply with the tree removal and protection provisions of the TRPA Code.

For the same reasons described above for the Master Plan, construction and operation of facilities for the Multigenerational Center Project would result in no impact related to potential conflict with local policies or ordinances protecting trees or other biological resources.

f) Conflict with the provisions of an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state habitat conservation plan?

56 Acres Master Plan

No impact. The plan area is not located in an area covered by an adopted Habitat Conservation Plan, Natural Community Conservation Plan, or other approved local, regional, or state conservation plan. Therefore, construction and operation of facilities, changes in services and uses, and other features proposed for the Master Plan would result in no impact related to the provisions of any adopted or approved conservation plan.

Multigenerational Center Project

No impact. For the same reasons described above for the Master Plan, construction and operation of facilities for the Multigenerational Center Project would result in no impact related to potential conflict with the provisions of any adopted or approved conservation plan.

3.4.3 Cumulative Impacts

The geographic scope for analyzing the cumulative effects on biological resources is the Tahoe Basin. As described in Section 3.4.2, "Discussion," for biological resources, implementation of the Master Plan and the Multigenerational Center project would result in no impact related to special-status species, wetlands and other sensitive habitats, or potential conflict with a local ordinance protecting biological resources or an adopted conservation plan. Any potential project-related disturbances to native habitats, native wildlife nursery sites, or movements of common animal species would not be substantial. No potential impacts on biological resources considered significant and requiring mitigation were identified.

Present and probable future projects that may affect habitat for special-status wildlife and plants, and other biological resources, in the project vicinity include residential and commercial development, recreation facilities and resort development, and vegetation management/fuels reduction projects. Development projects that overlap with native habitats would be expected to have some level of adverse effects on these resources; however, some vegetation management projects may result in long-term habitat enhancement that would benefit some wildlife and botanical species.

When combined with other past, present, and probable future projects with biological effects, implementation of the proposed Master Plan and the Multigenerational Center project would not substantially contribute to an adverse cumulative effect on biological resources. No special-status plant or animal species are expected to occur regularly in the plan area due to the absence of suitable breeding habitat, high disturbance levels associated with existing urban uses, and no historic documentation of occurrences in the plan area. Because habitats in the plan area are fragmented and highly disturbed, native species occur there in relatively low abundance and diversity. The plan area is within a commercial core and developed recreation area; the Master Plan would be implemented mostly on existing developed lands. Additionally, the area surrounding the plan area includes commercial and residential development, a major highway corridor (US 50/Lake Tahoe Boulevard) and other roadways, and disturbed conifer forest in fragmented undeveloped areas. Therefore, the quality and functions of biological resources in the plan area and vicinity would not change substantially with implementation of the Master Plan or the Multigenerational Center project. Additionally, because the Lake Tahoe Basin is recognized as environmentally sensitive, sufficient protections are in place by TRPA, El Dorado County, U.S. Army Corps of Engineers, and Lahontan Regional Water Quality Control Board (Lahontan RWQCB) to require that impacts of this project, and any nearby projects, are minimized. For these reasons, construction and operation of facilities, changes in services and uses, and other features proposed for the Master Plan and the Multigenerational Center project **would not make a considerable contribution** to a cumulative impact on biological resources.

3.5 CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
V. Cultural Resources.				
Would the project:				
a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?	☐	☐	☐	☒
b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?	☐	☒	☐	☐
c) Substantially disturb human remains, including those interred outside of formal cemeteries?	☐	☐	☒	☐

3.5.1 Environmental Setting

This contextual background described below draws from the cultural resources report prepared in support of this environmental document, *Historic and Archaeological Resources Report in Support of South Lake Tahoe Master Plan* (PaleoWest 2021).

PREHISTORIC OVERVIEW

Prehistoric occupation of the Lake Tahoe region of northeastern California spans a period of approximately 11,000 years beginning in the late Pleistocene continuing throughout the Holocene. Previous archaeological investigations have defined four distinct complexes associated with the occupation of the region: Tahoe Reach (8,000-10,000 calibrated [cal] before present [BP]), Spooner (5,000-8,000 cal BP), Martis both Early (4,000-6,000 cal BP) and Late (1,350-3,500 cal BP), and Kings Beach both Early (1,500-800 cal BP) and Late (800 cal BP to contact). Early inhabitants of the region where primarily highly mobile hunter-gatherer groups utilizing Late Paleolithic stemmed point tools as well as heavy bifaces, cores, and choppers. Like other regions along the Sierra Nevada range there is a dearth of large assemblages associated with these terminal Paleoindian and Early Archaic occupants who would have lived during the Tahoe Reach and early Spooner complexes.

Conversely, during the late Spooner and through the Early Kings Beach complexes archaeologists have observed a substantial rise in evidence of prehistoric occupations. Increased environmental stability between 2,000-7,000 years ago enabled hunter-gatherer groups in the region shift to more sedentary lifeways while developing new technologies including millingstones and handstones to process a wider diversity of foraged foods. During the late Spooner complex big game hunting reduced while seed processing became a primary subsistence strategy. A continued focus on foraged foods showed throughout the Martis complex with primarily basalt flaked stone tool technologies used for small game hunting to supplement a largely plant-based diet.

Occurring in the Late Martis/Early Kings Beach complex (approximately 1,500-2,000 cal BP) is the appearance of bedrock mortars as acorn intensification became the primary subsistence strategy for most indigenous Californians. An additionally important development during this time was the use bow and arrow technology distinguished by small projectile points made from obsidian and basalt coinciding with an increase in big game hunting and territoriality amongst established hunter gatherer groups.

HISTORIC OVERVIEW

The 56-acre South Lake Tahoe Recreation Area is located within the former community of Al Tahoe. In 1907, Sacramentan Almerin Sprague purchased a 273-acre property with lakeside frontage after recouping from exhaustion at Lake Tahoe in the summer of 1906. His appreciation of the location, climate, and his desire to build his own summer home on the lake eventually lead to the purchase of the 273 acres with plans to create a summer resort community for city dwellers. In less than two years, Sprague constructed a pier, a cottage-plan motel called "Liberty Inn," an apartment house called "Rubicon Cottage," a store and post office, a steam plant for electricity and laundry, and an icehouse. The post office was designated as the Al Tahoe Post Office and from that point forward, the area around the burgeoning resort town was called Al Tahoe. The Al-Tahoe Company sold their real estate holdings to Los Angeles businessman W.J. Wallace in 1917.

Al Tahoe and other resort communities around Lake Tahoe continued to grow and thrive in the 1920s, the pace of which slowed during the Great Depression of the 1930s and during World War II but increased again in the post-World War II years. In 1945, Aram Harootunian purchased the Al Tahoe property and nearby parcels and subdivided new lots. Gaming regulations loosened in the 1950s and casinos were erected just across the state border in Nevada, and in 1956 the Heavenly Valley Ski Resort opened, both less than 2 miles east of Al Tahoe.

The 56-acre South Lake Tahoe Recreation Area was originally part of the Eldorado National Forest, the boundaries of which were formed in 1910 out of the Tahoe and Stanislaus national forests. The El Dorado County Board of Supervisors purchased 60 acres from the Forest Service just south of the south end of Lake Tahoe, including the 56-acre project site, in 1923 to establish a public campground. After purchase in 1923, the Forest Service, Board of Supervisors, and the State Automobile Association sought funds to build the campground and the Forest Service would operate the campground once completed. At some point the Lake Valley Community Club obtained ownership of the property, then a slightly smaller 56 acres, and donated the land back to El Dorado County in April 1959 to be used for recreational and educational purposes. Following the donation, the property was developed with a library, community hospital, recreation center, upgrades to the municipal campground, two public works facilities, and a county vector control office, which is collectively referred to as the South Lake Tahoe Recreation Area.

In November 1965, voters passed incorporation of the City of South Lake Tahoe by more than two-thirds majority. The newly incorporated city combined the communities of Tahoe Valley, Al Tahoe, Bijou, and Stateline over approximately 6 square miles and had a collective population of 8,000 to 10,000 residents. By 1970, the population of the City of South Lake Tahoe increased to nearly 13,000 and reached 21,000 in 2010. Today, the buildings constructed on the 56-acre South Lake Tahoe Recreation Area continue to serve recreational and educational purposes. The original library has since been repurposed into a local museum that moved a log cabin and toll house to the site, the community hospital was converted into a senior center, a new library was constructed in 1983, and a new ice rink was constructed in the early 2000s.

KNOWN RESOURCES

A California Historical Resources Information System (CHRIS) records search was performed at the North Central Information Center (NCIC File #ELD-21-22) to determine the extent to which the plan area had been previously surveyed, as well as the number and type of known cultural resources present within a 0.25-mile radius of the plan area. The CHRIS records search indicates that a total of eight prior cultural resource studies have been completed within the plan area

The CHRIS records search results indicated that no archaeological resources have been previously recorded in the plan area; one built environment feature was previously recorded within the plan area and three previously recorded historic-age resources were recorded within the 0.25-mile search radius. The previously recorded resource in the plan area is a portion of the Campground by the Lake. The three buildings (a caretaker's residence, garage, and storage shed) on the north end of the campground were evaluated and determined ineligible for listing in the National Register of Historic Places.

An archaeological pedestrian survey of the plan area was conducted on April 8, 2021. No archaeological resources were observed. An intensive survey of the built environment within the plan area was conducted on March 25, 2021. Ten historic-age (50 years or older) features were fully documented and evaluated against California Register of Historical Resources (CRHR) criteria. These built-environment features include:

- 3050 South Lake Tahoe Boulevard: South Lake Tahoe Senior Center, constructed 1956, 1987, 1991
- 3058 Lake Tahoe Boulevard: Lake Tahoe Historical Museum, consists of a 1959 building
- 3058 Lake Tahoe Boulevard: consists of a circa-1933 relocated cabin
- 3058 Lake Tahoe Boulevard: Osgood Toll House, consists of an 1859 relocated toll house
- 3062 Lake Tahoe Boulevard: City of South Lake Tahoe Art Building, constructed in 1950
- 3066 Lake Tahoe Boulevard: former Lake Tahoe South Shore Chamber of Commerce and Lake Tahoe Visitor Authority, constructed circa-1956
- 1150 Rufus Allen Boulevard: Campground by the Lake, containing 12 historic-age buildings and structures
- 1150 Rufus Allen Boulevard: Maintenance Yard, containing a historic-age Maintenance Shop
- 1160 Rufus Allen Boulevard: City of South Lake Tahoe Public Works Street Division Corporation Yard, constructed between 1952 and 1955
- 1170 Rufus Allen Boulevard: El Dorado County Vector Control, constructed in 1963

The evaluation concluded that only one building appears to meet CRHR criteria; the Osgood Toll House at the Lake Tahoe Historical Museum at 3058 Lake Tahoe Boulevard appears eligible for listing in the CRHR at the local level under Criterion 1 for its significant association with important events, the development of travel and recreation at Lake Tahoe, and under CRHR Criterion 3 at the state level because it embodies distinctive characteristics of a type, period, and method of construction as an example of a square-log constructed toll house. Therefore, the toll house is a historical resource for the purpose of CEQA.

3.5.2 Discussion

a) Cause a substantial adverse change in the significance of a historical resource pursuant to Section 15064.5?

56 Acres Master Plan

No impact. The cultural resources report identified one built environment feature, the Osgood Toll House located at the Lake Tahoe History Museum, which is eligible for listing in the CRHR; therefore, it is a resource under CEQA. No other built-environment features in the plan area were recommended as eligible. This building would not be demolished or altered as part of the Multigenerational Center project. Therefore, there would be **no impact** on historical resources.

Multigenerational Center Project

No impact. Construction of the Multigenerational Center would require removal of a portion of the existing Campground by the Lake (including tent cabins), relocation of an existing restroom at the campground, and the removal of two existing campground buildings associated with the original camp store. As described above, the Campground by the Lake and its buildings were evaluated for listing in the CRHR and determined to be not eligible. Therefore, these buildings are not resources under CEQA. The existing Recreation and Swim Complex is less than 45-years of age and therefore does not meet the criteria guidance for evaluation under the CRHR and is not considered a resource under CEQA. Therefore, the Multigenerational Center project would have **no impact** on historical resources.

b) Cause a substantial adverse change in the significance of an archaeological resource pursuant to Section 15064.5?

56 Acres Master Plan

Less than significant with mitigation incorporated. The cultural resources study determined that no prehistoric or historic-period archeological resources were found within the plan area, based on the NCIC records search and the pedestrian survey. Nevertheless, the possibility remains that archaeological materials could be encountered during construction-related ground disturbing activities. This impact would be potentially significant.

Mitigation Measure 3.5-1: Unanticipated Discoveries of Archaeological Resources

This mitigation measure applies to the 56 Acres Master Plan.

If a prehistoric archeological site (such as midden soils, stone tools, chipped stone, baked clay, or concentrations of shell or bone) or a historic-period archaeological site (such as structural features, concentrated deposits of bottles, or other historic refuse) is uncovered during grading or other construction activities, all ground-disturbing activity within 100 feet of the discovery shall be halted until a qualified archaeologist can assess the significance of the find. The City will be notified of the potential find and a qualified archaeologist shall be retained to investigate its significance. If the find is a prehistoric archeological site, the appropriate Native American group shall be notified, and Mitigation Measure 3.18-2 shall be implemented. Any previously undiscovered resources found during construction will be recorded on appropriate California Department of Parks and Recreation 523 forms and evaluated for significance under all applicable regulatory criteria. If the archaeologist determines that the find does not meet the CRHR standards of significance for cultural resources, construction may proceed.

If the find is determined to be significant by the qualified archaeologist (i.e., because the find is determined to constitute either an historical resource, a unique archaeological resource, or tribal cultural resource), the archaeologist shall work with the City to follow accepted professional standards such as further testing for evaluation or data recovery, as necessary. If artifacts are recovered from significant historic archaeological resources, they shall be housed at a qualified curation facility. The results of the identification, evaluation, and/or data recovery program for any unanticipated discoveries shall be presented in a professional-quality report that details all methods and findings, evaluates the nature and significance of the resources, and analyzes and interprets the results.

Significance after Mitigation

Implementation of Mitigation Measure 3.5-1 would reduce potential impacts to archaeological resources discovered during project construction activities to a less-than-significant level by requiring preservation options and proper curation if significant artifacts are recovered.

Multigenerational Center Project

Less than significant with mitigation incorporated. See discussion for 56 Acres Master Plan, above.

Mitigation Measure 3.5-2: Unanticipated Discovery of Archaeological Resources

This mitigation measure applies to the Multigenerational Center Project.

Implement Mitigation Measure 3.5-1.

Significance after Mitigation

Implementation of Mitigation Measure 3.5-1 would reduce potential impacts to archaeological resources discovered during project construction activities to a less-than-significant level by requiring preservation options and proper curation if significant artifacts are recovered.

c) Substantially disturb human remains, including those interred outside of formal cemeteries?

56 Acres Master Plan

Less-than-significant impact. There are no known cemeteries or burials in the plan area. However, because earthmoving activities associated with project construction would occur, there is potential to encounter buried human remains or unknown cemeteries in areas with little or no previous disturbance. California law recognizes the need to protect Native American human burials, skeletal remains, and items associated with Native American burials from vandalism and inadvertent destruction. The procedures for the treatment of Native American human remains are contained in California Health and Safety Code Section 7050.5 and California PRC Section 5097.

These statutes require that, if human remains are discovered, potentially damaging ground-disturbing activities in the area of the remains shall be halted immediately, and the County coroner shall be notified immediately. If the remains are determined by the coroner to be Native American, the Native American Heritage Commission (NAHC) shall be notified within 24 hours and the guidelines of the NAHC shall be adhered to in the treatment and disposition of the remains. Following the coroner's findings, the NAHC-designated Most Likely Descendant and the landowner shall determine the ultimate treatment and disposition of the remains and take appropriate steps to ensure that additional human interments, if present, are not disturbed. The responsibilities for acting upon notification of a discovery of Native American human remains are identified in PRC Section 5097.94.

Compliance with California Health and Safety Code Section 7050.5 and PRC Section 5097 would provide an opportunity to avoid or minimize the disturbance of human remains, and to appropriately treat any remains that are discovered. Therefore, this impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. See discussion for 56 Acres Master Plan, above.

3.5.3 Cumulative Impacts

The project would have no impact on historical resources, therefore there would be no cumulative impact and this issue is not discussed further. The geographic scope for the analysis of cumulative impacts to archaeological resources and human remains is the Lake Tahoe Basin, where archaeologists have developed a taxonomic framework describing patterns characterized by technology, particular artifacts, economic systems, trade, burial practices, and other aspects of culture.

Because all significant cultural resources are unique and nonrenewable members of finite classes, meaning there are a limited number of significant cultural resources, all adverse effects erode a dwindling resource base. The loss of any one archaeological site could affect the scientific value of others in a region because these resources are best understood in the context of the entirety of the cultural system of which they are a part. The cultural system is represented archaeologically by the total inventory of all sites and other cultural remains in the region. As a result, a meaningful approach to preserving and managing cultural resources must focus on the likely distribution of cultural resources, rather than on a single project or parcel boundary. Euro-American development in the Tahoe Basin since 1858 has resulted in an existing significant adverse effect on archaeological resources and human remains. Cumulative development, including projects described in Table 3.21-1, continues to contribute to the disturbance of cultural resources.

No known unique archaeological resources or human remains are located within the boundaries of the plan area; nonetheless, project-related earth-disturbing activities could damage undiscovered archaeological resources or human remains. Implementation of the Master Plan (including the Multigenerational Center project), in combination with other development in the region, could contribute to ongoing substantial adverse changes in the significance of unique archaeological resources resulting from urban development and conversion of natural lands. Cumulative development could result in potentially significant archaeological resource impacts.

Implementation of Mitigation Measure 3.5-1 and Mitigation Measure 3.5-2 would ensure that the Master Plan's and Multigenerational Center project's contribution to cumulatively significant archaeological resource impacts would not be considerable by requiring construction work to cease in the event of an accidental find and the appropriate treatment of discovered resources, in accordance with pertinent laws and regulations. With implementation of this mitigation measure, the Master Plan's contribution to these impacts would be offset. Further, cumulative development would be required to implement similar mitigation to avoid/reduce impacts to archaeological resources. Compliance with California Health and Safety Code Section 7050.5 and PRC Section 5097 would ensure that treatment and disposition of the remains occurs in a manner consistent with state guidelines and California Native American Heritage Commission guidance. Therefore, the Master Plan **would not have a considerable contribution** to any significant cumulative impact related to archaeological resources or human remains.

3.6 ENERGY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VI. Energy.				
Would the project:				
a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?	☐	☐	☒	☐
b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency?	☐	☐	☒	☐

3.6.1 Environmental Setting

PHYSICAL SETTING

Energy Types and Sources

California relies on a regional power system comprised of a diverse mix of natural gas, renewable, hydroelectric, and nuclear generation resources. One-third of energy commodities consumed in California is natural gas. In 2018, approximately 34 percent of natural gas consumed in the State was used to generate electricity. Large hydroelectric projects generated approximately 11 percent of the electricity used by the State, and renewable energy from solar, wind, small hydroelectric, geothermal, and biomass combustion generated 31 percent (California Energy Commission 2020).

Electrical service to the City of South Lake Tahoe is provided by Liberty Utilities and Pacific Gas and Electric (PG&E). Natural gas service is provided to the project site by Southwest Gas Corporation. In 2018, PG&E's base power plan's electricity was composed of 39 percent eligible renewable energy resources, as defined by California Energy Commission (CEC), (i.e., biomass combustion, geothermal, small-scale hydroelectric, solar, and wind), 13 percent large-scale hydroelectric resources, and 15 percent natural gas and other fuels (CEC 2019a).

STATE PLANS, POLICIES, LAWS, AND REGULATIONS

Warren-Alquist Act

The 1974 Warren-Alquist Act established the California Energy Resources Conservation and Development Commission, now known as the California Energy Commission (CEC). The act introduced state policy for siting power plants to reduce potential environmental impacts, and additionally sought to reduce demand for these facilities by directing CEC to develop statewide energy conservation measures to reduce wasteful, inefficient, and unnecessary uses of energy. Conservation measures recommended establishing design standards for energy conservation in buildings that ultimately resulted in the creation of the Title 24 Building Energy Efficiency Standards (California Energy Code), which have been updated regularly and remain in effect today. The act additionally directed CEC to cooperate with the Office of Planning and Research, the California Natural Resources Agency (CNRA), and other interested parties in ensuring that a discussion of wasteful, inefficient, and unnecessary consumption of energy is included in all environmental impact reports required on local projects.

State of California Energy Action Plan

CEC is responsible for preparing the State Energy Plan, which identifies emerging trends related to energy supply, demand, conservation, public health and safety, and the maintenance of a healthy economy. The current plan is the

2003 California Energy Action Plan (2008 update). The plan calls for the State to assist in the transformation of the transportation system to improve air quality, reduce congestion, and increase the efficient use of fuel supplies with the least environmental and energy costs. To further this policy, the plan identifies several strategies, including assistance to public agencies and fleet operators in implementing incentive programs for zero-emission vehicles and addressing their infrastructure needs; and encouragement of urban design that reduces vehicle miles traveled (VMT) and accommodates pedestrian and bicycle access (CEC 2019b).

Legislation Associated with Electricity Generation

The State has passed legislation requiring the increasing use of renewables to produce electricity for consumers. California utilities are required to generate 33 percent of their electricity from renewables by 2020 (SB X1-2 of 2011); 52 percent by 2027 (SB 100 of 2018); 60 percent by 2030 (also SB 100 of 2018); and 100 percent by 2045 (also SB 100 of 2018).

Senate Bill 350: Clean Energy and Pollution Reduction Act of 2015

The Clean Energy and Pollution Reduction Act of 2015 (SB 350) requires doubling of the energy efficiency savings in electricity and natural gas for retail customers through energy efficiency and conservation by December 31, 2030.

California Building Energy Efficiency Standards (Title 24, Part 6)

The energy consumption of new residential and nonresidential buildings in California is regulated by the State's Title 24, Part 6, Building Energy Efficiency Standards (California Energy Code). The California Energy Code was established by CEC in 1978 in response to a legislative mandate to create uniform building codes to reduce California's energy consumption and provide energy efficiency standards for residential and non-residential buildings. CEC updates the California Energy Code every 3 years with more stringent design requirements for reduced energy consumption, which results in the generation of fewer GHG emissions.

The 2019 California Energy Code was adopted by CEC on May 9, 2018 and applies to projects constructed after January 1, 2020. The 2019 California Energy Code is designed to move the State closer to its zero-net energy goals for new residential development. It does so by requiring all new residences to install enough renewable energy to offset all the electricity needs of each residential unit (CCR, Title 24, Part 6, Section 150.1(c)4). CEC estimates that the combination of mandatory on-site renewable energy and prescriptively required energy efficiency standards will result in a 53 percent reduction in new residential construction as compared to the 2016 California Energy Code. Non-residential buildings are anticipated to reduce energy consumption by 30 percent as compared to the 2016 California Energy Code primarily through prescriptive requirements for high-efficiency lighting (CEC 2018). The Energy Code is enforced through the local plan check and building permit process. Local government agencies may adopt and enforce additional energy standards for new buildings as reasonably necessary due to local climatologic, geologic, or topographic conditions, provided that these standards exceed those provided in the California Energy Code.

City of South Lake Tahoe General Plan

The city of South Lake Tahoe adopted the General Plan on May 17, 2011. Planning and zoning in the City of South Lake Tahoe is guided by the City's General Plan, which is implemented through joint Plan Area Statements and Community Plans adopted by the City and TRPA. The policies in this General Plan seek to encourage energy conservation that leads to lowering the carbon footprint of South Lake Tahoe. The following goals and policies would help in improving efficiency use of energy and reduce its wastage (City of South Lake Tahoe 2011).

GOAL LU-5: To revitalize and consolidate existing commercial uses while providing incentives and commodities for new resident- and visitor-serving commercial uses.

- **Policy LU-5.3:** Commercial Center Enhancement

  The City shall encourage the upgrade and/or expansion of existing commercial centers, including improvements to parking and landscaping areas; redesigns to accommodate bicycles, pedestrians, and transit facilities; and remodeling to include "green" technology and improve energy efficiency.

GOAL LU-9: To become a leader in "green" building technology, energy efficiency, emerging technologies, and sustainable development practices in the Lake Tahoe Basin.

- Policy LU-9.4: Energy Efficient City Buildings and Facilities

  The City shall incorporate energy efficiency into all City-owned and operated buildings and facilities.

GOAL PQP-1: To ensure the timely maintenance, expansion, and upgrade of public facilities and services for the entire community.

- Policy PQP-1.9: Comprehensive "Green" Infrastructure Strategies

  The City shall create comprehensive "green" infrastructure strategies to address sustainability objectives in the supply and management of energy, solid waste and materials, water, and wastewater.

GOAL PQP-10: To relocate and consolidate City-owned and operated public buildings while making them more energy efficient.

- Policy PQP-10.2: Energy Efficiency in City Buildings and Facilities

  The City shall incorporate energy efficiency standards into all City-owned and operated buildings and facilities.

GOAL NCR-6: To encourage energy conservation in new and existing developments in order to reduce greenhouse gas emissions, limit their effect on global warming, and to create a more sustainable environment.

- Policy NCR-6.1: Decreasing Reliance on Non-Renewable Energy Sources

  The City shall shift away from reliance on non-renewable sources, should emerging research show net environmental benefits in the use of biofuel.

- Policy NCR-6.3: Local, Clean, and Renewable Energy Support

  The City shall increase energy efficiency, reduce emissions and support local, clean, and renewable energy sources.

- Policy NCR-6.11: Solar Photovoltaic System Program

  The City shall promote voluntary participation in programs to increase the use of solar photovoltaic systems in new and existing residential, commercial, institutional, and public buildings.

- Policy NCR-6.14: EPA Energy Star Certified Appliances

  The City shall encourage the use of "EPA Energy Star" certified appliances (e.g., water heaters, swimming pool heaters, cooking equipment, refrigerators, furnaces and boiler units) for new private development and public facilities, where feasible.

City of South Lake Tahoe Climate Action Plan

In 2017, the City passed Resolution 2017-26, Establishing Renewable Energy and Carbon Emissions Reduction Goals. These goals include achieving 50 percent of municipal energy sources from renewable energy by 2025, 100 percent of municipal energy sources from renewable energy by 2032, and 100 percent community energy sources from renewable electricity by 2032. The City's first Climate Action Plan (CAP) was developed and adopted by City Council on October 20, 2020 and serves as a long-term plan to reduce greenhouse gas (GHG) emissions from community activities and improve the reliance on renewable energy, as well as prepare for the impacts of climate change. The goals and policies in the CAP are aligned with the goals and policies mentioned for the General Plan, above.

3.6.2 Discussion

a) Result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation?

56 Acres Master Plan

Less-than-significant impact. Thresholds that define when energy consumption is considered wasteful, inefficient, or unnecessary have not been established in federal or State law or in the State CEQA Guidelines. Future facilities built under the Master Plan would comply with Title 24 Energy Efficiency Standards, which would result in energy-efficient buildings. However, compliance with building codes does not adequately address all potential energy impacts during construction and operation. The construction activities associated with implementation of the Master Plan would increase energy consumption but would be temporary and short-term. Operation of the facilities built under the Master Plan would generate an increase in energy consumption from fuel consumption and electricity demand but would not be considered wasteful, inefficient, or unnecessary as the Master Plan is aligned with the City's General Plan and Bijou/Al Tahoe Community Plan for developing a civic and recreational center, reducing the reliance on automobile and improving movement of people, goods, and services.

Construction

Energy would be required to operate and maintain construction equipment and transport construction materials. The one-time energy expenditure required to construct the physical buildings and facilities and infrastructure associated with the proposed project would be non-recoverable. Most energy consumption would result from operation of off-road construction equipment and on-road vehicle trips associated with construction worker commute trips and vendor haul truck trips.

The energy consumption associated with proposed project construction was estimated by year using the California Emissions Estimator Model (CalEEMod) Version 2020.4.0 and off model calculations. Most of the construction-related energy consumption would be associated with off-road equipment and the transport of equipment and waste using on-road haul trucks for all phases of construction. An estimated 92,616 gallons of gasoline and 53,096 gallons of diesel fuel would be used during project construction as shown in Table 3.6-1. Refer to section 3.3, "Air Quality" for details about the methodology and Appendix A for assumptions and modeling results.

Table 3.6-1 Construction-Related Energy Consumption for the Master Plan

Construction Years	Gasoline (gal/year)	Diesel (gal/year)
2025	31,908	18,712
2026	33,829	18,203
2027	26,679	16,127
2028	201	54
Total (All Vehicle Types)	**92,616**	**53,096**

Note: gal/year = gallons per year

Source: Calculations by Ascent Environmental in 2021

The energy needs for project construction would be temporary and are not anticipated to require additional capacity or substantially increase peak or base period demands for electricity and other forms of energy. Associated energy consumption for construction would be typical of that associated with similar facilities in the area. Automotive fuels would be consumed to transport construction workers and materials to and from the project site. Energy would be required for construction elements and transport of construction materials. The energy expenditure required to construct the physical infrastructure associated with the project would be non-recoverable. Because the energy consumption related with the construction of the Master Plan would temporary and short-term, it would not be consumed in a wasteful, inefficient, or unnecessary manner when compared to other construction activity in the region. Therefore, the impact would be less than significant.

Operation

The Master Plan would increase energy consumption in the region relative to existing conditions. However, the new buildings would, at a minimum, comply with 2019 Title 24 Building Energy Efficiency Standards. Table 3.6-2 summarizes the estimated energy consumption associated with the first full year of operation in 2040. Energy consumption was estimated using CalEEMod Version 2020.4.0 and off model calculations, like the approach used for the air quality and GHG analyses (see Sections 3.3, "Air Quality," and 3.8, "Greenhouse Gas Emissions").

Table 3.6-2 Annual Operational Energy Consumption of Master Plan at Buildout (2040)

Energy Type	Annual Energy Consumption	Units
On-Site Operations		
Electricity (from the grid)	894	MWh/year
Natural Gas	14,575	therms/year
Transportation		
Gasoline	102,566	gal/year
Diesel	4,087	gal/year

Notes: MWh/year= megawatt-hours per year; gal/year = gallons per year

Source: Calculations performed by Ascent Environmental in 2021

Operation of the Master Plan would include the use of electricity for lighting and use of natural gas for heating. Gasoline and diesel would be used for transportation and delivery of goods to the project site. Energy use would also include the consumption of electricity associated with wastewater treatment and water well pumping, as well as automotive fuels used for solid waste removal.

Title 24 Building Energy Efficiency Standards for 2019 would be integrated into all facilities included in the Master Plan to reduce energy demands. In addition, the proposed project's gasoline and diesel consumption would be subject to state and federal regulations regarding fuel efficiency standards for vehicles. For these reasons, the Master Plan's consumption of electricity, natural gas, gasoline, and diesel would not be considered wasteful, inefficient, or unnecessary.

The City's CAP provides strategies to reduce grid source energy demand with the increased use of renewable energy sources (Measure RE-4). The electricity demand would be met by Liberty Utilities. Liberty Utility's energy sources are consistent with California's RPS program to increase procurement from eligible renewable energy resource to 33 percent of total procurement by 2020, 50 percent by 2026, and 60 percent by 2030. Liberty Utilities has a goal of achieving 75 percent renewable generation capacity by 2023 (Liberty Utilities 2020).

Hence, the Master Plan would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation and the impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. The Multigenerational Center would comply with Title 24 Energy Efficiency Standards, which would result in energy-efficient buildings. However, compliance with building codes does not adequately address all potential energy impacts during construction and operation. The construction activities associated with the Multigenerational Center would increase energy consumption but would be temporary and short-term. Operation of the Multigenerational Center would generate an increase in energy consumption from fuel consumption and electricity demand but would not be considered wasteful, inefficient, or unnecessary as the facility is aligned with the City's General Plan and Bijou/Al Tahoe Community Plan for developing a civic and recreational center, reducing the reliance on automobile and improving movement of people, goods, and services.

Construction

Energy would be required to operate and maintain construction equipment and transport construction materials. The one-time energy expenditure required to construct the physical buildings and facilities and infrastructure associated

with the proposed project would be non-recoverable. Most energy consumption would result from operation of off-road construction equipment and on-road vehicle trips associated with construction worker commute trips and vendor haul truck trips.

The energy consumption associated with construction of the Multigenerational Center was estimated by year using the California Emissions Estimator Model (CalEEMod) Version 2020.4.0 and off model calculations. Most of the construction-related energy consumption would be associated with off-road equipment and the transport of equipment and waste using on-road haul trucks for all phases of construction. An estimated 3,574 gallons of gasoline and 12,946 gallons of diesel fuel would be used during project construction as shown in Table 3.6-3. Refer to section 3.3, "Air Quality" for details about the methodology and Appendix A for assumptions and modeling results.

The energy needs for project construction would be temporary and are not anticipated to require additional capacity or substantially increase peak or base period demands for electricity and other forms of energy. Associated energy consumption for construction would be typical of that associated with similar facilities in the area. Automotive fuels would be consumed to transport construction workers and materials to and from the project site. Energy would be required for construction elements and transport of construction materials. The energy expenditure required to construct the physical infrastructure associated with the project would be non-recoverable. Since the energy consumption related with the construction of the project would temporary and short-term, it would not be consumed in a wasteful, inefficient, or unnecessary manner when compared to other construction activity in the region. Hence, the impact would be **less than significant**.

Table 3.6-3 Construction-Related Energy Consumption of the of Multigenerational Center

Construction Years	Gasoline (gal/year)	Diesel (gal/year)
2022	174	2,186
2023	3,400	10,760
Total (All Vehicle Types)	**3,574**	**12,946**

Note: gal/year = gallons per year

Source: Calculations by Ascent Environmental in 2021

Operation

The Multigenerational Center would increase energy consumption in the region relative to existing conditions. However, the new buildings would, at a minimum, comply with 2019 Title 24 Building Energy Efficiency Standards. Table 3-8 summarizes the estimated energy consumption associated with the first full year of operation. Energy consumption was estimated using CalEEMod Version 2020.4.0 and off model calculations, which was also used to estimate emissions for the air quality and GHG analyses. Refer to Section 3.3, "Air Quality," for details about the methodology and Appendix A for assumptions and modeling results. Table 3.6-4 shows the annual energy consumption of Master Plan for the buildout year (2024).

Table 3.6-4 Annual Operational Energy Consumption of Multigenerational Center for Buildout (2024)

Energy Type	Annual Energy Consumption	Units
On-Site Operations		
Electricity (from the grid)	260	MWh/year
Natural Gas	2,148	therms/year
Transportation		
Gasoline	3,493	gal/year
Diesel	107	gal/year

Notes: MWh/year = megawatt-hours per year; gal/year = gallons per year

Source: Calculations performed by Ascent Environmental in 2021

Operation of the project would include the use of electricity for lighting and use of natural gas for heating. Gasoline and diesel would be used for on-site auxiliary equipment, utility vehicles, and transportation. Energy use would also include the consumption of electricity associated with wastewater treatment and water well pumping, as well as automotive fuels used for solid waste removal.

Title 24 Building Energy Efficiency Standards for 2019 would be integrated into the project to reduce the project's energy demands. The Multigenerational Center would also install on-site photovoltaic system in some capacity to meet electricity demand as a compliance to the Leadership in Energy and Environmental Design (LEED) certification that the buildings would be applicable for. In addition, the proposed project's gasoline and diesel consumption would be subject to state and federal regulations regarding fuel efficiency standards for vehicles. For these reasons, the project's consumption of electricity, natural gas, gasoline, and diesel would not be considered wasteful, inefficient, or unnecessary. With implementation of LEED standards, the Multigenerational Center would also reserve 5 percent of the parking for electric vehicle charging, which would reduce the fuel consumption related to visiting the project site.

The City's CAP provides strategies to reduce grid source energy demand with the increased use of renewable energy sources (Measure RE-4). The electricity demand would be met by Liberty Utilities. Liberty Utility's energy sources are consistent with California's RPS program to increase procurement from eligible renewable energy resource to 33 percent of total procurement by 2020, 50 percent by 2026, and 60 percent by 2030. It has a goal of achieving 75 percent renewable generation capacity by 2023 (Liberty Utilities 2020).

Hence, the Multigenerational Center would not result in potentially significant environmental impact due to wasteful, inefficient, or unnecessary consumption of energy resources, during project construction or operation and this would be less than significant.

b) Conflict with or obstruct a state or local plan for renewable energy or energy efficiency

56 Acres Master Plan

Less-than-significant impact. The objective of the proposed Master Plan is to develop and operate a nationally renowned civic and recreational space for the residents and visitors in the South Lake Tahoe city. Another objective of the plan is to improve pedestrian and bicycle circulation and access, including enhancing pedestrian access throughout the plan area and the beach/lakefront area and connections to surrounding destinations and the regional network. Construction of facilities proposed in the Master Plan would increase the energy consumption but would be temporary. The buildings in the Master Plan would be either repurposed or replaced or newly constructed and these building would be designed to be more energy efficient than the existing buildings in the plan area. Hence, it would not conflict with the State or local plan for renewable energy or energy efficiency.

The Master Plan is proposed to develop a nationally renowned civic space for enjoyment of the visitors and the residents. The Master Plan would be consistent with the Bijou/Al Tahoe Community Plan and the General Plan related to reducing the dependency on automobile and improving the movement of people, goods, and services within the Bijou/Al Tahoe area, and Lake Tahoe region. The General Plan also provides policy direction for the expansion of recreation and civic center facilities within the Bijou/Al Tahoe Community Plan area. The Master Plan would enhance pedestrian and bicycle circulation and access throughout the plan area, including the beach/lakefront area and connections to surrounding destinations and the regional network. This would be consistent with the City's CAP strategy related to transportation, which promotes development of regional and local transit network for tourism, and improvement of the bike and pedestrian network. Also, the buildings proposed under the Master Plan would be designed to be energy efficient and hence would be more energy efficient than the existing buildings in the plan area. This would also be consistent with City CAP strategy related to building energy, which promotes efficient buildings and usage of renewable energy.

In addition, as discussed under item a), above, construction activities for the Master Plan would increase the consumption of diesel and gasoline used by the construction equipment, but this would be short term and temporary use of fuels. Hence, the Master Plan would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and the impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. The objective of the proposed Multigenerational Center is to develop and operate a nationally renowned civic and recreational space for the residents and visitors in the South Lake Tahoe city. Construction of the Center would increase the energy consumption but would be temporary. In addition, the Multigenerational Center would be designed to meet Leadership in Energy and Environmental Design standards. This would essentially result in adoption on measures that would promote energy efficiency and replacement of conventional sources with renewable energy.

The Multigeneration Center is proposed to be developed as the first stage in developing the civic and recreational hub in City of South Lake Tahoe. As the Multigenerational Center would be a part of the Master Plan, this would also be consistent with the Bijou/Al Tahoe Community Plan and the General Plan and would contribute to reducing dependency on automobile and improving the movement of people, goods, and services within the Bijou/Al Tahoe area, and Lake Tahoe region. The Multigenerational Center project also proposes to maintain pedestrian and bicycle circulation and access, including maintaining connections to surrounding destinations and the regional network. This would be consistent with the City's CAP strategy for transportation, which promotes development of regional and local transit network for tourism, and improvement of bike and pedestrian network. Also, the Multigenerational Center building would be designed to meet LEED standards and would aim to achieve a gold or platinum LEED certification. This would imply that the building would incorporate sustainable features like providing bike facilities, reserving 5 percent of the parking for electric vehicle charging, reducing outdoor and indoor water use, installing on site renewable energy systems, etc. Regardless of which sustainable features the building achieves, the building would be consistent with the City's CAP strategies for transportation, building energy, and water and solid waste.

In addition, as discussed under item a), above, the construction activities would increase the consumption of diesel and gasoline required by the construction equipment, but this would be short term and temporary. Hence, the Multigenerational Center would not conflict with or obstruct a state or local plan for renewable energy or energy efficiency and the impact would be less than significant.

3.6.3 Cumulative Impacts

The proposed project would result in less-than-significant impacts from the construction and operation of the proposed Master Plan and Multigeneration Center. The construction of facilities under the Master Plan and the Multigenerational Center would result in an increase in the energy consumption, but construction energy use would be temporary and short-term. The operations of both the Master Plan and the Multigenerational Center would also increase energy consumption in the form of electricity, natural gas, gasoline, and diesel fuel use. This would not have a substantial impact as both the buildings would be designed to be more energy efficient with respect to existing buildings in the plan area. In addition, the Multigenerational Center would aim to obtain a gold or a platinum LEED certification, which would indicate the building would reduce energy consumption even further than required by Title 24 Building Energy Efficiency Standards for 2019. Therefore, the Master Plan and Multigenerational Center would not combine with other cumulative projects identified in the cumulative project list (see Table 3.21-1) to result in wasteful, inefficient, or unnecessary consumption of energy resources or conflict with or obstruct a state or local plan for renewable energy or energy efficiency. Thus, the Master Plan and Multigenerational Center **would not make a considerable contribution** to a significant cumulative impact related to energy.

3.7 GEOLOGY AND SOILS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VII. Geology and Soils.				
Would the project:				
a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:				
i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)	☐	☐	☒	☐
ii) Strong seismic ground shaking?	☐	☐	☒	☐
iii) Seismic-related ground failure, including liquefaction?	☐	☐	☒	☐
iv) Landslides?	☐	☐	☒	☐
b) Result in substantial soil erosion or the loss of topsoil?	☐	☐	☒	☐
c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?	☐	☐	☒	☐
d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?	☐	☐	☒	☐
e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?	☐	☐	☐	☒
f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?	☐	☐	☒	☐

3.7.1 Environmental Setting

The Tahoe Basin was formed more than 2 million years ago by a combination of block faulting and damming of the outlet, at the north end of the basin, and by repeated episodes of volcanic activity and glacial advances (Saucedo 2005). The plan area is located in the southern portion of the Tahoe Basin, where Pleistocene-Holocene glacial till and moraines dominate the geology (Saucedo 2005). The existing site topography is flat with a gradual slope towards Lake Tahoe in the north. The plan area is located in a seismically active area. There are three major fault zones within the Tahoe Basin: the West Tahoe-Dollar Point Fault (the longest at 45 kilometers); the Stateline-North Tahoe Fault; and the Incline Village Fault (Brothers et al. 2009). Relative to the plan area, the West Tahoe-Dollar Point Fault is

located approximately 6 miles to the west and runs toward the north, the Stateline-North Tahoe Fault is approximately 11 miles to the north, and the Incline Village Fault is approximately 16 miles to the north. Recent studies indicate that all three of these faults have experienced large rupture events within recent geologic time (Dingler 2007). The nearest mapped Alquist-Priolo Earthquake Fault Zone is located along the Genoa Fault, approximately 5 miles east of the plan area (CGS 2021).

There is one soil type in the plan area: the Christopher-Gefo complex on 0-5 percent slopes (Table 3.7-1; NRCS 2021) which is a loamy coarse sand and gravelly coarse sand. This soil is not rated as a hydric soil. The Christopher-Gefo complex was formed from outwash derived from granodiorite (NRCS 2021). The depth to the water table is over 80 inches (NRCS 2021). The potential for expansive soil is low in the plan area. The erosion hazard is also low. All disturbed soil would be stabilized through ground cover or revegetation at project completion per TRPA Code Section 60.4 and Lahontan RWQCB Tahoe Construction General Permit requirements. Table 3.7-1 provides a summary of the soil map unit and relevant soil characteristics in the plan area.

Table 3.7-1 Soils in the Plan Area

Map Symbol	Soil Name	Soil Expansion Potential	Erosion Hazard[1]
7444	Christopher-Gefo complex 0-5 percent slopes	Low (1 percent linear extensibility)	0.10-0.15

[1] Erosion factors range from 0.02 to 0.69. Other factors being equal, the higher the value, the more susceptible the soil is to sheet and rill erosion by water.

Source: NRCS 2021

Soil liquefaction occurs when ground shaking from an earthquake causes a saturated sediment layer to lose strength and take on the characteristics of a fluid. Factors determining the liquefaction potential are soil type, the level and duration of seismic ground motions, the type and consistency of soils, and the depth to groundwater. Loose sands and peat deposits are susceptible to liquefaction, while clayey silts, silty clays, and clays deposited in freshwater environments are generally stable under the influence of seismic ground shaking (CGS 2008). Liquefaction poses a hazard to engineered structures. The loss of soil strength can result in bearing capacity insufficient to support foundation loads, increased lateral pressure on retaining or basement walls, and slope instability. The potential for liquefaction, or subsidence and lateral spreading is generally low for the plan area because of the depth to groundwater and relatively dense granular texture of the soils (NV5 2021).

The TRPA Bailey Land Capability System is used to classify the sensitivity of land in the Tahoe Basin. The Land Capability Districts (LCDs) range from 1 to 7, with 1 being the most environmentally sensitive and 7 being most suitable for supporting development. Most of the plan area is classified as LCD 7 man-modified, which is not considered sensitive land. The area adjacent to Lake Tahoe is classified as LCD 1b, one of the most sensitive land classifications. For land within LCD 7, 30 percent of the area is allowed to be covered (i.e., developed with impervious surfaces) and for lands within LCD 1b, 1 percent of the area is allowed to be covered. Existing and proposed coverage in the project area are shown in Table 3.7-2. The plan area currently exceeds the amount of coverage allowed under the TRPA Code. The location of proposed coverage at build-out of the Master Plan and associated the Multigenerational Center Project (Phase 1 of the Master Plan) is shown in Figure 3.7-1. With build out of the Master Plan there would be a net decrease in coverage in the plan area.

Table 3.7-2 Existing and Proposed Coverage in the Plan Area

Land Capability District (LCD)	Allowable Coverage	Plan Area (sq. ft.)	Allowable Coverage (sq. ft.)	Existing Coverage (sq. ft.)a	Proposed Coverage (sq. ft.)	Reduction/Increase in Coverage (sq. ft.)
1b	1%	15,200	152	2,724a	2,724	0
7	30%	2,493,406	748,021.8	1,148,836b (46%)	956,061 (38%)	-192,775
Total		**2,743,113**		**1,151,530**	**958,785**	**-192,775**

Note: sq. ft. = square feet; does not include any coverage associated with US 50

[a] The existing coverage includes an existing stair/ramp at Lakeview Commons that was not included in the TRPA-verified coverage calculation.

[b] This number includes 156,422 sq. ft. of soft coverage.

Source: Cardno 2021; compiled by Ascent Environmental, Inc in 2021

Source: data downloaded from California Department of Conservation in 2011

Figure 3.7-1 Proposed Land Coverage

3.7.2 Discussion

a) Directly or indirectly cause potential substantial adverse effects, including the risk of loss, injury, or death involving:

i) Rupture of a known earthquake fault, as delineated on the most recent Alquist-Priolo Earthquake Fault Zoning Map issued by the State Geologist for the area or based on other substantial evidence of a known fault? (Refer to California Geological Survey Special Publication 42.)

56 Acres Master Plan

Less-than-significant impact. The Alquist-Priolo Act (Public Resources Code Sections 2621– 2630) was passed in 1972 to mitigate the hazard of surface faulting to structures designed for human occupancy. The plan area is not located in an Alquist-Priolo Earthquake Fault Zone. The nearest mapped Alquist-Priolo Earthquake Fault Zone is located along the Genoa Fault, approximately 5 miles to the east of the plan area (CGS 2021). No known faults are mapped as crossing or trending towards the plan area; therefore, the potential for surface rupture at the site is considered low. Earthquakes centered on regional faults in the area, such as the West Tahoe Fault or Genoa Fault, would likely result in higher ground motion at the site than earthquakes centered on smaller faults that are mapped closer to the site. The buildings associated with the Master Plan would be designed in accordance with current seismic design standards included in the 2019 California Building Code Section 1613 and in accordance with American Society of Civil Engineers (ASCE) standards, specifically ASCE 7-10 *Minimum Design Loads for Buildings and Other Structures*. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. For the same reasons described above for the Master Plan, this impact would be less than significant.

ii) Strong seismic ground shaking?

56 Acres Master Plan

Less-than-significant impact. As indicated in item a-i), the plan area could experience seismic shaking due to its proximity to regional fault systems. However, the plan area is not located on a known fault and to avoid substantial adverse effects due to seismic shaking, the buildings associated with the Master Plan would be constructed in accordance with the 2019 California Building Code Section 1613 and with ASCE standards, specifically ASCE 7-10 *Minimum Design Loads for Buildings and Other Structures*. Therefore, impacts related to strong seismic shaking would be less than significant.

Multigenerational Center Project

Less-than-significant impact. For the same reasons described above for the Master Plan, this impact would be less than significant.

iii) Seismic-related ground failure, including liquefaction?

56 Acres Master Plan

Less-than-significant impact. Soil type, depth to groundwater, and intensity of seismic ground motions are factors that determine the potential for liquefaction. Loose sands and peat deposits are susceptible to liquefaction, while clayey silts, silty clays, and clays deposited in freshwater environments are generally stable under the influence of seismic ground shaking (CGS 2008). It is unlikely that liquefaction could occur in the plan area based on the soil type and the over 80-inch depth to groundwater. The proposed buildings in the Master Plan would be designed and constructed in accordance with the 2019 California Building Code Section 1613 and with ASCE standards that are intended to reduce the risk of injury or property damage from seismic hazards, including liquefaction. The 2019 California Building Code (CBC), states that all structures would be designed to resist earthquake motions in

accordance with ASCE standards, specifically ASCE 7-10 *Minimum Design Loads for Buildings and Other Structures*. Impacts associated with seismic-related ground failure, including liquefaction, would be less than significant.

Multigenerational Center Project

Less-than-significant impact. The lake terrace deposits underlying the plan area have a low potential for liquefaction (NV5 2021). For this reason and the reasons described above for the Master Plan, this impact would be less than significant.

iv) Landslides?

56 Acres Master Plan

Less-than-significant impact. A landslide or mudslide is the downhill movement of earth material under the force of gravity. The factors contributing to landslide potential are steep slopes, unstable terrain, and proximity to earthquake faults. The majority of the plan area is located in a relatively flat area that does not contain any steep slopes; therefore, it is not subject to landslides and there would be no impact. The cantilevered boardwalk associated with Lakeview Commons Phase 2 would be located on a steep slope directly adjacent to Lake Tahoe. After detailed design plans are prepared for the boardwalk, the City would obtain permits from TRPA and would be subject to subsequent environmental review by TRPA to review the proposed slope stabilization, erosion control, and stormwater infiltration BMPs prior to approval of the project to minimize the risk of landslide. Therefore, the impact would be less than significant.

Multigenerational Center Project

No impact. For the same reasons described above for the Master Plan, there would be no impact.

b) Result in substantial soil erosion or the loss of topsoil?

56 Acres Master Plan

Less-than-significant impact. Grading associated with implementation of the Master Plan could result in exposure of soil to wind and water erosion until the site is effectively stabilized or revegetated. To minimize erosion potential during construction, Lahontan RWQCB, TRPA and City of South Lake Tahoe would require implementation of best management practices (BMPs), a dewatering plan (if groundwater is encountered), and revegetation specifications. Temporary and permanent BMPs, as required by TRPA Code Section 60.4, minimize the potential for soil erosion and the potential for the loss of topsoil. Additionally, grading associated with the Master Plan would be required by the Lahontan RWQCB to obtain coverage under the Construction General Permit (Order No. R6T-2016-0010) and would require a storm water pollution prevention plan (SWPPP), which would document the erosion and sediment-control measures (e.g., management, structural, and vegetative controls) that would be required for all construction activities. Grading operations would be required to eliminate direct routes for conveying runoff to drainage channels, and specific measures would be required for stabilizing soils before winter (October 15). Implementation of the required BMPs and compliance with General Permit Order No. R6T-2016-0010 would reduce the potential for soil erosion and loss of topsoil to a less-than-significant level. The long-term potential for soil erosion from stormwater runoff is addressed in Section 3.10, "Hydrology and Water Quality." The cantilevered boardwalk associated with Lakeview Commons Phase 2 would be located on a steep slope directly adjacent to Lake Tahoe. After detailed design plans are prepared for the boardwalk, the City would obtain permits from TRPA and would need to comply with all previously stated regulations. Additionally, the boardwalk would be subject to subsequent environmental review by the TRPA to review the proposed slope stabilization, erosion control, and stormwater infiltration BMPs prior to approval of the project to minimize erosion.

Implementation of the Master Plan would not affect impervious area (coverage) in sensitive lands. It would result in a decrease in coverage of approximately 93,000 sq. ft. Even with a reduction in coverage, the proposed coverage within Land Capability District 7 would still exceed the percent allowable as determined by the TRPA; however, because there would be a net reduction in coverage, this impact would be less than significant when compared to existing conditions.

Multigenerational Center Project

Less-than-significant impact. Like the requirements described above for the Master Plan, the Multigenerational Center Project would also be required to implement temporary and permanent BMPs as required by the TRPA and the City of South Lake Tahoe. Because the project would disturb over 1 acre of soil, it would need to comply with the Construction General Permit (Order No. R6T-2016-0010), which requires a SWPPP that documents project specific erosion and sediment control measures. For these reasons, this impact would be less than significant.

The Multigenerational Center would result in 137,214 sq. ft. of coverage in Land Capability District 7. Because the Center is a part of the larger plan area, the percent of coverage on the parcel for just the Center coverage associated with the Multigenerational Center is included in the net change in coverage associated with the Master Plan. New coverage associated with construction of the Multigenerational Center would be offset by reductions in land coverage resulting from removal of the existing recreation center, El Dorado County vector control facilities, and a reduction in the coverage associated with the City public works maintenance yard, and campground. TRPA would verify all existing and proposed coverage, and confirm the Center complies with TRPA land coverage requirements (TRPA Code Chapter 30) prior to issuing a permit for the Center. While the Multigenerational Center would result in new coverage, that coverage would be offset by reductions elsewhere in the plan area and the coverage associated with the project would comply with TRPA Code requirements intended to avoid erosion resulting from the creation of land coverage. This impact would be less than significant.

c) Be located on a geologic unit or soil that is unstable, or that would become unstable as a result of the project, and potentially result in on- or off-site landslide, lateral spreading, subsidence, liquefaction, or collapse?

56 Acres Master Plan

Less-than-significant impact. As discussed in item a-iv), above, implementation of the Master Plan would not result in on- or off-site landslide. Linear extensibility of the soil in the plan area is 1.0 percent; therefore, the lateral spreading potential is very low (NRCS 2021). Subsidence is the motion of the surface of the earth as it shifts downward and is commonly caused by groundwater pumping. No groundwater pumping is proposed as part of the Master Plan that could result in subsidence. As discussed in item a-iii), above, it is unlikely that liquefaction could occur in the event of a large magnitude earthquake based on the soil type associated with the plan area. Collapsible soils are generally dry, low density, silty soils with high void space between the soil grains. The Christopher-Gefo complex soil present in the plan area is a loamy coarse sand and therefore is not likely to collapse. Section 1613 of the 2019 CBC states that all structures would be designed to resist earthquake motions in accordance with ASCE standards, specifically ASCE 7-10 *Minimum Design Loads for Buildings and Other Structures*. The project would comply with existing codes and requirements and impacts associated with unstable soils would be less than significant.

Multigenerational Center Project

Less-than-significant impact. A geotechnical report prepared for the Multigenerational Center concluded that the site is suitable for the proposed development and that no highly compressible or potentially expansive soil conditions were encountered (NV5 2021). For the same reasons described above for the Master Plan, this impact would be less than significant.

d) Be located on expansive soil, as defined in Table 18-1-B of the Uniform Building Code (1994, as updated), creating substantial direct or indirect risks to life or property?

56 Acres Master Plan

Less-than-significant impact. Linear extensibility can be used to determine the shrink-swell or expansive potential of soils. As discussed in item c), the linear extensibility of the soil in the plan area is 1.0 percent, and therefore the expansive potential of the soil is low (NRCS 2021). Risks to life or property related to expansive soils would be less than significant.

Multigenerational Center Project

Less-than-significant impact. A geotechnical report prepared for the Multigenerational Center stated that no potentially expansive soil conditions were encountered, and the site is suitable for the proposed development (NV5 2021). For this reason and the reasons described above for the Master Plan, this impact would be less than significant.

e) Have soils incapable of adequately supporting the use of septic tanks or alternative wastewater disposal systems where sewers are not available for the disposal of wastewater?

56 Acres Master Plan

No Impact. Implementation of the proposed Master Plan would not involve the use of septic tanks or alternative wastewater disposal systems. Therefore, no impact would occur.

Multigenerational Center Project

No impact. For the same reasons described above for the Master Plan, there would be no impact.

f) Directly or indirectly destroy a unique paleontological resource or site or unique geologic feature?

56 Acres Master Plan

Less-than-significant impact. Paleontological resources are evidence of once-living organisms preserved in the geologic record. They include both the fossilized remains of ancient plants and animals and the traces thereof (e.g., tracks, burrows, prints) that are more than 5,000 years old. There are no known paleontological resources or unique geologic features in the plan area or in the region. Surfaces in the Tahoe Basin were created by geologic uplift and generally have deep granitic bedrock and shallow surface soils. Because the region is not underlain with sedimentary rock formations (which are most likely to contain fossils), it is not likely to contain major paleontological resources. Because of the low likelihood of the plan area to contain paleontological resources, the impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. For the same reasons described above for the Master Plan, there would be a less-than-significant impact.

3.7.3 Cumulative Impacts

The cumulative context for geology and soils is the Tahoe Basin. Impacts related to seismic and other geologic and soils hazards are localized in nature and do not accumulate to cause broader environmental consequences. For example, implementation of the Master Plan components would not increase or decrease the effects of expansive soils on the adjacent parcel. Therefore, implementation of the proposed Master Plan and Multigenerational Center project would have no cumulative impact relative to unstable geology or expansive soils.

Ground disturbance in the areas has the potential to result in a cumulative impact due to erosion. The Master Plan and Multigenerational Center project and the cumulative projects listed in Table 3.21-1 would be required to comply with regulations set forth by the City, TRPA, and Lahontan RWQCB to minimize erosion. Implementation of the required erosion and sediment controls would prevent a significant increase in soil erosion. Therefore, implementation of the proposed Master Plan and Multigenerational Center project together with the cumulative projects listed in Table 3.21-1 would result in less-than-significant cumulative effects related to soil erosion or loss of topsoil and **would not be cumulatively considerable**.

The Bailey land classification system (Bailey 1974) provides guidance for land development within the Lake Tahoe Basin. This system directs development toward the most capable soils and protects more sensitive areas. Implementation of the proposed Master Plan and construction of the Multigenerational Center and many of the cumulative projects would create additional land coverage within the cumulative analysis area. However, all projects

within the Tahoe Basin are required to comply with TRPA land coverage regulations. Although development prior to the implementation of the Bailey land classification system resulted in an adverse cumulative condition relative to land coverage, TRPA's existing regulatory framework is structured to protect soil resources and reduce land coverage in sensitive LCDs. Implementation of the Master Plan would result in a reduction in 92,991 sq. ft. of coverage in the plan area compared to existing conditions. Therefore, the contribution of the Master Plan and Multigenerational Center project to cumulative land coverage impacts **would not be cumulatively considerable**.

3.8 GREENHOUSE GAS EMISSIONS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
VIII. Greenhouse Gas Emissions.				
Would the project:				
a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?	☐	☐	☒	☐
b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?	☐	☐	☒	☐

3.8.1 Environmental Setting

SCIENTIFIC BASIS OF GREENHOUSE GASES AND CLIMATE CHANGE

Certain gases in the earth's atmosphere, classified as greenhouse gases (GHGs), play a critical role in determining the earth's surface temperature. Solar radiation enters the earth's atmosphere from space. A portion of the radiation is absorbed by the earth's surface and a smaller portion of this radiation is reflected toward space. This absorbed radiation is then emitted from the earth as low-frequency infrared radiation. The frequencies at which bodies emit radiation are proportional to temperature. The earth has a much lower temperature than the sun; therefore, the earth emits lower frequency radiation. Most solar radiation passes through GHGs; however, infrared radiation is absorbed by these gases. As a result, radiation that otherwise would have escaped back into space is instead trapped, resulting in a warming of the atmosphere. This phenomenon, known as the greenhouse effect, is responsible for maintaining a habitable climate on earth.

Prominent GHGs contributing to the greenhouse effect are carbon dioxide (CO_2), methane, nitrous oxide, hydrofluorocarbons, perfluorocarbons, and sulfur hexafluoride. Human-caused emissions of GHGs in excess of natural ambient concentrations are believed to be responsible for intensifying the greenhouse effect and leading to a trend of unnatural warming of the earth's climate, known as global climate change or global warming. It is "extremely likely" that more than half of the observed increase in global average surface temperature from 1951 to 2010 was caused by the anthropogenic increase in GHG concentrations and other anthropogenic forcing (IPCC 2014:3, 5).

Climate change is a global problem. GHGs are global pollutants, unlike criteria air pollutants and toxic air contaminants, which are pollutants of regional and local concern. Whereas pollutants with localized air quality effects have relatively short atmospheric lifetimes (about one day), GHGs have long atmospheric lifetimes (one to several thousand years). GHGs persist in the atmosphere for long enough time periods to be dispersed around the globe. Although the exact lifetime of any particular GHG molecule is dependent on multiple variables and cannot be pinpointed, it is understood that more CO_2 is emitted into the atmosphere than is sequestered by ocean uptake, vegetation, and other forms of sequestration. Of the total annual human-caused CO_2 emissions, approximately 55 percent is sequestered through ocean and land uptakes every year, averaged over the last 50 years, whereas the remaining 45 percent of human-caused CO_2 emissions remains stored in the atmosphere (IPCC 2013:467).

The quantity of GHGs that ultimately result in climate change is not precisely known; but is enormous; no single project alone would measurably contribute to an incremental change in the global average temperature, or to global, local, or microclimates. From the standpoint of CEQA, GHG impacts to global climate change are inherently cumulative.

GREENHOUSE GAS EMISSION SOURCES

GHG emissions are attributable in large part to human activities associated with the transportation, industrial/manufacturing, utility, residential, commercial, and agricultural emissions sectors (CARB 2017a).

In California, the transportation sector is the largest emitter of GHGs, followed by electricity generation (CARB 2017a). Emissions of CO_2 are byproducts of fossil fuel combustion. Methane, a highly potent GHG, primarily results from off-gassing (the release of chemicals from nonmetallic substances under ambient or greater pressure conditions) and is largely associated with agricultural practices and landfills. Nitrous oxide is also largely attributable to agricultural practices and soil management. CO_2 sinks, or reservoirs, include vegetation and the ocean, which absorb CO_2 through sequestration and dissolution (CO_2 dissolving into the water), respectively, two of the most common processes for removing CO_2 from the atmosphere.

Assembly Bill 32, the California Global Warming Solutions Act of 2006

In September 2006, the California Global Warming Solutions Act of 2006, Assembly Bill (AB) 32, was signed into law. AB 32 establishes regulatory, reporting, and market mechanisms to achieve quantifiable reductions in GHG emissions and a cap on statewide GHG emissions. AB 32 requires that statewide GHG emissions be reduced to 1990 levels by 2020. AB 32 also requires that (a) the statewide greenhouse gas emissions limit remain in effect unless otherwise amended or repealed, (b) the statewide greenhouse gas emissions limit continue in existence and be used to maintain and continue reductions in emissions of greenhouse gases beyond 2020, and (c) [CARB] shall make recommendations to the Governor and the Legislature on how to continue reductions of greenhouse gas emissions beyond 2020 [California Health and Safety Code, Division 25.5, Part 3, Section 38551]. For the purposes of AB 32 and other legislation in California, GHGs are expressed in carbon-dioxide-equivalent (CO_2e). CO_2e is a measurement used to account for the fact that different GHGs have different potential to retain infrared radiation in the atmosphere and contribute to the greenhouse effect. This potential, known as the global warming potential of a GHG, is dependent on the lifetime, or persistence, of the gas molecule in the atmosphere.

Executive Order B-30-15

On April 20, 2015, EO B-30-15 established a California GHG reduction target of 40 percent below 1990 levels by 2030. The EO aligns California's GHG reduction targets with those of leading international governments such as the 28-nation European Union, which adopted the same target in October 2014. California is on track to meet or exceed the target of reducing GHG emissions to 1990 levels by 2020, as established in the California Global Warming Solutions Act of 2006 (Assembly Bill 32, discussed above). California's new emission reduction target of 40 percent below 1990 levels by 2030 sets the next interim step in the State's continuing efforts to pursue the long-term target expressed under Executive Order S-3-05 to reach the ultimate goal of reducing emissions 80 percent below 1990 levels by 2050. This is in line with the scientifically established levels needed in the U.S. to limit global warming below 2 degrees Celsius, the warming threshold at which major climate disruptions are projected, such as super droughts and rising sea levels.

Senate Bill 32 and Assembly Bill 197 of 2016

In August 2016, SB 32 and AB 197 were signed into law, which serve to extend California's GHG reduction programs beyond 2020. SB 32 amended the Health and Safety Code to include Section 38566, which contains language to authorize CARB to achieve a statewide GHG emission reduction of at least 40 percent below 1990 levels by no later than December 31, 2030. SB 32 codified the targets established by EO B-30-15 for 2030, which set the next interim step in the State's continuing efforts to pursue the long-term target expressed in EOs S-3-05 and B-30-15 of 80 percent below 1990 emissions levels by 2050.

Climate Change Scoping Plan and Updates

In December 2008, CARB adopted its first version of its Climate Change Scoping Plan, which contained the main strategies California will implement to achieve the mandate of AB 32 (2006) to reduce statewide GHG emissions to 1990 levels by 2020. In May 2014, CARB released and subsequently adopted the First Update to the Climate Change Scoping Plan to identify the next steps in reaching the goals of AB 32 (2006) and evaluate the progress made between 2000 and 2012 (CARB 2014). After releasing multiple versions of proposed updates in 2017, CARB adopted

the next version titled California's 2017 Climate Change Scoping Plan (2017 Scoping Plan) in December of that same year (CARB 2017b). The 2017 Scoping Plan indicates that California is on track to achieve the 2020 statewide GHG target mandated by AB 32 of 2006 (CARB 2017b:9). It also lays out the framework for achieving the mandate of SB 32 of 2016 to reduce statewide GHG emissions to at least 40 percent below 1990 levels by the end of 2030 (CARB 2017b). The 2017 Scoping Plan identifies the GHG reductions needed by each emissions sector.

The 2017 Scoping Plan also identifies how GHGs associated with proposed projects could be evaluated under CEQA (CARB 2017b:101-102). Specifically, it states that achieving "no net increase" in GHG emissions is an appropriate overall objective of projects evaluated under CEQA if conformity with an applicable local GHG reduction plan cannot be demonstrated. CARB recognizes that it may not be appropriate or feasible for every development project to mitigate its GHG emissions to zero and that an increase in GHG emissions because of a project may not necessarily imply a substantial contribution to the cumulatively significant environmental impact of climate change. The latest 2022 Scoping Plan Update aims to assess progress towards achieving the Senate Bill 32 2030 target and lay out a path to achieve carbon neutrality by no later than 2045.

Senate Bill X1-2, the California Renewable Energy Resources Act of 2011 and Senate Bill 350, the Clean Energy and Pollution Reduction Act of 2015

SB X1-2 of 2011 requires all California utilities to generate 33 percent of their electricity from renewables by 2020. SB X1-2 sets a three-stage compliance period requiring all California utilities, including independently owned utilities, energy service providers, and community choice aggregators, to generate 20 percent of their electricity from renewables by December 31, 2013; 25 percent by December 31, 2016; and 33 percent by December 31, 2020. SB X1-2 also requires the renewable electricity standard to be met increasingly with renewable energy that is supplied to the California grid from sources within, or directly proximate to, California. SB X1-2 mandates that renewables from these sources make up at least 50 percent of the total renewable energy for the 2011-2013 compliance period, at least 65 percent for the 2014–2016 compliance period, and at least 75 percent for 2016 and beyond. In October 2015, SB 350 was signed into law, which requires retail sellers and publicly owned utilities to procure 50 percent of their electricity from renewable resources by 2030.

El Dorado County Air Quality Management District

The El Dorado County Air Quality Management District (EDCAQMD) has not adopted specific thresholds of significance for analyzing GHG emissions under CEQA. At present, the Sacramento Metropolitan Air Quality Management District (SMAQMD) along with a committee of EDCAQMD and other regional air districts (i.e., Placer County Air Pollution Control District [PCAPCD], Feather River Air Quality Management District, and Yolo-Solano Air Quality Management District) use guidance from the California Air Pollution Control Officers Association to develop draft threshold concepts for evaluating project-level GHG emissions. The goal of the thresholds is to capture at least 90 percent of GHG emissions from new stationary sources and land development projects. The nearby PCAPCD has developed thresholds of significance for analyzing climate change impacts in consideration of this strategy. PCACPD has adopted a 10,000 and 1,100 metric tons of carbon dioxide equivalent ($MTCO_2e$) bright-line thresholds of significance for analyzing construction and operational emissions, respectively. In lieu of adopted thresholds of significance governed by EDCAQMD and Tahoe Regional Planning Agency (TRPA), these thresholds of significance were applied to the project.

City of South Lake Tahoe Climate Action Plan

In 2017, the City passed Resolution 2017-26, Establishing Renewable Energy and Carbon Emissions Reduction Goals. These goals include achieving 50 percent of municipal energy sources from renewable energy by 2025, 100 percent of municipal energy sources from renewable energy by 2032, and 100 percent of community energy sources from renewable electricity by 2032. The resolution additionally outlines the emissions reduction targets of a 50 percent reduction in community-wide emissions by 2030 and an 80 percent reduction in community-wide emissions by 2040. After establishing these reduction targets, the City completed a community-wide GHG emissions inventory to identify the emissions-generating sources in the community. This inventory was used as the foundation for developing the City's first Climate Action Plan, and City Council adopted it on October 20, 2020. It serves as a long-term plan to reduce GHG emissions from community activities and prepare for the impacts of climate change.

City of South Lake Tahoe General Plan

GOAL NCR-5: To incorporate air quality improvements and emission reductions directly with land use and transportation planning.

- **Policy NCR-5.12:** Greenhouse Gas Emission Reductions Support

  The City shall support local, TRPA, and statewide efforts to reduce emission of greenhouse gases linked to climate change.

- **Policy NCR-5.13:** Citywide Greenhouse Gas Emission Inventory

  The City shall develop a citywide greenhouse gas emission inventory and establish regular time frames for updating the inventory.

- **Policy NCR-5.14:** Greenhouse Gas Emission Reduction Target

  The City shall establish a greenhouse gas emission reduction target consistent with AB 32 and SB 375 reduction efforts.

- **Policy NCR-5.15:** Carbon Emission Analysis and Mitigation

  The City shall analyze and mitigate significant increases in carbon emissions during project review pursuant to the California Environmental Quality Act.

GOAL NCR-6: To encourage energy conservation in new and existing developments in order to reduce greenhouse gas emissions, limit their effect on global warming, and to create a more sustainable environment.

- **Policy NCR-6.1:** Decreasing Reliance on Non-Renewable Energy Sources

  The City shall shift away from reliance on non-renewable sources, should emerging research show net environmental benefits in the use of biofuel.

- **Policy NCR-6.2:** Greenhouse Gas Emission Reduction Strategy

  The City shall develop a comprehensive strategy to reduce GHG emissions and climate impacts.

- **Policy NCR-6.20:** Protection from Climate Change

  The City shall develop strategies to protect the city from the impacts of climate change, such as reduced snowpack, lower lake levels, and natural disasters.

Thresholds of Significance

Since EDCAQMD has not adopted a threshold of significance for evaluating operational emissions of GHGs within El Dorado County, it recommends using PCAPCD's bright-line threshold of significance of 10,000 $MTCO_2e$/year and a de minimis threshold of significance of 1,100 $MTCO_2e$/year to determine whether a project's construction and operations would have significant GHG impact. Using this threshold of significance, the project would result in a significant impact to climate change if:

- The operational GHG emissions exceeded the De Minimis Level of 1,100 $MTCO_2e$ for the full buildout year.
- The construction GHG emissions exceeded bright-line threshold of 10,000 $MTCO_2e$/year.

3.8.2 Discussion

a) Generate greenhouse gas emissions, either directly or indirectly, that may have a significant impact on the environment?

56 Acres Master Plan

Less-than-significant impact. The Master Plan would result in GHG emissions due to its construction and operational activities. EDCAQMD recommends using PCAPCD's thresholds of significance for evaluating the construction- and

operations-related GHG emissions. These thresholds are consistent with the GHG goals established by SB 32. The Master Plan would not exceed the threshold of significance of 10,000 and 1,100 $MTCO_2e$ per year for construction and operational activities. Thus, the proposed project would not generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment.

Temporary construction-related activities for the proposed Master Plan would include site preparation, grading, building construction, paving, and architectural coatings. The GHG emissions from construction activities were calculated by using CalEEMod Version 2020.4.0 with design information provided by the City of South Lake Tahoe and CalEEMod defaults where the information was not available. Due to the long-term horizon of the Master Plan, the exact timing and duration of construction activities for various land uses is unknown. Therefore, CalEEMod default phasing and duration of construction activities were used to provide an estimate of potential construction emissions. CalEEMod estimates a construction duration of four years based on the size and types of land uses under the Master Plan. Construction would likely occur up to 20 years, but construction emissions were conservatively modeled to occur over a four-year period to avoid understating the maximum annual emissions. Construction of other facilities under the Master Plan would be expected to occur after the construction of the Multigenerational Center; therefore, early 2025 was assumed as the start date for construction. It should be noted that this construction scenario is intended to provide a representative analysis of maximum construction emissions that could occur under a rapid buildout of the Master Plan although buildout of the Master Plan is planned to occur over a 20-year period. Therefore, full operation of the Master Plan was assumed to be in 2040.

Existing land uses in the plan area include an ice arena, campgrounds and cabins, historical museum, library, senior center, art center, chamber office, park and outdoor event spaces, maintenance yards, vector control facility, and fire training facility. Under the Master Plan, a new civic center and new outdoor recreation and event space would be constructed, and the fire training facility, vector control, and the two maintenance yards would be relocated. The modeling evaluates GHG emissions from construction of new and expanded uses in the plan area. The construction worker trip numbers and lengths were estimated based on CalEEMod default values. Table 3.8-1 summarizes the estimated construction-related annual GHG emissions over four years of construction. Refer to Appendix A of this document for detailed modeling assumptions and results.

Table 3.8-1 Summary of Greenhouse Emissions Associated with Master Plan Project Construction Activities ($MTCO_2e$/year)

Year	GHG Emissions
2025	795
2026	795
2027	644
2028	3
Maximum	**795**
PCAPCD Thresholds[1]	**10,000**
Exceed Thresholds?	**No**

Notes: PCAPCD = Placer County Air Pollution Control District, GHG = greenhouse gas, $MTCO_2e$ = metric tons of carbon dioxide equivalents

[1] EDCAQMD does not have an adopted threshold for GHG emissions but recommends using the PCAPCD Threshold of Significance of 10,000 $MTCO_2e$/year.

Source: Modeled by Ascent Environmental, Inc. in 2021

As shown in Table 3.8-1, maximum annual GHG emissions would reach 795 $MTCO_2e$/year, which would be well below the applicable emissions thresholds of 10,000 $MTCO_2e$/year.

The Master Plan would also result in GHG emissions from operational activities from new and expanded land uses. Operations would result in mobile-source GHG emissions associated with vehicle trips to and from the project (i.e., project-generated vehicle miles traveled [VMT]); area-source emissions from the operation of landscape maintenance

equipment; water-source emissions from water use and the conveyance and treatment of wastewater; and waste-source emissions from the transport and disposal of solid waste.

The daily VMT in the traffic analysis shows the change in VMT from the existing uses and was estimated as 1,176 net daily VMT for both the Master Plan and Multigenerational Center. Refer to Table 3.17-1 in Section 3.17, "Transportation," for a breakdown of net change in VMT by different land uses. Table 3.8-2 provides a summary of operational emissions estimated for the proposed Master Plan. Refer to Appendix A for a detailed description of all calculations, model runs, and assumptions used to support the modeling. As shown in Table 3.8-2, annual GHG emissions would reach 504 $MTCO_2e$/year, which would be well below the applicable emissions threshold of 1,100 $MTCO_2e$/year.

Since operation and construction of the Master Plan would result in annual GHG emissions below the applicable thresholds, the impact would be less than significant.

Table 3.8-2 Summary of Annual Greenhouse Gas Emissions Associated with Master Plan Project Operation ($MTCO_2e$/year)

Operational Source	GHG Emissions
Area	<0.1
Energy	135
Mobile	193
Waste	78
Water	79
Total Annual Emissions	**485**
Applicable Thresholds[1]	**1,100**
Exceed Thresholds?	**No**

Notes: PCAPCD = Placer County Air Pollution Control District, GHG = greenhouse gas, $MTCO_2e$ = metric tons of carbon dioxide equivalents

[1] EDCAQMD does not have an adopted threshold for GHG emissions but recommends using PCAPCD's Threshold of Significance of 1,100 $MTCO_2e$/year.

Source: Modeled by Ascent Environmental, Inc. in 2021

Multigenerational Center Project

Less-than-significant impact. Temporary construction-related activities for the proposed Multigenerational Center would include site preparation, grading, building construction, paving, and architectural coatings. GHG emissions from construction activities were calculated using CalEEMod Version 2020.4.0 with design assumptions provided by the City of South Lake Tahoe and CalEEMod defaults where the information was not available. The construction start date for the Multigenerational Center would be in early 2022. Demolition and site preparation would occur in 2022, and building construction, paving, and architectural coatings would be completed in 2023. Full operation of the Multigenerational Center would begin 2024. The existing Recreation and Swim Complex would eventually be demolished as part of the Master Plan, but its recreation uses would be moved to the new Multigenerational Center as soon as the Center is operational. The construction worker trip numbers and lengths are assumed as CalEEMod defaults. Table 3.8-3 summarizes the estimated construction-related annual GHG emissions over a year of the construction period. Refer to Appendix A of this document for detailed modeling results.

As shown in Table 3.8-3, maximum annual GHG emissions would reach 240 $MTCO_2e$/year, which would be well below the applicable emissions thresholds of 10,000 $MTCO_2e$/year.

The Multigenerational Center would also result in GHG emissions from its operational activities. Operational emissions would result from mobile-sources associated with vehicle trips to and from the project (i.e., project-generated VMT); area-source emissions from operation of landscape maintenance equipment; energy-source emissions from natural gas and electricity; water-source emissions from water use and the conveyance and treatment of wastewater; and waste-source emissions from the transport and disposal of solid waste.

Table 3.8-3 Summary of Greenhouse Emissions Associated with Multigenerational Center Project Construction Activities ($MTCO_2e$/year)

Year	GHG Emissions
2022	35
2023	240
Maximum	240
SMAQMD Thresholds[1]	10,000
Exceed Thresholds?	No

Notes PCAPCD = Placer County Air Pollution Control District, GHG = greenhouse gas, $MTCO_2e$ = metric tons of carbon dioxide equivalents

[1] EDCAQMD does not have an adopted threshold for GHG emissions but recommends using PCAPCD's Threshold of Significance of 10,000 $MTCO_2e$/year.

Source: Modeled by Ascent Environmental, Inc. in 2021

The daily VMT for Multigenerational Center was estimated to be 796. Refer to Table 3.17-1 in Section 3.17, "Transportation" for the breakdown of net change in VMT by different land uses. Table 3.8-4 provides a summary of operational emissions for the proposed Multigenerational Center. Refer to Appendix A for a detailed description of all calculations, model runs, and assumptions used to support the modeling. As shown in Table 3.8-4, annual GHG emissions would reach 276 $MTCO_2e$/year, which would be well below the applicable emissions threshold of 1,100 $MTCO_2e$/year.

Table 3.8-4 Summary of Annual Greenhouse Gas Emissions Associated with Multigenerational Center Operation ($MTCO_2e$/year)

Operational Source	GHG Emissions
Area	<0.1
Energy	75
Mobile	54
Waste	184
Water	12
Total Annual Emissions	326
Applicable Thresholds[1]	1,100
Exceed Thresholds?	No

Notes: PCAPCD = Placer County Air Pollution Control District, GHG = greenhouse gas, $MTCO_2e$ = metric tons of carbon dioxide equivalents

[1] EDCAQMD does not have an adopted threshold for GHG emissions but recommends using PCAPCD's Threshold of Significance of 1,100 $MTCO_2e$/year.

Source: Modeled by Ascent Environmental, Inc. in 2021

Because operation and construction of the Multigenerational Center would result in annual GHG emissions below the applicable threshold and it would not conflict with State or local policies for reducing GHG emissions, the impact would be less than significant.

b) Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of greenhouse gases?

Master Plan Project

Less-than-significant impact. The Master Plan proposes to build facilities to promote recreational activities in the area. As described in item a), above, the GHG emissions would not exceed PCAPCD's threshold of significance, as recommended by EDCAQMD. Because PCAPCD's threshold of significance is based on the State's SB 32 2030 goal, the Master Plan would not interfere with State's GHG reduction goals.

The Master Plan is consistent with South Lake City's General Plan and Bijou/Al Tahoe Community Plan and the underlying goal of reducing the dependency on automobile and improving the movement of people, goods, and services within the Bijou/Al Tahoe area, and Lake Tahoe region. The Master Plan also commits to improving pedestrian and bicycle circulation and access, including pedestrian access throughout the plan area and the beach/lakefront area and connections to surrounding destinations and the regional transportation network. The improvement in the pedestrian and bike access would also reduce the dependency on the automobiles and would reduce the GHG emissions from automobile use associated with the Master Plan. The buildings proposed under the project would be designed to current building codes and hence would be more energy efficient than the buildings built earlier in that area. This would help in creating more sustainable infrastructure in the area and would be consistent with the City of South Lake Tahoe's Climate Action Plan's building energy, transportation, water and solid waste goals. Hence, the Master Plan's construction and operation activities would not conflict with the State plan, policy, or regulation adopted for the purpose of reducing the emissions of greenhouse gases. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. The Multigenerational Center proposes to build a recreational center with aquatics facilities to promote recreational activities in the area. The proposed project would generate GHG emissions due to its construction and operation activities. As mentioned in item a), above, the GHG emissions would not exceed PCAPCD's threshold of significance. Since PCAPCD's threshold of significance is consistent with the State's SB 32 2030 goal, the project would not interfere with State's carbon reduction goal.

The Multigenerational Center project would be consistent with South Lake City's General Plan and Bijou/Al Tahoe Community Plan and their goal of reducing the dependency on automobile and improving the movement of people, goods, and services within the Bijou/Al Tahoe area and Lake Tahoe region. The reduction in dependency on the automobile would help in reducing the GHG emission associated with it. The project also commits to improving pedestrian and bicycle circulation and access, including pedestrian access throughout the plan area and the beach/lakefront area and connections to surrounding destinations and the regional network. The improvement in the pedestrian and bike access would also reduce the dependency on the automobiles and would reduce the GHG emissions from automobile use associated with the Multigenerational Center. The building proposed under the Multigenerational Center would aim to achieve gold or platinum LEED certification and would include sustainable features like providing bike facilities, reserving 5 percent of the parking for electric vehicle charging, reducing outdoor and indoor water use, installing on site renewable energy systems, etc. The incorporation of sustainable features into the building design would help to reduce the overall GHG emitted from operation of the Multigenerational Center. This would also be consistent with the City of South Lake Tahoe's Climate Action Plan's building energy, transportation, water, and solid waste goals. Thus, the project's construction and operation activities would not conflict with State plans, policies, or regulations adopted for the purpose of reducing GHG emissions. This impact would be less than significant.

3.8.3 Cumulative Impacts

Impacts from GHGs are inherently cumulative from the standpoint of CEQA. As discussed under item a), above, annual construction GHG emissions for the Master Plan and Multigenerational Center would be well below the applicable emissions thresholds of 10,000 $MTCO_2e$/year. Furthermore, Master Plan and Multigenerational Center operational GHG emissions would not exceed the most applicable mass emission thresholds of 1,100 $MTCO_2e$/year, which was developed to show consistency with the GHG emissions reduction targets in SB 32. Both the Master Plan and the Multigenerational Center would also be consistent with State and local plans and policies to reduce GHG emissions. Therefore, for the above-mentioned reasons, the proposed project's construction and operational GHG emissions **would not result in a considerable contribution** to a cumulative impact related to GHG emissions.

3.9 HAZARDS AND HAZARDOUS MATERIALS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
IX. Hazards and Hazardous Materials.				
Would the project:				
a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?	☐	☐	☒	☐
b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?	☐	☒	☐	☐
c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?	☐	☐	☒	☐
d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?	☐	☒	☐	☐
e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?	☐	☐	☐	☒
f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?	☐	☐	☒	☐

3.9.1 Environmental Setting

The plan area currently includes a parks maintenance facility within the campground and City public works maintenance yard located northwest of the ice arena. The property is used as a maintenance and parking facility for vehicles used in road maintenance and improvement including snowplows, wheel loaders, and dump trucks. These facilities use and store the types of hazardous materials typical of a municipal maintenance facility, such as fuel, oil, paint, solvents, and household cleaners. Currently, an aboveground storage tank for diesel fuel is located at the Public Works maintenance yard. The El Dorado County Vector Control Facility stores pesticides. Hazardous materials that are stored at the Recreation and Swim Complex include pool maintenance chemicals and household cleaners.

Several buildings that are proposed for removal as part of the Master Plan were constructed prior to 1978 and, thus, have the potential to contain asbestos-containing building materials and lead-based paint. Construction of the

building at the public works maintenance yard was completed by 1955. The maintenance shop building at the parks maintenance yard was built in 1962 and the vector control building was completed by 1963. The Recreation and Swim Complex was constructed in 1975 (PaleoWest 2021).

HAZARDOUS WASTE SITES

Based on a June 17, 2021 search of the Geo Tracker database maintained by the State Water Resources Control Board (SWRCB) and the Envirostor database maintained by the California Department of Toxic Substances Control (DTSC), two records of sites potentially containing hazardous materials were identified within or in proximity to the plan area.

Envirostor records indicate that pesticide-contaminated flooring of a pesticide shed at the vector control facility in the plan area was removed from the site in 1987, and that the site clean-up order was rescinded. The potential for soil contamination is indicated, but specific contaminants are not identified (DTSC 2021).

A Leaking Underground Storage Tank site associated with the former Express Gas/Pioneer Center was located approximately 220 feet west of the plan area, at 3101 Harrison Avenue. Records indicate that soil contamination with diesel occurred. Cleanup for the site was completed and the case was closed in 1991 (SWRCB 2021). Because this site was cleaned up and no off-site concerns related to soil or groundwater contamination were identified, including within the plan area, this site is not discussed further in the analysis.

SCHOOLS

There are three schools within 0.25 mile of the plan area. The Saint Theresa Catholic School, Tahoe Parents Nursery School, and South Lake Tahoe Middle School are all located approximately 550 feet south of the plan area, adjacent to Lake Tahoe Boulevard. A fourth school, the Bijou Community School, is located approximately 0.7 mile east of the plan area. No schools are located within the plan area.

AIRPORTS

The Lake Tahoe Airport is located approximately 2.6 miles southwest of the plan area, east of the portion of US 50 also known as Emerald Bay Road. No private airstrips are observed in proximity to the plan area.

EMERGENCY RESPONSE AND EVACUATION PLANS

The City's draft All Hazards Community Evacuation Plan (El Dorado County Sheriff, Office of Emergency Services 2021) was prepared in collaboration with the El Dorado County Sheriff, Governor's Office Emergency Services (CAL OES), California Highway Patrol (CHP), California Department of Forestry and Fire Protection (CAL FIRE), FireSafe Council, and other agencies and stakeholders. The City identifies US 50 as a primary evacuation route serving the plan area (City of South Lake Tahoe 2021). Primary and secondary temporary refuge centers are identified at the CVS pharmacy location on Lake Tahoe Boulevard east of the plan area, and at Lake Tahoe Middle School located south of the plan area.

WILDLAND FIRE HAZARDS

The Tahoe region is at a high risk of wildfire spread because of the climate, steep topography, and high level of available fuel. Fire Hazard Severity Zones (FHSZs) are mapped by CAL FIRE for the entire state. FHSZs are based on an evaluation of fuels, fire history, terrain, housing density, and occurrence of severe fire weather and are intended to identify areas where urban fires could result in catastrophic losses. FHSZs are categorized as: Moderate, High, and Very High. The plan area is located within a Very High FHSZ within a Local Responsibility Area (LRA) (CAL FIRE 2009).

MANAGEMENT OF HAZARDOUS MATERIALS

Federal laws require planning to ensure that hazardous materials are properly handled, used, stored, and disposed of, and if such materials are accidentally released, to prevent or mitigate injury to health or the environment. The U.S. Environmental Protection Agency (EPA) is the agency primarily responsible for enforcement and implementation of federal laws and regulations pertaining to hazardous materials. Applicable federal regulations pertaining to hazardous materials are primarily contained in CFR Titles 29, 40, and 49. Hazardous materials, as defined in the CFR, are listed in 49 CFR 172.101. In California, both federal and state community right-to-know laws are coordinated through Cal OES. The federal law, Superfund Amendment and Reauthorization Act Title III or Emergency Planning and Community Right-to-Know Act, described above, encourages, and supports emergency planning efforts at the state and local levels and to provide local governments and the public with information about potential chemical hazards in their communities. Because of the community right-to-know laws, information is collected from facilities that handle (e.g., produce, use, store) hazardous materials above certain quantities.

If a contractor uses or plans to use hazardous materials at levels that reach applicable state (Chapter 6.95 of the California Health and Safety Code) and/or federal thresholds, businesses are required to prepare a Hazardous Materials Business Plan, which would include hazardous materials and hazardous waste management procedures and emergency response procedures, including emergency spill cleanup supplies and equipment. The plan is submitted to the administering agency, in this case the El Dorado County Department of Environmental Management, Hazardous Waste Division (Certified Unified Program Agency [CUPA]), to implement and enforce.

The DTSC, a division of the California Environmental Protection Agency, has primary regulatory responsibility over hazardous materials in California, working in conjunction with EPA to enforce and implement hazardous materials laws and regulations.

TRANSPORT OF HAZARDOUS MATERIALS

The U.S. Department of Transportation regulates transport of hazardous materials between states and is responsible for protecting the public from dangers associated with such transport. The federal hazardous materials transportation law, 49 U.S. Code (USC) 5101 et seq. is the basic statute regulating transport of hazardous materials in the United States.

The State of California has adopted U.S. Department of Transportation (USDOT) regulations for the movement of hazardous materials originating within the state and passing through the state; state regulations are contained in 26 California Code of Regulations (CCR). State agencies with primary responsibility for enforcing state regulations and responding to hazardous materials transportation emergencies are the CHP and the California Department of Transportation (Caltrans). Together, these agencies determine container types used and license hazardous waste haulers to transport hazardous waste on public roads.

WORKER SAFETY

The federal Occupational Safety and Health Administration (federal OSHA) is the agency responsible for assuring worker safety in the handling and use of chemicals identified in the Occupational Safety and Health Act of 1970 (Public Law 91-596, 9 USC 651 et seq.). OSHA has adopted numerous regulations pertaining to worker safety, contained in CFR Title 29. These regulations set standards for safe workplaces and work practices, including standards relating to the handling of hazardous materials.

The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing workplace safety regulations within the state. Cal/OSHA standards are typically more stringent than federal OSHA regulations and are presented in Title 8 of the CCR. Cal/OSHA conducts on-site evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.

3.9.2 Discussion

a) Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials?

56 Acres Master Plan

Less-than-significant impact. Implementation of the Master Plan would include construction of new facilities throughout the plan area (e.g., Lakeview Commons Phase 2 boardwalk, Civic Center, outdoor event space, Main Street, share-use paths, nature and adventure play area) and would include demolition and removal or relocation of some facilities (e.g., campground, vector control building, Park maintenance facility, Public Works maintenance yard, Recreation and Swim Complex).

Construction of the new Master Plan facilities would require tree removal, paving and grading activities, and use of motorized heavy construction equipment and vegetation removal equipment that requires hazardous and flammable materials such as fuels and lubricants. Hazardous materials that may be used during construction include fuels (such as gasoline and diesel), lubricant, paint, and asphalt and pavement. Use and storage of hazardous materials during operation and maintenance of the recreational facilities and land uses proposed as part of the Master Plan would be similar to those used under existing conditions and include household cleaners, fertilizers, and pesticides. However, relocation of the vector control building, park maintenance facility, and public works maintenance yard outside of the plan area would result in the removal of uses in the plan area that use and store hazardous materials, such as fuel, oil, paint, solvents, and pesticides.

Hazards and hazardous materials are regulated by a number of federal, state, and local agencies, including the federal OSHA, USDOT, Cal/OSHA, DTSC, SWRCB, CHP, Caltrans, and El Dorado County Environmental Management Department (EDCEMD). Regulations that would minimize potential hazards and hazardous materials impacts associated with implementation of the Master Plan include:

- OSHA has adopted numerous regulations pertaining to worker safety, contained in Title 29 of the Code of Federal Regulations (29 CFR). These regulations set standards for safe workplaces and work practices, including standards relating to the handling of hazardous materials and those required for excavation and trenching.
- Cal/OSHA assumes primary responsibility for developing and enforcing workplace safety regulations in California. Cal/OSHA standards, which typically are more stringent than federal OSHA regulations, are presented in Title 8 of the California Code of Regulations (8 CCR). Cal/OSHA conducts onsite evaluations and issues notices of violation to enforce necessary improvements to health and safety practices.
- Under the Resource Conservation and Recovery Act of 1976 (RCRA), DTSC has the authority to implement permitting, inspection, compliance, and corrective action programs to ensure that people who manage hazardous waste follow state and federal requirements. The Hazard Communication Standard defined in 29 CFR Part 1910 requires that workers be informed of the hazards associated with the materials they handle. USDOT has also developed regulations (10 CFR and 49 CFR) pertaining to the transport of hazardous substances and hazardous wastes by all modes of transportation.
- California has adopted USDOT regulations for the movement of hazardous materials originating within the state and passing through the state; state regulations are contained in 26 CCR. State agencies with primary responsibility for enforcing state regulations and responding to hazardous materials transportation emergencies are CHP and Caltrans. Together, these agencies determine container types used and license hazardous waste haulers to transport hazardous waste on public roads.
- The project falls within the jurisdiction of the Construction Stormwater General Permit for the Lake Tahoe Basin issued in March 2016 (Order No. R6T-2016-0010), as further described under Section 3.7.1, "Environmental Setting," in Section 3.7, "Geology and Soils." Section 402 of the CWA establishes the National Pollutant Discharge Elimination System (NPDES) permit program to regulate discharges of pollutants into waters of the United States. The NPDES permit and Construction Stormwater General Permit require that permit registration documents be filed for construction projects with greater than 1 acre of disturbance. The documents must include a notice of

intent and a SWPPP that identifies proposed best management practices and includes a site-specific construction site monitoring and reporting plan developed by a Qualified SWPPP Developer. Although a major focus of the SWPPP is managing stormwater on the construction site, it also must address proper use and storage of hazardous materials, spill prevention and containment, and cleanup and reporting of any hazardous materials releases if they do occur.

- EDCEMD is responsible for promoting a safe and healthy environment in El Dorado County and for enforcing hazardous waste laws and regulations at a local level. EDCEMD, as the local CUPA, monitors the proper use, storage, and cleanup of hazardous materials; monitoring wells; removal of leaking USTs; and permits for the collection, transport, use, or disposal of refuse.

Project construction and operation would also be required to implement and comply with these federal, state, and local regulatory requirements and manufacturer's instructions related to hazardous materials to reduce the potential for exposure of the public or environment to hazards resulting from routine use, storage, or transport of hazardous materials or from accidental release or upset. These existing regulations specify mandatory and prescriptive actions about how to fulfill the regulatory requirements as part of the project definition, leaving little discretion in their implementation.

Construction of any of the facilities proposed as part of the Master Plan that would disturb an area greater than 1 acre would be required to prepare and implement a SWPPP (see b) under Section 3.7.2 in Section 3.7, "Geology and Soils"). Implementation of the SWPPP would contain stormwater onsite for infiltration and/or treatment, which would prevent potential accidental releases of hazardous materials off-site. The required TRPA permit would also include best management practices to prevent releases of hazardous materials and contain and clean up any accidental releases that might occur during construction activities (such as rupture of a hydraulic line on a piece of equipment releasing hydraulic fluid).

The level of use of hazardous materials in construction and operation of the Master Plan would be typical for recreation and public service land uses, some existing uses and storage of hazardous materials would be relocated offsite reducing the use and storage of hazardous materials in the plan area, and the Master Plan would be required to implement and comply with existing federal, state, TRPA, and local hazardous materials regulations. For these reasons, the Master Plan would not create significant hazards to the public or environment through the routine transport, use, and disposal of hazardous materials or from reasonably foreseeable upset and accident conditions. Therefore, implementation of the Master Plan would result in a less-than-significant impact.

Multigenerational Center Project

Less-than-significant impact. Potential uses of hazardous materials associated with this project would result from construction activities and from maintenance and operation of the aquatic center proposed as part of the Multigenerational Center Project. Construction of the Multigenerational Center may involve use of hazardous and/or flammable materials, such as fuels, lubricant, paint, and asphalt and pavement.

Operation and maintenance of the aquatic center would result in the use and storage of chemicals commonly used for pool maintenance such as sodium hypochlorite, hydrochloric acid solutions, or cyanuric acid similar to existing conditions at the existing Recreation and Swim Complex. These chemicals are used to maintain the pH (or acidity) of the pool to discourage growth of harmful bacteria and algae, and to maintain safety and comfort for facility users. Use of chemicals associated with pool maintenance would be stored inside, consistent with recommended safety practices to avoid the potential release into the environment. Chemicals would not be accessible to patrons of the project. Storage of pool chemicals and maintenance of the facility would be required to comply with applicable regulations. For example, the EDCEMD require that a new or updated public pool facility be inspected for appropriate drainage, sewage connections, and filtration. Per state regulation CCR Title 22, Section 65523, public pool facilities are to monitor and keep a daily record of for information regarding operation, including readings of disinfectant (e.g., chlorine) residual, pH, and maintenance procedures such as cleaning of filters and quantity of chemicals used. This data is subject to inspection by the EDCEMD.

Hazardous materials involved during construction of the Multigenerational Center would be temporary for the duration of construction and limited in quantity to what is required for construction activities. Additionally, as described above for the Master Plan, the handling, transport, storage, and disposal of the hazardous materials would be like those mentioned above for the Master Plan and would be subject to existing agency requirements and regulations also described above (e.g., 29 CFR, 8 CCR, RCRA, CWA, and EDCEMD regulations). Therefore, use and storage or hazardous materials associated with construction of the project would not result in a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous waste or materials.

Operation and maintenance of the Multigenerational Center would represent a continuation of existing conditions in the plan area at the Recreation and Swim Complex, including continued use and storage of chemicals commonly used for pool maintenance. Pool maintenance activities would occur in compliance with existing regulations and would be subject to inspection by EDCEMD. Therefore, implementation of the project would not result in a significant hazard to the public or the environment through the routine use, transport, or disposal of substantial quantities of potentially hazardous materials because compliance with existing regulatory requirements would minimize the risk associated with hazardous materials use resulting from project. This impact would be less than significant.

b) Create a significant hazard to the public or the environment through reasonably foreseeable upset and/or accident conditions involving the release of hazardous materials into the environment?

56 Acres Master Plan

Less than significant with mitigation incorporated. As noted in the discussion above for item a), construction of proposed facilities for the Master Plan would involve the use of heavy construction equipment, which uses small amounts of hazardous and flammable materials such as fuels and lubricants that are typically associated with construction activities. Additionally, other hazardous materials that may be used during construction include paint, asphalt, and pavement. Operation and maintenance of proposed and existing uses within the plan area, such as government office buildings, a cultural center and museum, and recreational uses, etc. are not of the nature that, in their operation, would involve storage, use, or transport of large quantities of hazardous substances; however, some typical hazardous materials would be used for operation and maintenance of these facilities, such as household cleaners and pesticides. As described above, compliance with existing regulations, including standards for construction staging, storage, labeling, disposal, and notification of appropriate agencies in case of release, would minimize risk of accidental release and risk of hazards to the public or the environment.

The Recreation and Swim Complex, vector control building, Public Works maintenance building, and Parks maintenance building could contain asbestos and lead-based paint and, if not handled properly, construction workers could be exposed to these materials when this building is demolished. Federal and state regulations govern the demolition of structures where materials containing lead and asbestos could be present. Asbestos and lead abatement must be performed and monitored by contractors with appropriate certifications from the California Department of Health Services. Additionally, demolition of structures containing asbestos would be a National Emission Standards for Hazardous Air Pollutants Regulated Facility subject to a thorough asbestos inspection and testing of materials to determine whether asbestos is present. Cal/OSHA regulations in Section 1532.1 in Title 8 of the CCR identify procedures that must be undertaken to properly identify and dispose of lead-based coatings and protection measures for workers. Compliance with these regulations would require that the presence of these materials be verified and remediated, which would eliminate potential health risks associated with exposure to asbestos or lead during building demolition.

As described above under Section 3.9.1, Envirostor records indicate that pesticide-contaminated flooring of a pesticide shed was removed from the vector control facility in the plan area in 1987, and that a site clean-up order was subsequently rescinded. Implementation of the Master Plan would result in relocation of vector control facility to an off-site location and a parking lot would be constructed in this portion of the plan area. Although cleanup has occurred at the site, the nature of the vector control building and facility used for pesticide storage could have resulted in past, unidentified release of pesticides in this area. Thus, there is the potential for ground disturbance and

grading activities to encounter contaminated soils resulting in the potential for accidental exposure of construction workers to hazardous materials.

The Parks maintenance yard supports storage of equipment and vehicles that are used for landscape maintenance, snow removal, and trash removal at City park facilities, including those within the plan area. The public works maintenance yard includes vehicle fueling, snow removal equipment storage, and supports the maintenance and repair of city streets. Due to the nature of these facilities to store and maintain equipment, there is the potential for previously unidentified leaks of hazardous materials (e.g., oil, fuel) to have occurred. Implementation of the Master Plan would result in relocation of these facilities to off-site locations. The Master Plan proposes to locate portions of the Main Street, campground, and campground entrance at the existing site of the Parks maintenance facility and the Public Works maintenance yard would be replaced by parking, southern portion of the camping cabins, and open space. Thus, there is the potential for ground disturbance and grading activities as part of constructing these facilities to encounter contaminated soils resulting in the potential for accidental exposure of construction workers to hazardous materials.

Implementation of the Master Plan would not result in land uses that would result in routine use or transport of significant amounts of hazardous materials and construction activities and operation of the new facilities would be subject to existing hazardous materials regulations such that these activities would have a low potential to result in a significant hazard to the public or the environment through reasonably foreseeable upset and accidental release of hazardous materials. However, construction activities associated with Master Plan facilities that would be located at the current locations for the vector control facility, parks maintenance facility, and public works facility could encounter soils with previously unidentified hazardous materials contamination resulting in potential accidental exposure of construction workers to hazardous materials. This impact would be potentially significant.

Mitigation Measure 3.9-1: Conduct Soil Investigation

This mitigation measure applies to the 56 Acres Master Plan.

Before initiating construction, demolition, or other ground disturbing activities within the existing public works maintenance yard, parks maintenance yard, or vector control district site, the City or construction manager shall retain a qualified environmental contractor to sample surface soils located within the public works maintenance yard, parks maintenance yard, and vector control district site. If soil contamination is detected, contaminated soil shall be removed from site and the site must be remediated. The soil investigation and removal, if contaminated soils are found, shall include the following:

- Soil sample results shall be provided to EDCEMD and Lahontan RWQCB.
- Based on the soil sample results, the construction manager and qualified environmental contractor shall coordinate with EDCEMD and Lahontan RWQCB to determine the appropriate methods for soil removal and extent of soil removal required, if any.
- A qualified environmental contractor shall be retained for removal of contaminated soils, if necessary. Contaminated soils shall be removed and disposed of at a permitted hazardous waste disposal facility. The qualified environmental contractor shall provide proof of disposal to EDCEMD.
- Soils shall be resampled and, if necessary, as determined by EDCEMD or Lahontan RWQCB, additional contaminated soil shall be removed.
- Construction may commence in the public works maintenance yard, parks maintenance yard, and/or vector control district site after soils are determined by EDCEMD or Lahontan RWQCB to no longer contain contamination.

Significance after Mitigation

Implementation of Mitigation Measure 3.9-1 would require that any contaminated soils encountered at the public works maintenance yard, parks maintenance yard, and/or vector control district site are identified, removed, and properly disposed. This would minimize the risk of an accidental release of hazardous substances that could adversely

affect human health or the environment during construction, reducing this impact for the Master Plan to a less-than-significant level.

Multigenerational Center Project

Less-than-significant impact. As noted in the discussion above for item a), construction of the Multigenerational Center would involve the use of heavy construction equipment, which uses small amounts of hazardous and flammable materials such as fuels and lubricants that are typically associated with construction activities. Additionally, other hazardous materials that may be used during construction include paint, asphalt, and pavement. Operation and maintenance of the aquatic center would result in the use and storage of chemicals commonly used for pool maintenance such as sodium hypochlorite, hydrochloric acid solutions, or cyanuric acid similar to existing conditions at the existing Recreation and Swim Complex. As described above, compliance with existing regulations, including standards for construction staging, storage, labeling, disposal, notification of appropriate agencies in case of release, and transport of hazardous materials would minimize risk of accidental release and risk of hazards to the public or the environment.

Similar to existing conditions associated with operation of the existing Recreation and Swim Complex, because construction activities for and operation of the Multigenerational Center would be subject to existing hazardous materials regulations such that the use, storage, and transport of hazardous materials would have a low potential to result in a significant hazard to the public or the environment through reasonably foreseeable upset and accidental release of hazardous materials. This impact would be less than significant.

c) Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances, or waste within 0.25 mile of an existing or proposed school?

56 Acres Master Plan

Less-than-significant impact. As described in Section 3.9.1 above, "Environmental Setting," there are three schools located within 0.25 mile of the proposed project area: Saint Theresa Catholic School, Tahoe Parents Nursery school, and South Lake Tahoe Middle School approximately 550 feet (approximately 0.1 mile) south of the plan area. A fourth school, the Bijou Community School, is located approximately 0.7 mile east of the plan area.

As described in the discussions under items a) and b) above, hazardous materials involved with implementation of the proposed Master Plan would result primarily from construction activities. Potentially hazardous substances involved in construction of the proposed project include fuels such as gasoline and diesel, lubricant, paint, and asphalt, and pavement. Compliance with existing regulations, as described above, including standards for construction staging, storage, labeling, disposal, and notification of appropriate agencies in case of release would minimize potential emissions of hazardous substances during construction.

Handling of hazardous materials associated with implementation of the Master Plan within 0.25 mile of schools would occur during construction activities and would be temporary in nature. Compliance with existing regulations during construction and operation, including standards for construction staging, storage, labeling, disposal, and notification of appropriate agencies in case of release would minimize the risk of hazardous materials emissions in proximity to schools identified within 0.25 mile of the plan area. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. The schools identified in proximity to plan area are located over 0.3 miles, outside of a quarter-mile radius, from the proposed site for the Multigenerational Center Project. No other schools or educational institutions are identified within a quarter mile of the project site. However, for the reasons described above for the Master Plan, the potential hazards associated with the use of hazardous materials for construction and operation of the Multigenerational Center would be a less-than-significant impact.

d) Be located on a site which is included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5 and, as a result, would it create a significant hazard to the public or the environment?

56 Acres Master Plan

Less than significant with mitigation incorporated. See the discussion for the Master Plan under b), above. Envirostor records indicate that the vector control facility in the plan area was identified as the site of a hazardous materials contamination that was cleaned up and the site clean-up order was subsequently rescinded. Thus, construction at this site could result in exposure to a significant hazard to the public or the environment. Therefore, this impact would be potentially significant.

Mitigation Measure 3.9-2: Conduct Soil Investigation

This mitigation measure applies to the 56 Acres Master Plan.

Implement Mitigation Measure 3.9-1.

Significance after Mitigation

Implementation of Mitigation Measure 3.9-2 would require that any contaminated soils encountered at the vector control district site are identified, removed, and properly disposed. This would minimize the risk of an accidental release of hazardous substances that could adversely affect human health or the environment during construction, reducing this impact for the Master Plan to a less-than-significant level.

Multigenerational Center Project

No impact. The proposed site for the Multigenerational Center project is not located on, within, or adjacent to any sites included on a list of hazardous materials sites compiled pursuant to Government Code Section 65962.5. Therefore, implementation of the project would not result in a hazard to the public or environment as a result of being located on such a site. The project would have no impact.

e) For a project located within an airport land use plan or, where such a plan has not been adopted, within 2 miles of a public airport or public use airport, would the project result in a safety hazard or excessive noise for people residing or working in the project area?

56 Acres Master Plan

No impact. The Lake Tahoe Airport is located approximately 2.6 miles southwest of the plan area. No private airstrips are observed in proximity to the plan area. No airports are located within 2 miles of the plan area. The plan area is within the airport influence area for the airport land use compatibility plan of the Lake Tahoe Airport Airport (Lake Tahoe Airport Land Use Commission 2019:1-5). Specifically, the plan area is within Review Area 2, which consists of the areas within the 14 CFR Part 77 surfaces, and overflight notification area. The standards for determining obstructions to air navigation are established in Subpart C, *Obstruction Standards*, 14 CFR Part 77, *Safe, Efficient Use and Preservation of the Navigable Airspace*. This regulation defines a set of imaginary surfaces with relation to an airport's runway(s). The height of the buildings proposed under the Master Plan and Multigenerational Center project would not extend into the approach surface for the airport runway (City of South Lake Tahoe 2019:4-36). Because the Master Plan would not include residential uses, no overflight notification would be required (City of South Lake Tahoe 2019:4-43). Therefore, implementation of the Master Plan would not result in safety hazards or excessive noise for people within the plan area as a result of proximity to an airport. Therefore, the plan would result in no impact related to airports.

Multigenerational Center Project

No impact. See discussion under "56 Acres Master Plan," above.

f) Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan?

56 Acres Master Plan

Less-than-significant impact. The City identifies eastbound US 50 as a primary evacuation route for the Bijou/Al Tahoe Community Plan Area in the City. Secondary evacuation routes identified are westbound US 50 and Pioneer Trail via Al Tahoe Boulevard (City of South Lake Tahoe 2021). However, in the event of an emergency, evacuation routes and evacuation centers may vary based on conditions of the emergency and would be communicated to the community. Potential emergency situations requiring the initiation of emergency or evacuation plans include events such as wildfire, hazardous waste release, and winter storm events, or other events would be determined and communicated to public members based on (El Dorado County Sheriff, Office of Emergency Services).

Implementation of the Master Plan would result in the construction of new or updated buildings or facilities within the plan area. While some facilities may be added, such as the outdoor event space, playground, and other public spaces, and transportation facilities such as multipurpose paths and parking, others would be relocated off-site or reduced in capacity, such as the County's vector control facility, parks maintenance yard, public works maintenance yard, and the campground. The Recreation and Swim Complex would be demolished. Several attractions within the plan area, including the museum, senior center, and art center would not be altered. Thus, proposed improvements would not represent a substantial permanent change in types or intensity of land uses within the plan area compared to existing conditions and would not result in an increase that could conflict with the adopted emergency plans or procedures adopted within the plan area. For example, the Master Plan does not introduce land uses that are new to the plan area, such as housing or lodging, that could potentially result in a permanent increase in people residing within a fire hazard zone.

Because construction activities resulting from implementation of the Master Plan would occur within the plan area, including staging construction equipment and supplies, it is unlikely that temporary road closures would be required and, thus, would not interfere with emergency access to locations within the plan area. Subsequent construction projects under the Master Plan would implement standard construction BMPs and would maintain emergency access in and out of the plan area and post signage along public roadways at access points to and within the plan area, as necessary, notifying drivers and the public of construction activities and that heavy duty trucks might be entering and exiting the roadway.

Currently, special events are hosted at Lakeview Commons and athletic events are held at the ice arena and Recreation and Swim Complex, which result in temporary increases in vehicle traffic on roadways surrounding the plan area. These events would continue to occur in the plan area, with athletic events at the Recreation and Swim Complex shifted to the Multigenerational Center. Implementation of the Master Plan would increase the number of special events in the plan area with the new Main Street and outdoor event space. Up to 10 events could be held at each of these facilities each year, with the Main Street closed to traffic during events in that area. The events could attract from 250-500 people at each event. The City Parks and Recreation Department manages scheduling events at facilities in the plan area through the event application process such that overlapping events would not be scheduled that would have parking demand that would exceed available on-site parking and would minimize the increase in vehicle traffic. The Special Event Application Guidelines provide a list of requirements for event planners to meet that would minimize adverse effects related to traffic, parking, alternative transportation, notifications to surrounding residents and businesses, and accessibility for all abilities (Thomaselli, pers. comm., 2021). Some of these requirements include preparation of a Traffic Plan for minimizing disruptions to traffic flows and encouragement and facilitation of alternative transportation methods. Because the City limits the number of events that occur at one time and require event planners to implement measures to manage traffic, the additional events would not substantially interfere with emergency response or evacuation.

Construction activities would not result in road closures or closures of public access to roads surrounding the plan area and would implement BMPs to avoid any potential impacts on emergency access or evacuation, such as posting signage related to the construction activities along roads and public access points. For the reasons described above, the Master Plan would not represent a substantial permanent change in types or intensity of land uses within the plan

area compared to existing conditions and would not result in an increase in use that could conflict with the adopted emergency plans or procedures adopted within the plan area. This impact would be less than significant.

Multigenerational Center Project
Less-than-significant impact. See discussion under "56 Acres Master Plan," above.

g) Expose people or structures, either directly or indirectly, to a significant risk of loss, injury, or death involving wildland fires?

56 Acres Master Plan
Less-than-significant impact. According to the CAL FIRE Fire Resource Assessment Program FHSZ Geographic Information System data, the plan area is located within a Very High FHZ within an LRA (CAL FIRE 2009).

As described in Chapter 2, "Project Description," tree thinning would be implemented as new facilities are constructed to defensible space of at least 100 feet from structures per California PRC Section 4291, which would reduce fire fuels within the plan area. Construction of new structures would also be required to implement other applicable requirements of the Uniform Fire Code and Uniform Building Code, including ignition-resistant construction, automatic interior fire sprinklers, onsite fire hydrant minimum flows, and adequate emergency and fire apparatus access. Additionally, facilities constructed as part of the Master Plan would be subject to design and defensible space requirements that are intended to protect development from loss due to wildfire included in Section 13.5.3.F.4.a of TRPA Code of Ordinances, which requires use of native vegetation whenever possible, consistent with fire defensible space requirements. The relocated campground would include campfire rings, the same as under existing conditions, and their use by campers would continue to be subject to fire restrictions that are implemented by South Lake Tahoe Fire Rescue during times of elevated risk of severe and catastrophic fire. Because the number of campsites would be reduced from 172 campsites to 135 campsites, there would be a reduction in the number of fire rings and an associated reduction in potential for risk of fire compared to existing conditions. No other components of the Master Plan would include any outdoor fire rings or fireplaces that would pose a wildfire ignition threat.

As described under item f) above, implementation of the Master Plan would result in the construction of new or updated buildings or facilities within the plan area and relocation of some facilities off-site. Thus, proposed improvements would not represent a substantial change in types or intensity of land uses within the plan area compared to existing conditions and would not result in an increase exposure of people or structures to a significant risk of loss, injury, or death involving wildland fires.

Implementation of the Master Plan would not exacerbate wildfire risks because capacity for recreational fires would be somewhat reduced, and their use would be subject to fire restrictions during periods of high fire risk. Additionally, defensible space would be maintained in the plan area and construction would comply with all applicable fire-related codes and regulations. Although the Master Plan would increase the number of people in the plan area associated with additional special events, the number of visitors exposed to wildfire risk would not be a substantial increase over existing conditions. Therefore, this impact would be less than significant.

Multigenerational Center Project
Less-than-significant impact. Refer to discussion under "56 Acres Master Plan," above.

3.9.3 Cumulative Impacts

The cumulative projects listed in Table 3.21-1 consists of improvements to roadway facilities, shore stabilization and lake public access, and a new shared-use trail. These projects would not result in permanent increases in the use, transport, or disposal of hazardous materials or hazardous waste. Use, transport, or disposal of hazardous materials associated with types of projects identified in Table 3.21-1 would result primarily from construction activities. Disposal of construction waste and fuels associated with motorized construction equipment would be temporary in nature.

As described above, implementation of the Master Plan and the Multigenerational Center Project would result in less-than-significant impacts pertaining to risks associated with hazardous materials, including with implementation of

Mitigation Measures 3.9-1 and 3.9-2 as part of the Master Plan to minimize the risk of an accidental release of hazardous substances that could adversely affect human health or the environment during construction. The project would not combine with other cumulative projects identified in Table 3.21-1 to result in a cumulative permanent increase in risk associated with or use of hazardous materials and hazardous wastes. The Master Plan and Multigenerational Center would not make a considerable contribution to a cumulative impact related to hazardous materials. See Section 3.20, "Wildfire," below for a discussion of potential cumulative impacts pertaining to wildfire hazards.

3.10 HYDROLOGY AND WATER QUALITY

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
X. Hydrology and Water Quality.				
Would the project:				
a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?	☐	☐	☒	☐
b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?	☐	☐	☒	☐
c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:				
i) Result in substantial on- or offsite erosion or siltation;	☐	☐	☒	☐
ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;	☐	☐	☒	☐
iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or	☐	☐	☒	☐
iv) Impede or redirect flood flows?	☐	☐	☒	☐
d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?	☐	☐	☒	☐
e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?	☐	☐	☐	☒

3.10.1 Environmental Setting

REGIONAL HYDROLOGY

Lake Tahoe is located in a basin that is fed by 63 tributary streams that drain directly into the lake. The Truckee River at the northwest end of the Tahoe Basin is the lake's only outlet, ultimately flowing to Pyramid Lake in Nevada. A dam constructed at Tahoe City in the early 1900s regulates water flow to the Truckee River from the natural rim (6,223 feet above sea level) to the maximum legal lake level of 6,229.1 feet. The lake is 12 miles wide and 22 miles long with 72 miles of shoreline. Average precipitation is almost 16 inches each year in South Lake Tahoe (WRCC 2021) and generally falls as snow in the higher elevations and as a mix of snow and rain in the lower elevations from October to May. Peak stream runoff is typically triggered by spring snowmelt in May and June. The snowpack at lake level melts before the peak in snowmelt and runoff from the higher elevations.

LOCAL HYDROLOGY AND WATER QUALITY

The plan area is located in the Bijou Creek Watershed (Figure 3.9-1). It is adjacent to Lake Tahoe and contains no natural drainage features. The Bijou Creek Watershed extends from Heavenly Mountain Resort and includes Bijou Meadow, which Bijou Creek runs through, and then drains to Lake Tahoe via an outfall through the Bijou Shopping Center. There are no hydrologic resources in the plan area, but it is located directly adjacent to Lake Tahoe and stormwater runoff drains to storm drain infrastructure that ultimately flows into Lake Tahoe. There are two outfalls to Lake Tahoe that are located in the plan area that convey stormwater directly to the lake. Potential sources of nutrients and pollutants from the plan area include urban runoff, irrigation, pet waste, fertilizer, road deicers and traction abrasives, and vehicle use, washing, and maintenance.

Groundwater was encountered at 30 and 31 feet below ground surface in the plan area (NV5 2021). A study performed in 2003 found that organic nitrogen plus ammonia, ammonia, and biologically available iron concentrations generally were greater in the groundwater in the Bijou Creek watershed than those observed in groundwater elsewhere in the Lake Tahoe Basin (Allander 2005). Nitrate concentrations were similar in the two groups. Phosphorus and orthophosphate concentrations generally were lower in the groundwater of the Bijou Creek watershed compared to groundwater from elsewhere in the Lake Tahoe Basin (Allander 2005). Specific conductance and pH of groundwater were similar between the Bijou Creek watershed and elsewhere in the Lake Tahoe Basin, but the temperature of groundwater was generally greater in the Bijou Creek watershed (Allander 2005).

There were no obvious spatial distribution patterns for nutrient concentrations or field parameters in the Bijou Creek watershed. Groundwater in the Bijou Creek watershed discharges to Lake Tahoe and may contribute to the higher-than-normal turbidity of the Lake in the area (Allander 2005).

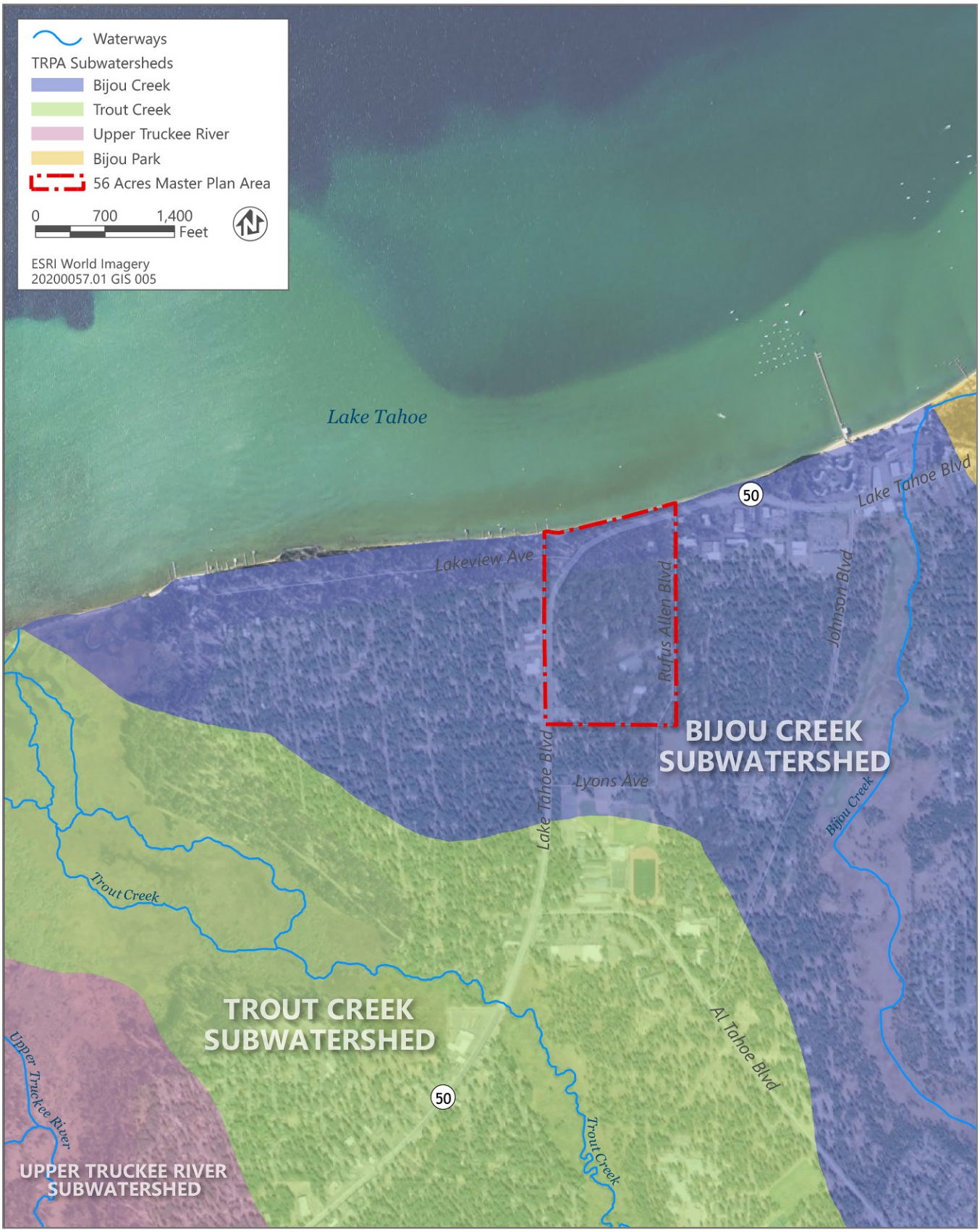
3.10.2 Discussion

a) Violate any water quality standards or waste discharge requirements or otherwise substantially degrade surface or groundwater quality?

56 Acres Master Plan

Less-than-significant impact. Development as a result of implementation of the Master Plan would require grading and excavation, which would expose sediment. Excavation is not expected to occur deeper than 9 feet and groundwater measured in the plan area was approximately 30 feet below ground surface (NV5 2021). Therefore, implementation of the Master Plan would not directly impact groundwater. Exposed sediment could directly impact surface water quality. All projects in the Tahoe Basin, including implementation of the Master Plan, are required to comply with TRPA water quality protections. Temporary construction BMPs that would be required through existing regulations, such as Chapter 33 and Section 60.4 of the TRPA Code (TRPA 2012), would include temporary erosion control BMPs, dust control measures, requirements to minimize soil disturbance, winterization by October 15, stockpile stabilization, spill prevention plans, tracking prevention, and permanent stabilization of any disturbed areas. All construction projects in the Tahoe Basin must be consistent with TRPA requirements (including Chapter 4.5 of the TRPA BMP Handbook; TRPA 2014), the federal antidegradation policy, and maintain designated beneficial uses of Lake Tahoe.

Any projects that would disturb over one acre of soil would also be required to comply with Lahontan RWQCB Tahoe Construction General Permit (Order No. R6T-2016-0010). The Permit requires implementation of a SWPPP, which identifies temporary BMPs (e.g., tarping of any stockpiled materials or soil; use of silt fences, fiber rolls, dust control, tracking control, etc.) and permanent BMPs (e.g., structural containment, revegetation, stabilization) for use in all construction areas to reduce or eliminate the discharge of soil, surface water runoff, and pollutants during all excavation, grading, trenching, repaving, or other ground-disturbing activities. The SWPPP will also include BMPs for hazardous waste and contaminated soils management and a spill prevention and control plan, as appropriate.



Source: Data downloaded from USFWS in 2020 and received from TRPA in 2016

Figure 3.10-1 Subwatersheds and Rivers

TRPA, Lahontan RWQCB, and the City of South Lake Tahoe have substantial experience with review, approval, and enforcement of project-specific permit conditions for projects in the Tahoe Basin, and they have been shown to be effective. Because regulatory protections are in place to minimize erosion and transport of sediment and other pollutants and because the intention of the project is to improve water quality, this impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. Implementation of the Multigenerational Center project would include construction of a new pool that would require excavation of 9 feet below ground surface (NV5 2021). For the same reasons described above for the Master Plan, there would be a less-than-significant impact.

b) Substantially decrease groundwater supplies or interfere substantially with groundwater recharge such that the project may impede sustainable groundwater management of the basin?

56 Acres Master Plan

Less-than-significant impact. Implementation of the Master Plan would include the creation of impervious area (buildings, roads, parking, multi-use paths) but would also include the removal and restoration of existing impervious area. Overall impervious area would decrease by almost 93,000 sq. ft. with implementation of the Master Plan. Storm drain systems would be designed to infiltrate the 20-year one inch per hour storm event as required by TRPA Code Section 60.4. Therefore, infiltration of stormwater would still occur in the plan area and implementation of the Master Plan would not decrease groundwater supplies or interfere with recharge such that the project may impede sustainable groundwater management of the basin. For this reason, the potential effects to groundwater supplies and groundwater recharge would be less than significant.

Multigenerational Center Project

Less-than-significant impact. Two stormwater basins and additional BMPs are proposed to infiltrate stormwater from impervious areas of the Multigenerational Center. For the same reasons described above for the Master Plan, there would be a less-than-significant impact.

c) Substantially alter the existing drainage pattern of the site or area, including through the alteration of the course of a stream or river or through the addition of impervious surfaces, in a manner which would:

i) Result in substantial on- or off-site erosion or siltation;

56 Acres Master Plan

Less-than-significant impact. The majority of the plan area contains no drainage features and its susceptibility to erosion is low due to relatively flat topography and soil type. In addition, the implementation of construction BMPs described in item a), above would prevent substantial erosion during construction and ground-disturbing activities. Permanent BMPs would infiltrate the 20-year one inch per hour storm event as required by TRPA Code Section 60.4 and would be designed to minimize erosion. The plan area would also be subject to Section 7.15 Urban Runoff and Storm Water Quality Management of the City of South Lake Tahoe Code, which requires projects to prevent, control, and reduce storm water pollutants which would contribute pollution to stormwater, storm drain system, or waters of the state. The cantilever boardwalk associated with Lakeview Commons Phase 2 would be located on a steep slope directly adjacent to Lake Tahoe and would need to comply with all previously stated regulations. After detailed design plans are prepared for the boardwalk, the City would obtain permits from TRPA and the boardwalk would be subject to subsequent environmental review by TRPA to review the proposed slope stabilization, erosion control, and stormwater infiltration BMPs prior to approval of the project. Therefore, the potential for implementation of the Master Plan to result in substantial on- or off-site erosion or siltation would be less than significant.

Multigenerational Center Project

Less-than-significant impact. For the same reasons described above for the Master Plan, there would be a less-than-significant impact.

ii) Substantially increase the rate or amount of surface runoff in a manner which would result in flooding on- or off-site;

56 Acres Master Plan

Less-than-significant impact. As described in item c-i), the plan area does not contain water features of any kind. The existing plan area contains compacted and impervious areas which are relatively impermeable. The reconfiguration of paved areas and structures proposed in the Master Plan would decrease impervious area by approximately 93,000 square feet relative to existing conditions which would decrease rate and amount of surface runoff. Additionally, as a condition of TRPA permit approval, the various components of the project would be required to install permanent stormwater infiltration BMPs as described in item b), above. For these reasons, implementation of the Master Plan would have a less-than-significant impact on-site drainage and increased surface runoff resulting in flooding.

Multigenerational Center Project

Less-than-significant impact. For the same reasons described above for the Master Plan, there would be a less-than-significant impact.

iii) Create or contribute runoff water which would exceed the capacity of existing or planned stormwater drainage systems or provide substantial additional sources of polluted runoff; or

56 Acres Master Plan

Less-than-significant impact. Implementation of the Master Plan would reduce impervious surfaces in the plan area by 93,000 sq. ft. and would therefore create less runoff than under existing conditions. In addition, implementation of the Master Plan would be required to infiltrate all runoff from the 20-year, one inch per hour storm on-site; treat stormwater runoff to meet TRPA's discharge limits; or demonstrate that runoff would be accommodated by a shared municipal system as a condition of permit approval. The plan area would also be subject to Section 7.15 Urban Runoff and Storm Water Quality Management of the City of South Lake Tahoe Code, which requires projects to prevent, control, and reduce storm water pollutants that would contribute pollution to stormwater, storm drain system, or waters of the state. Therefore, the Master Plan would have a less-than-significant impact on existing or planned drainage systems.

Multigenerational Center Project

Less-than-significant impact. The Multigenerational Center project would include stormwater basins and other BMPs to infiltrate the 20-year, one inch per hour storm event on-site as required per TRPA Code Section 60.4. For the same reasons described above, there would be a less-than-significant impact.

iv) Impede or redirect flood flows?

56 Acres Master Plan

Less-than-significant impact. The plan area is located in an area that is mapped as Flood Zone X, which is defined as areas outside of the 0.2 percent annual chance floodplain (FEMA 2012). For this reason, flood flows would be very rare. Redevelopment of the plan area would include adequate storm drain infrastructure that would be designed to direct flood flows to infiltration facilities with overflow features that would minimize flood impacts. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. For the same reasons described above for the Master Plan, there would be a less-than-significant impact.

d) In flood hazard, tsunami, or seiche zones, risk release of pollutants due to project inundation?

56 Acres Master Plan

Less-than-significant impact. A seiche is a periodic oscillation of an enclosed or restricted water body, typically a lake or reservoir, produced by seismic shaking. Depending on the magnitude and location of an earthquake occurring in the Tahoe basin, a seiche wave ranging in height from about 3 to 10 meters could develop in Lake Tahoe (Ichinose et. al. 1999). Due to the proximity to Lake Tahoe, the plan area could be inundated by a seiche wave, which has the potential to cause a release of pollutants. Earthquakes of the magnitude necessary to create a seiche wave are rare in the Tahoe Basin. The Master Plan does not include housing, but visitors and employees would be at risk from inundation in the event of the large earthquake capable of triggering a seiche wave. The existing campground and Recreation and Swim Complex are also in the area under threat of inundation by seiche. Therefore, redevelopment in the plan area would not modify or increase the existing threat of inundation by seiche. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. For the same reasons described above for the Master Plan, there would be a less-than-significant impact.

e) Conflict with or obstruct implementation of a water quality control plan or sustainable groundwater management plan?

56 Acres Master Plan

No impact. Water quality standards and control measures for surface water and groundwater within the Lahontan Region are contained in the Water Quality Control Plan for the Lahontan Region (Basin Plan). The Basin Plan designates beneficial uses for water bodies. It establishes water quality objectives, waste discharge prohibitions, and other implementation measures to protect those beneficial uses. Chapter 5, "Water Quality Standards and Control Measures for the Tahoe Region," of the Basin Plan summarizes a variety of control measures for the protection and enhancement of Lake Tahoe. The Master Plan does not include activities that would conflict with a water quality control plan or sustainable groundwater management plan. Additionally, as discussed in item a), above, the Master Plan would not adversely affect surface or groundwater quality. There would be no impact.

Multigenerational Center Project

No impact. For the same reasons described above for the Master Plan, there would be no impact.

3.10.3 Cumulative Impacts

Cumulative impacts to hydrology and water quality are considered in the context of the Tahoe Basin watershed. Disturbance to the watershed has occurred through logging, milling, mining, grazing, and development within the Tahoe Basin. These activities combined with runoff from development, have degraded the water quality of the tributaries to Lake Tahoe, resulting in an existing cumulative adverse condition. This has led to an increase in sediment and other pollutants carried into Lake Tahoe. The Lake Tahoe total maximum daily load was developed to address sediment levels in partnership with local jurisdictions. Additionally, numerous projects have been implemented to restore disturbed areas of the watershed and reduce this adverse condition.

Implementation of the Master Plan and construction of the Multigenerational Center as well as the cumulative projects listed in Table 3.21-1 would be required to comply with the erosion control and water quality protection conditions of TRPA. This would include temporary water quality protection BMPs during construction and permanent stormwater management features. Furthermore, the Master Plan and Center would result in a reduction in land coverage and installation of permanent water quality BMPs and stormwater infrastructure that would reduce water quality degradation. Therefore, the contribution of the Master Plan and Multigenerational Center to cumulative hydrology and water quality impacts **would not be cumulatively considerable**.

3.11 LAND USE AND PLANNING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XI. Land Use and Planning.				
Would the project:				
a) Physically divide an established community?	☐	☐	☐	☒
b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?	☐	☐	☒	☐

3.11.1 Environmental Setting

The plan area is located within the jurisdictions of the City of South Lake Tahoe and TRPA. The plan area is developed, and existing land uses include indoor and outdoor recreational space, maintenance facilities, and community-oriented and public service facilities, such as an art center, history museum, senior center, and library. Outdoor recreation amenities include shared-use paths, picnic tables, park and playground spaces, and a campground with 172 RV, tent, and cabin spaces.

LAKE TAHOE REGIONAL PLAN

Land use planning and regulation in the Tahoe Basin is guided by the TRPA Tahoe Regional Plan and Code of Ordinances. The Regional Plan is intended to establish a balance between the natural environment and the built environment; and attain and maintain TRPA's environmental thresholds. The Regional Plan includes Goals and Policies that guide decision making as it affects the Region's resources and environmental thresholds, and they are intended to provide opportunities for orderly growth and development consistent with those thresholds. The Goals and Policies are addressed in six major elements: land use, transportation, conservation, recreation, and public services and facilities Land in the Lake Tahoe Region is assigned to one of eight classifications: Wilderness, Backcountry, Conservation, Recreation, Resort Recreation, Residential, Mixed-Use, and Tourist. The classifications summarize major land uses that exist in the Region and are further supplemented by the plan area statements, community plans, master plans, and area plans. The Regional Plan designates the plan area as Mixed-Use (TRPA 2018). The Regional Plan identifies Mixed-Use areas as urban areas that have been designated to provide a mix of commercial, public services, light industrial, office, and residential uses to the Region or have the potential to provide future commercial, public service, light industrial, office, and residential uses. The purpose of this classification is to concentrate higher intensity land uses for public convenience and enhanced sustainability (TRPA 2012).

CITY OF SOUTH LAKE TAHOE GENERAL PLAN

The City's General Plan was updated in September 2010 and provides a comprehensive plan for the City through 2030. The General Plan vision for future land use and community design is:

> In 2030, the Highway 50 corridor has been transformed into an interconnected series of compact mixed-use (commercial, office, residential, and tourist accommodation) districts that serve the needs of residents and visitors alike. The corridor is the heart of the community and contains year-round sidewalks and bike paths. The transformation of the corridor has been fueled by the cooperative efforts of local, regional, and state governments, and private investors who share the vision for a prosperous and healthy region (City of South Lake Tahoe 2011:LU-1).

The land use designation established for the plan area by the City's General Plan is Recreation. This designation provides for outdoor recreation areas, active and passive recreational uses, habitat protection, and public/quasi-public uses. This designation is applied to areas with existing or proposed outdoor recreation and areas without overriding environmental constraints (City of South Lake Tahoe 2011:LU-3 and LU-4).

BIJOU/AL TAHOE COMMUNITY PLAN

The plan area is located within the Bijou/Al Tahoe Community Plan (TRPA and CSLT 1995). The goal of the Community Plan is to guide the development of the Community Plan area to serve as a family-oriented and recreational area, as well as a town center for the community. The Community Plan area is divided into four districts: the Town Center District, Harrison Avenue District, Lucky Payless District, and Bijou District. The plan area is located within the Town Center District, which includes the areas containing South Tahoe Middle School, Lake Tahoe Community College, and South Lake Tahoe Government Center. The land use designations established by the Community Plan for the plan area is Public Service and Recreation.

The following goals, related specific objectives and special policies adopted for the Community Plan and applicable to the Master Plan and Multigenerational Center:

GOAL 1 Urban Design and Development: To ensure that the design elements of new, remodeled, and rehabilitated developments are compatible with the scenic objectives and policies of the Bijou/Al Tahoe Community Plan.

Objective 1: Create districts within the community plan boundaries to concentrate specific uses and development.

- Policy B: Create a pedestrian friendly, village atmosphere within each of the four distinct districts. Retain existing transitional areas between the distinct districts.

GOAL 2 Land Use Strategy and Economic Feasibility Goals: Maintain a balance between economic health and the environment, correcting past deficiencies in land use and being responsive to the needs and opportunities within the Bijou/Al Tahoe area.

Objective 1: Concentrate development to create unique areas within the community plan boundaries.

- Policy A: Generate an anchor within the community plan, i.e., "Town Center District," allowing mixed uses, including public service, commercial support businesses, and recreational uses. Designate within the [56] acre area identified as the CSLT Recreation complex and Campground by the Lake a "Special Events Area", provided the events are conducted out of view from Highway 50 scenic corridor. Develop a design plan through the Parks and Recreation Commission.

3.11.2 Discussion

a) Physically divide an established community?

56 Acres Master Plan

No impact. No housing exists within the plan area. Implementation of the Master Plan would reconfigure existing features on the site such as the existing aquatic center and the campground. The project would not substantially change the nature of the plan area as a recreation amenity or the nature of the surrounding areas, including residential, education, and commercial uses. The project would not introduce any barriers or project features that could physically divide the surrounding community and no housing or residences would be relocated or displaced as a result of plan activities. There would be no impact.

Multigenerational Center Project

No impact. See discussion under "56 Acres Master Plan," above.

b) Cause a significant environmental impact due to a conflict with any land use plan, policy, or regulation adopted for the purpose of avoiding or mitigating an environmental effect?

56 Acres Master Plan

Less-than-significant impact. The uses proposed in the Master Plan would be a continuation of existing recreation and public service uses in the plan area that are consistent with the Recreation and Public Service land uses identified in the Community Plan and City General Plan, and with the Mixed-Use designation identified by the Tahoe Regional Plan.

Projects implemented subsequent to the Master Plan would be subject to the policies, standards, and guidelines for development identified in the Community Plan and City General Plan. Additionally, the Master Plan would be required to comply with TRPA Regional Plan policies and TRPA Code of Ordinances, which are adopted for the purpose of minimizing development impacts to the environment. Implementation of the Master Plan would not conflict with existing land use plans, policies, or regulations for the purpose of mitigating an environmental affect. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. The Multigenerational Center would replace the existing Recreation and Swim Complex. The project is consistent with uses envisioned for the site in the Community Plan. The Center falls with the definition of a "Recreation Center" according to the TRPA Code of Ordinances. Recreation Centers are an allowed use within the Town Center District of the Bijou/Al Tahoe Community Plan subject to design review (TRPA and CSLT 1995:II-11). The project would also be required to comply with all provisions of the TRPA Regional Plan and Code of Ordinances, and City General Plan. Because the project would not conflict with existing land use plans, policies, or regulations for the purpose of mitigating an environmental affect, this impact would be less than significant.

3.11.3 Cumulative Impacts

Land use plans and policies are intended to have a cumulative effect on the land use and development patterns within the region. Over time, as multiple projects comply with land use regulations and achieve land use policies, desired land use and development patterns are achieved. Thus, the project's consistency with land use plans reflects its cumulative effect on land use. The Master Plan includes allowable uses consistent with current uses of the plan area and consistent with the local and regional plans. Further, related projects in the Table 3.21-1 would be required to comply with TRPA and local jurisdictional zoning, land use, and protective policies as conditions of approval. Because no land use impacts would occur on a project-specific basis, the project would not contribute to any potential cumulative land use impacts. Therefore, the project **would not make a considerable contribution** to a significant cumulative impact.

3.12 MINERAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XII. Mineral Resources.				
Would the project:				
a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?	☐	☐	☐	☒
b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?	☐	☐	☐	☒

3.12.1 Environmental Setting

The project site does not contain any known mineral or aggregate resources of local or statewide significance (Busch 2001). The project site is underlain by Pleistocene to Holocene glacial till and moraines with no known current or future economic value. No economically viable deposits of clean sand or gravel exist in the project site that would be useful to extract for riprap, aggregate, or other industrial uses (Busch 2001). Additionally, mining is not an identified allowable use in the Tahoe Basin (see Chapter 21 of the TRPA Code of Ordinances).

3.12.2 Discussion

a) Result in the loss of availability of a known mineral resource that would be of value to the region and the residents of the state?

56 Acres Master Plan

No impact. No known mineral resources are located within the project site. There would be no impact.

Multigenerational Center Project

No impact. See discussion for "56 Acres Master Plan," above.

b) Result in the loss of availability of a locally important mineral resource recovery site delineated on a local general plan, specific plan, or other land use plan?

56 Acres Master Plan

No impact. See discussion for item a), above. The project would not result in the loss of availability of a locally important mineral resource recovery site.

Multigenerational Center Project

No impact. See discussion for "56 Acres Master Plan," above.

3.12.3 Cumulative Impacts

The Master Plan and Center project would result in no impacts on mineral resources. Therefore, the plan and project would not combine with other cumulative projects identified in Table 3.21-1 to result in a cumulative loss of mineral resources. Therefore, there would be no cumulative impact.

3.13 NOISE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIII.Noise.				
Would the project result in:				
a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?	☐	☒	☐	☐
b) Generation of excessive groundborne vibration or groundborne noise levels?	☐	☐	☒	☐
c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?	☐	☐	☒	☐

3.13.1 Environmental Setting

In the science of acoustics, the fundamental model consists of a sound (or noise) source, a receiver, and the propagation path between the two. Sound is the mechanical energy of a vibrating object transmitted by pressure waves through a liquid or gaseous medium (e.g., air) to a human ear. Noise is defined as loud, unexpected, annoying, or unwanted sound. As sound travels through the atmosphere from the source to the receiver, noise levels attenuate (i.e., decrease) depending on a variety of factors, including geometric spreading (i.e., spherical or cylindrical spreading), ground absorption (i.e., hard versus soft sites), atmospheric conditions (e.g., wind direction and speed, air temperature, humidity, turbulence), and shielding by natural or human-made features.

The amplitude of pressure waves generated by a sound source determines the loudness of that source, also called the sound pressure level (SPL). SPL is most commonly described by using decibels (dB) because this logarithmic unit best corresponds to the way the human ear interprets sound pressures. However, the decibel scale does not adequately characterize how humans perceive noise because the human ear is not equally sensitive to loudness at all frequencies (i.e., pitch) in the audible spectrum. To approximate the response of the human ear, sound levels of individual frequency bands are weighted, depending on the human sensitivity to those frequencies. Then, an "A-weighted" sound level (expressed in units of A-weighted decibels or dBA) can be computed based on this information. All sound levels discussed in this section are expressed in A-weighted decibels.

Because decibels are logarithmic units, SPLs expressed in dB cannot be added or subtracted through ordinary arithmetic. Under the decibel scale, a doubling of sound energy corresponds to a 3-dB increase. In typical noisy environments, changes in noise of 1–2 dB are generally not perceptible. However, it is widely accepted that people can begin to detect sound level increases of 3 dB in typical noisy environments. Further, a 5-dB increase is generally perceived as a distinctly noticeable increase, and a 10-dB increase is generally perceived as a doubling of loudness (Caltrans 2013:2-10).

Various noise descriptors have been developed to describe time-varying noise levels. The noise descriptors used in this chapter include:

- A-Weighted Decibels (dBA): Noise levels are commonly reported in decibels using the A-weighting scale (dbA). The A-weighting network approximates the frequency response of the average young ear when listening to most ordinary sounds. When people make judgments of the relative loudness or annoyance of a sound, their judgment correlates well with the A-scale sound levels of those sounds.
- Equivalent Continuous Sound Level (L_{eq}): L_{eq} represents an average of the sound energy occurring over a specified period. In effect, L_{eq} is the steady-state sound level containing the same acoustical energy as the time-varying sound level that occurs during the same period (Caltrans 2013:2-48). For instance, the 1-hour equivalent sound level, also referred to as the hourly L_{eq}, is the energy average of sound levels occurring during a 1-hour period.
- Community Noise Equivalent Level (CNEL): CNEL is the energy average of the A-weighted sound levels occurring over a 24-hour period, with a 10-dB penalty applied to sound levels occurring during the nighttime hours between 10 p.m. and 7 a.m. and a 5-dB penalty applied to the sound levels occurring during evening hours between 7 p.m. and 10 p.m. (Caltrans 2013:2-48).

GROUND VIBRATION

Vibration is the periodic oscillation of a medium or object with respect to a given reference point. Groundborne vibration is vibration of and through the ground. Sources of ground-borne vibration include natural phenomena (e.g., earthquakes, volcanic eruptions, sea waves, landslides) and those introduced by human activity (e.g., explosions, machinery, traffic, trains, construction equipment). Vibration sources may be continuous, (e.g., operating factory machinery) or transient in nature (e.g., explosions).

Groundborne vibration amplitudes are commonly expressed in peak particle velocity (PPV) or root-mean-square (RMS) vibration velocity. PPV and RMS vibration velocities are normally described in inches per second (in/sec) but can also be expressed in decibel notation (VdB), which is used mainly in evaluating human response to vibration.

EXISTING NOISE SOURCES

The predominant noise source in the vicinity of the plan area is vehicle traffic on local roadways, primarily US 50 (Lake Tahoe Boulevard) and Rufus Allen Boulevard. In addition to traffic noise sources, noise sources associated with land uses within and surrounding the plan area also contribute to the existing noise environment. The plan area is located in a primarily developed area in the City of South Lake Tahoe and includes various on-site recreational, camping, and other public facilities. Noise associated with these types of land uses includes people talking, laughing, playing music, and participating in recreational activities. The plan area is also surrounded by a mix of residential and commercial land uses. Residential land uses are not typically associated with substantial noise levels. Noise sources associated with commercial land uses generally include parking lot and loading dock/delivery activity.

NOISE- AND VIBRATION-SENSITIVE RECEPTORS

Noise-sensitive land uses (i.e., sensitive receptors) are generally considered to include uses where noise exposure could result in health-related risks to individuals, as well as places where quiet is an essential element of their intended purpose. Residential dwellings are of primary concern because of the potential for increased and prolonged exposure of individuals to both interior and exterior noise levels, and because of the potential for nighttime noise to result in sleep disruption. Additional land uses such as schools, transient lodging, historic sites, cemeteries, and places of worship are also generally considered sensitive to increases in noise levels. Vibration-sensitive land uses are generally considered to be buildings or structures that could be damaged due to vibration or land uses where vibration levels could interfere with operations or cause human annoyance.

Sensitive receptors in the vicinity of the plan area include single-family residences, hotels, a church, and a school. The nearest sensitive receptors to the plan area are single-family residences in the Al Tahoe and Bijou neighborhoods.

The closest residences in the Al Tahoe and Bijou neighborhoods are located approximately 50 feet south and 55 feet east of the plan area, respectively. The closest hotel (Hotel Azure) is located across Rufus Allen Boulevard 53 feet east of the plan area. Saint Theresa Catholic Church is located approximately 490 feet south of the plan area, and the athletic facilities and closest buildings of South Tahoe Middle School are located approximately 680 and 1,070 feet south of the plan area, respectively.

3.13.2 Discussion

a) Generation of a substantial temporary or permanent increase in ambient noise levels in the vicinity of the project in excess of standards established in the local general plan or noise ordinance, or in other applicable local, state, or federal standards?

56 Acres Master Plan

Less than significant impact with mitigation incorporated. Noise would be generated during construction and operation, which are discussed separately, below.

Temporary Construction Noise

Construction activities associated with development of the Master Plan area, including renovation and alteration of existing buildings and facilities, would result in a temporary increase in noise levels. Master Plan construction is anticipated to begin in 2022 and would occur over an estimated 20 years. Construction activities would vary for each component of the Master Plan but would generally include site preparation, paving, building construction and/or renovation, and landscaping.

Construction noise levels would fluctuate depending on the type, number, and duration of construction equipment use. The effects of construction noise largely depend on the type of construction activities occurring and equipment used on any given day; the distances from construction activity to noise-sensitive receptors; any noise-attenuating features, such as topography, vegetation, and existing structures; and existing ambient noise levels. Pieces of heavy construction equipment that would likely be used during development of the Master Plan area include air compressors, concrete pump trucks, dozers, dump trucks, excavators, flatbed trucks, front end loaders, generators, graders, pavers, and welders. These pieces of equipment generate noise levels that range from 73 to 85 dB at 50 feet (FHWA 2006). No pile driving or blasting would occur.

To demonstrate the loudest possible noise level at all sensitive receptors in the vicinity of the plan area, noise modeling conservatively assumed simultaneous operation of three pieces of heavy equipment (an excavator, a front-end loader, and a generator) at the plan area boundary nearest to each receptor. Table 3.13-1 shows the estimated levels of noise exposure at nearby receptors. Construction noise exposure levels at more distant receptors not listed in Table 3.13-1 would be lower because noise levels attenuate over distance. Also, construction noise exposure levels at the receptors listed in Table 3.13-1 would be lower for construction activities occurring at more distant locations within the plan area. Detailed calculations are provided in Appendix B.

As shown in Table 3.13-1, noise-sensitive receptors near active construction sites would experience temporary elevated noise levels from construction activities. However, Section 68.9 of the TRPA Code exempts construction activities from TRPA noise standards if the activity occurs between 8:00 a.m. and 6:30 p.m. (TRPA 2020:68-5). Additionally, construction activities involving grading would be required to comply with the TRPA Standard Conditions of Approval for Grading Projects (TRPA n.d.), which contains several requirements that would help to reduce noise impacts, including:

- Engine doors shall remain closed during periods of operation except during necessary engine maintenance.
- Stationary equipment (e.g., generators or pumps) shall be located as far as feasible from noise-sensitive receptors and residential areas. Stationary equipment near sensitive noise receptors or residential areas shall be equipped with temporary sound barriers.

All construction associated with development of the Master Plan would occur between the hours of 8:00 a.m. and 6:30 p.m. and would comply with all TRPA requirements. Therefore, short-term increases in noise generated by construction activities would not result in the exposure of sensitive receptors to or generation of noise levels in excess of applicable standards.

Table 3.13-1 Exterior and Interior Noise Levels at Nearby Receptors During Master Plan Construction

Receptor	Approximate Distance from Construction Activity to Receptor (feet)[1]	Exterior Noise Level at Receptor[3] L_{eq}	Indoor Noise Level at Receptor[3,4] L_{eq}
Residences south of plan area in Al Tahoe neighborhood	50	84	60
Residences east of the plan area in Bijou neighborhood	55	83	59
Hotel Azure	53	83	59
Saint Theresa Catholic Church	490	58	34
South Tahoe Middle School	680 (outdoor), 1,070 (indoor)[2]	54	25

Notes: dB = decibel; L_{eq} = equivalent continuous sound level

[1] Distances were measured from the plan area boundary to the nearest receptor to conservatively assume that construction work could potentially occur up to the edge of the plan area closest to the receptor.

[2] These distances differ because the school grounds cover a large area, and the nearest school buildings are farther from the plan area than the nearest outdoor areas used by the school. The outdoor distance was used to calculate the exterior noise level and the indoor distance was used to calculate the indoor noise level.

[3] Noise exposure level estimates conservatively assume simultaneous operation of three pieces of heavy equipment (an excavator, a front-end loader, and a generator) in close proximity to each other at the boundary of the plan area nearest to the receptor. Noise level estimates assume all equipment is properly maintained and fitted with operational noise control device, per manufacturer specifications. See Appendix B for detailed noise modeling and input parameters.

[4] Building walls would provide 24 dB of attenuation (EPA 1971:11).

Source: Modeled by Ascent Environmental in 2021

Long-term, Operational Noise

Long-term, operational noise would be generated by a variety of noise sources, including operational and maintenance activities, visitors using the facilities, parking lot activity, mechanical equipment for on-site buildings (i.e., HVAC units), and vehicle traffic along local roadways.

Maintenance Activities

The Master Plan would create a park with a variety of recreational and civic facilities and services, including a campground, trails and paths, parking, play and gather spaces (e.g., Lakeview Commons, Champions Plaza, playgrounds), a library, the Multigenerational Center, an ice arena, county facilities, and a civic center. Many of these uses already exist within the Master Plan area and would continue to operate in the same manner as existing conditions after implementation. Some facilities would be relocated and/or expanded as part of the Master Plan, but operations would generally include the same types of activities and require the same types of equipment. No heavy-duty noise-generating equipment, such as those discussed in the analysis of construction noise, would be required for maintenance of the plan area. Landscaping tools (e.g., lawn mowers, hand tools) are typical for developed areas such as the City of South Lake Tahoe.

Visitor Activities

The number of visitors to the plan area would increase after implementation of the Master Plan to utilize the facilities and services onsite. However, people visiting the site would partake in the same types of activities (e.g., camping, recreation, special events) that already occur on-site and, thus, would produce the same types of noise (e.g., talking, children playing).

As described in Chapter 2, "Project Description," the campground would be reconfigured and relocated south of its existing location. The number of campsites would be reduced from 178 sites to 135 sites; thus, the campground

improvements could result in a reduction of noise. Additionally, campground guests must adhere to quiet hours (generally 10:00 p.m. to 7:00a.m.) which prohibits the use of loud equipment and noise generating activities (i.e., RV generators, loud music, etc.).

Special events would be required to comply with City noise requirements. Proposed outdoor events with expected noise impacts are required to develop a Sound Management Plan as part of an event's application to control the type and volume of sound produced by the event and minimize possible disturbance to nearby sensitive receptors. Additionally, no event shall exceed a maximum decibel limit of 95dB measured at the property line over a sustained period of ten minutes, and outdoor music and entertainment shall be limited to performing between the hours of 10:00 a.m. and 10:00 p.m. although music and entertainment is not expected and will not be approved to occur through those twelve hours (City of South Lake Tahoe 2021a). Special event applicants shall work closely with the City to ensure proper notification procedures take place as appropriate.

The increase in visitors to the plan area would not be large enough to noticeably increase noise levels off-site, and visitors would not introduce new types of noise sources to the plan area. Additionally, the campground would be reduced and, therefore, result in potentially reduced noise levels. As detailed above, special events that would generate increased noise would be scheduled and approved by the City and must follow all City noise regulations as detailed in the Special Event Guidelines. Furthermore, the new flexible event space would be located in the northwestern portion of the plan area distant from sensitive receptors.

Parking Lots

The Master Plan would include the provision of new and relocated parking lots within the plan area. The largest parking areas would be located on the eastern side of the plan area, one next to the Multigenerational Center (northern lot) and the other located next to the ice arena (southern lot). Noise sources associated with parking lots are generally short-term and can include car engines revving or idling, tires squeaking, car alarms, car horns, doors slamming, and people talking. Although the existing parking lots within the plan area are smaller than what is planned as part of the Master Plan, parking lot noise is part of the existing noise environment because these surface parking lots currently exist in the plan area. Additionally, the nearest sensitive receptor is located approximately 100 feet to the east from the nearest edge of each parking lot across Rufus Allen Boulevard, which is a predominant source of noise in the area. Because the parking lot is separated from sensitive receptors by landscaping, an intervening and predominant noise source in the area (Rufus Allen Boulevard), and will primarily be used during the daytime hours, noise generated this parking lot would not expose any offsite receptors to excessive noise levels that could exceed City standards or disturb people during the sensitive times of the day.

HVAC Equipment

Development of the project would result in the installation of stationary noise sources used for the operation of buildings such as HVAC equipment. Noise levels from HVAC equipment vary substantially depending on unit efficiency, size, and location. Noise levels from HVAC equipment range from 45 to 70 dBA L_{eq} at 50 feet (EPA 1971). The buildings currently existing on-site are already equipped with HVAC equipment necessary for operation; and thus, are already part of the existing noise condition on-site. The only new buildings that would be constructed that would include new HVAC units would be the Multigenerational Center and the civic center, which would be located approximately 500 and 375 feet away from the nearest sensitive receptors, respectively. Using the highest noise level for HVAC equipment and assuming the equipment would be installed on the closest edge of each building, the nearest sensitive receptors to the Multigenerational Center would be exposed to a noise level of 44 dB L_{eq}, and the nearest sensitive receptors to the civic center would be exposed to a noise level of 53 dB L_{eq}. Therefore, the single-family residences across the street from the civic center could be exposed to noise levels that exceed the City's exterior nighttime non-transportation noise standard of 45 dB L_{eq} (City of South Lake Tahoe 2021b). See Appendix B for detailed calculations.

Traffic Noise

The existing noise environment in the Master Plan area is dominated by traffic noise from nearby roadways, as well as nearby commercial activities. Vehicle trips generated by visitors to the Master Plan area and new employees would

result in an increase in average daily traffic volumes and associated increases in traffic noise levels along affected roadway segments near the project site.

A doubling of a noise source results in a 3-dBA increase in noise. It is generally accepted that a change of 3 dBA is barely perceptible, a change of 5 dBA is readily perceptible, and a change of 10 dBA is perceived as twice or half as loud to the average human ear (Caltrans 2013:6-5). Therefore, the significance threshold for mobile source noise is based on human perceptibility to changes in noise levels (increases) with consideration of existing ambient noise conditions. Based on the traffic modeling conducted and summarized in Chapter 3.17, "Transportation," the build out of the Master Plan is expected to increase daily vehicle trips from 3,376 to 4,458 (i.e., net increase of 1,082). Existing volumes would not double; thus, traffic noise increases would be less than 3 dBA. Therefore, additional trips associated with the build out of the Master Plan would not result in a substantial noise increase.

Summary of Impacts

As detailed above, short-term increases in noise generated by construction activities associated with the Master Plan would not result in the exposure of sensitive receptors to or generation of noise levels in excess of applicable standards. Additionally, project-generated operational traffic noise levels would not result in substantial noise increases (i.e., more than 3 dBA). However, long-term operational stationary source noise levels would exceed the City's nighttime non-transportation noise standard of 45 dB L_{eq}. Therefore, this impact would be significant.

Mitigation Measure 3.13-1: Implement Design Measures to Ensure That Operation of On-Site HVAC Equipment Does Not Expose Off-Site Sensitive Receptors to Noise Levels That Exceed Applicable Standards

This mitigation measure applies to the 56 Acres Master Plan.

The City shall implement design measures to ensure that all mechanical building equipment that is part of HVAC systems on the civic center buildings do not expose off-site residential and temporary lodging land uses to exterior noise levels that exceed 55 L_{eq} during daytime hours (7 a.m. to 10 p.m.) or 45 L_{eq} during nighttime hours (10 p.m. to 7 a.m.). The effectiveness of the design measures shall be verified by a qualified acoustical engineer. Measures to achieve these performance standards may include, but shall not be limited to, the following measures:

- Locate HVAC units within equipment rooms or enclosures that incorporate noise reduction features, such as acoustical louvers. Equipment enclosures shall be oriented so that major openings (i.e., intake louvers, exhaust) are directed away from nearby noise-sensitive receptors.
- Set back all HVAC units as much as possible from off-site noise-sensitive receptors, including residential and temporary lodging land uses.
- Position HVAC units on the opposite side of an on-site buildings from off-site sensitive receptors so that the buildings serve as an intervening noise barrier.
- Design and build sound barriers near all noise-generating HVAC units that enclose mechanical equipment as much as possible and completely block the line of sight between the equipment and off-site residential and temporary lodging land uses. Sound barriers can consist of a wall, earthen berm, or some combination thereof.

Significance after Mitigation

Implementation of Mitigation Measure 3.13-1 would ensure that nearby noise sensitive receptors were not exposed to noise levels from HVAC systems within the Master Plan area such that the City's exterior daytime or nighttime non-transportation noise standards would be exceeded. Thus, this impact would be reduced to a **less-than-significant** level.

Multigenerational Center Project

Less-than-significant impact. Noise would be generated during construction and operation, which are discussed separately, below.

Temporary Construction Noise

Construction activities associated with development of the Multigenerational Center would result in a temporary increase in noise levels. Construction of the Multigenerational Center is anticipated to begin in 2022 and the building

would be operational in 2024. Construction activities would generally include site preparation, paving, building construction, and landscaping.

As detailed above for the Master Plan, construction noise levels would fluctuate depending on the type, number, and duration of use of construction equipment. Pieces of heavy equipment that may be used during construction of the Multigenerational Center include air compressors, concrete pump trucks, dozers, dump trucks, excavators, flatbed trucks, front end loaders, generators, graders, pavers, and welders. These pieces of equipment generate noise levels that range from 73 to 85 dB at 50 feet (FHWA 2006). No pile driving or blasting would occur.

To demonstrate the loudest possible noise level at the nearest sensitive receptor in the vicinity of the Multigenerational Center, noise modeling conservatively assumed simultaneous operation of three pieces of heavy equipment (an excavator, a front-end loader, and a generator) at the project site boundary closest to the nearest sensitive receptor (Hotel Azure). Construction of the Multigenerational Center would occur approximately 500 feet from Hotel Azure, resulting in an attenuated noise level at the receptor of 58 dB L_{eq}. Detailed calculations are provided in Appendix B.

Table 3.13-2 Exterior and Interior Noise Levels at Nearby Receptors During Multigenerational Center Construction

Receptor	Approximate Distance from Construction Activity to Receptor (feet)[1]	Exterior Noise Level at Receptor[3] L_{eq}	Indoor Noise Level at Receptor[3,4] L_{eq}
Hotel Azure	500	58	34

Notes: dB = decibel; L_{eq} = equivalent continuous sound level

[1] Distances for were measured from the nearest plan area boundary to the receptor to conservatively assume that construction work could potentially occur up to the edge of the plan area closest to the receptor.

[2] These distances differ because the school grounds cover a large area, and the nearest school buildings are farther from the plan area than the nearest outdoor areas used by the school. The outdoor distance was used to calculate the exterior noise level and the indoor distance was used to calculate the indoor noise level.

[3] Noise exposure level estimates conservatively assume simultaneous operation of three pieces of heavy equipment (an excavator, a front-end loader, and a generator) in close proximity to each other at the boundary of the plan area nearest to the receptor. Noise level estimates assume all equipment is properly maintained and fitted with operational noise control device, per manufacturer specifications. See Appendix D for detailed noise modeling and input parameters.

[4] Building walls would provide 24 dB of attenuation (EPA 1971:11).

Source: Modeled by Ascent Environmental in 2021

Additionally, as applied to the construction noise analysis for Master Plan implementation, Section 68.9 of the TRPA Code exempts construction activities from TRPA noise standards if the activity occurs between 8:00 a.m. and 6:30 p.m. (TRPA 2020:68-5). Furthermore, construction activities involving grading would be required to comply with the TRPA Standard Conditions of Approval for Grading Projects (TRPA n.d.), which contains several requirements that would help to reduce noise impacts, including:

- Engine doors shall remain closed during periods of operation except during necessary engine maintenance.
- Stationary equipment (e.g., generators or pumps) shall be located as far as feasible from noise-sensitive receptors and residential areas. Stationary equipment near sensitive noise receptors or residential areas shall be equipped with temporary sound barriers.

All construction associated with development of the Multigenerational Center would occur between the hours of 8:00 a.m. and 6:30 p.m. and would comply with all TRPA requirements. Therefore, short-term increases in noise generated by construction activities would not result in the exposure of sensitive receptors to or generation of noise levels in excess of applicable standards.

Long-term, Operational Noise

Long-term, operational noise for the Multigenerational Center would be generated by a variety of noise sources including operational and maintenance activities, visitors using the facility, parking lot activity, mechanical equipment

(i.e., HVAC units), and vehicle traffic along local roadways. The analysis above related to noise generated by maintenance and visitor activities for the Master Plan is applicable to the Multigenerational Center and is not discussed further.

Parking Lots

The Multigenerational Center would include the expansion of the existing library parking lot by 56 spaces. Noise sources associated with parking lots are generally short-term and can include car engines revving or idling, tires squeaking, car alarms, car horns, doors slamming, and people talking. However, noise generated by parking lot activity is part of the existing noise environment because parking spaces currently exist in the area. Additionally, the nearest sensitive receptor is located approximately 100 feet to the east from the nearest edge of each parking lot across Rufus Allen Boulevard, which is a predominant source of noise in the area. Because the parking lot is separated from sensitive receptors by landscaping, an intervening and predominant noise source in the area (Rufus Allen Boulevard), and will primarily be used during the daytime hours, noise generated this parking lot would not expose any offsite receptors to excessive noise levels that could exceed City standards or disturb people during the sensitive times of the day.

HVAC Equipment

As discussed above, noise levels from HVAC equipment range from 45 to 70 dBA L_{eq} at 50 feet (EPA 1971). The Multigenerational Center is one of two buildings constructed that would include new HVAC units as part of Master Plan implementation and would be located approximately 500 feet away from the nearest sensitive receptors. Using the highest noise level for HVAC equipment and assuming the equipment would be installed on the closest edge of each building, the nearest sensitive receptors to the Multigenerational Center would be exposed to a noise level of 44 dB L_{eq}; thus, noise generated from HVAC equipment at the Multigenerational Center would not exceed the City's nighttime non-transportation noise standard of 45 dB L_{eq} (City of South Lake Tahoe 2021b). See Appendix B for detailed calculations.

Traffic Noise

Vehicle trips generated by visitors to the Multigenerational Center and new employees would result in an increase in average daily traffic volumes and associated increases in traffic noise levels along affected roadway segments near the project site.

A doubling of a noise source results in a 3-dBA increase in noise. It is generally accepted that a change of 3 dBA is barely perceptible, a change of 5 dBA is readily perceptible, and a change of 10 dBA is perceived as twice or half as loud to the average human ear (Caltrans 2013:6-5). Based on the traffic modeling conducted and summarized in Chapter 3.17, "Transportation," the Multigenerational Center is expected to increase daily vehicle trips from 952 to 1,446 (i.e., a net increase of 494 trips). Existing volumes would not double; thus, traffic noise increases would be less than 3 dBA. Therefore, additional trips associated with the Multigenerational Center would not result in substantial noise increases and the Multigenerational Center would be required to comply with adopted TRPA thresholds.

Summary of Impacts

As detailed above, short-term increases in noise generated by construction activities associated with the Multigenerational Center would not result in the exposure of sensitive receptors to or generation of noise levels in excess of applicable standards. Additionally, long-term operational stationary source noise levels would not exceed the City's nighttime non-transportation noise standard of 45 dB L_{eq} and project-generated operational traffic noise levels would not result in substantial noise increases (i.e., more than 3 dBA). Therefore, this impact would be less than significant.

b) Generation of excessive groundborne vibration or groundborne noise levels?

56 Acres Master Plan

Less-than-significant impact. Master Plan construction would not involve the use of ground vibration–intensive activities, such as pile driving and blasting. Activities involving pile driving and blasting typically generate the highest vibration levels compared to other construction methods and are, therefore, of greatest concern when evaluating

construction-related vibration impacts. Pieces of equipment that generate lower levels of ground vibration, such as bulldozers, would be used during construction. Operation of a bulldozer generates a vibration level of 0.089 in/sec PPV and 87 VdB at 25 feet (FTA 2018:184). Vibration from operation of a bulldozer could exceed the Caltrans-recommended threshold of 0.5 in/sec PPV for structural damage (Caltrans 2020) within 37 feet of bulldozing and the FTA-recommended threshold with respect to human response of 80 VdB (FTA 2018) within 43 feet of bulldozing. Refer to Appendix B for detailed vibration modeling calculations. All off-site vibration-sensitive receptors are located 50 feet or further from the nearest Master Plan area boundary. Thus, construction associated with implementation of the Master Plan would not result in vibration levels at sensitive receptors exceeding Caltrans- or FTA-recommended standards with respect to the prevention of structural damage and human annoyance, respectively. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. Multigenerational Center construction would not involve the use of ground vibration–intensive activities, such as pile driving and blasting. Operation of a bulldozer generates a vibration level of 0.089 in/sec PPV and 87 VdB at 25 feet (FTA 2018:184). Vibration from operation of a bulldozer could exceed the Caltrans-recommended threshold of 0.5 in/sec PPV for structural damage (Caltrans 2020) within 37 feet of bulldozing and the FTA-recommended threshold with respect to human response of 80 VdB (FTA 2018) within 43 feet of bulldozing. Refer to Appendix B for detailed vibration modeling calculations. The nearest sensitive receptor is located approximately 500 feet from the Multigenerational Center site. Thus, construction associated with implementation of the Multigenerational Center would not result in vibration levels at sensitive receptors exceeding Caltrans- or FTA-recommended standards with respect to the prevention of structural damage and human annoyance, respectively. This impact would be less than significant.

c) For a project located within the vicinity of a private airstrip or an airport land use plan or, where such a plan has not been adopted, within two miles of a public airport or public use airport, would the project expose people residing or working in the project area to excessive noise levels?

56 Acres Master Plan

Less-than-significant impact. The plan area is located within the Airport Influence Area Review Area 2 for the Lake Tahoe Airport, which is the nearest airport. Its runway is located approximately 2.5 miles south of the plan area. The Lake Tahoe Airport Land Use Compatibility Plan (ALUCP) includes noise compatibility criteria for land uses within the Airport Influence Area, as well as airport noise contours (LTALUC 2019). Based on the noise contour map provided in the ALUCP, the plan area is located outside of the 50 CNEL airport noise contour. Therefore, the land uses within the Master Plan area would be compatible with regards to aircraft noise, and implementation of the Master Plan would not result in the exposure of visitors or employees to excessive aircraft-related noise levels. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. As detailed above, all land uses within the Master Plan, including the Multigenerational Center, are located within the Airport Influence Area Review Area 2 for the Lake Tahoe Airport, which is the closest airport to the plan area. Its runway is located approximately 2.5 miles south of the Multigenerational Center. As described above, the ALUCP includes noise compatibility criteria for land uses within the Airport Influence Area, as well as airport noise contours (LTALUC 2019). Based on the noise contour map provided in the ALUCP, the Multigenerational Center is located outside of the 50 CNEL airport noise contour. Therefore, the Multigenerational Center would be compatible with regards to aircraft noise, and operation of the Multigenerational Center would not result in the exposure of visitors or employees to excessive aircraft-related noise levels. This impact would be less than significant.

3.13.3 Cumulative Impacts

Impacts related to short-term project-related construction noise and vibration levels are localized in nature, based on audibility and distance to sensitive receptors. Cumulative impacts from construction-generated noise may result if other future planned construction activities were to take place close to the project site and cumulatively combine with construction noise from the Project. As detailed in item a) above, Section 68.9 of the TRPA Code exempts construction activities from TRPA noise standards if the activity occurs between 8:00 a.m. and 6:30 p.m. (TRPA 2020:68-5). Therefore, because all construction associated with development of the Master Plan and Multigenerational Center would occur between the hours of 8:00 a.m. and 6:30 p.m. and would comply with all TRPA requirements, combining of any construction noise would be exempt and comply with TRPA construction noise requirements. Therefore, noise impacts associated with temporary increases in ambient noise levels (i.e., construction activities) as discussed under item a) would not be cumulatively considerable.

As detailed in Table 3.21-1, the cumulative projects generally consist of multimodal facilities, roadway improvements, stormwater infrastructure improvements, and slope stabilization and could occur at the same time as construction of the Master Plan and Multigenerational Center. These facilities would not result in the introduction of any new stationary noise sources during operation; and thus, would not combine with the noise generated by parking lot activity or mechanical equipment (i.e., HVAC units) associated with the implementation of the Master Plan and Multigenerational Center. Additionally, as discussed under item a), above, buildout of the Master Plan and Multigeneration Center would not generate a substantial increase in traffic noise levels because, generally, noise level increases of less than 3 dB would be barely perceptible to the human ear. Therefore, noise impacts associated with permanent increases in ambient noise levels as discussed under item a) would not be cumulatively considerable.

Therefore, the noise generated during construction and operation of the project would not combine with other cumulative projects identified in Table 3.21-1 in such a way that would result in significant noise exposure to the same individual noise sensitive receptors. Thus, the project **would not make a considerable contribution** to a cumulatively significant impact.

3.14 POPULATION AND HOUSING

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIV. Population and Housing.				
Would the project:				
a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?	☐	☐	☒	☐
b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?	☐	☐	☐	☒

3.14.1 Environmental Setting

According to the U.S. Census Bureau, the population for the City of South Lake Tahoe was estimated to be approximately 21,330 people in 2020 with approximately 15,961 total housing units reported for 2019 (U.S. Census Bureau 2019a, 2020). Many of the housing units are used as second homes or vacation rentals, resulting in approximately 42 percent of the housing units being classified as vacant in 2019 (U.S. Census Bureau 2019a). The primary land use in the plan area includes recreation and public service uses. In 2019, the City had an estimated unemployment rate of approximately 5 percent (U.S. Census Bureau 2019b).

No residences are located within the plan area. Single family residences are located directly east of the plan area along Rufus Allen Boulevard, while commercial and residential properties border the project site to the west along US 50 and Harrison Avenue.

3.14.2 Discussion

a) Induce substantial unplanned population growth in an area, either directly (for example, by proposing new homes and businesses) or indirectly (for example, through extension of roads or other infrastructure)?

56 Acres Master Plan

Less-than-significant impact. The Master Plan proposes new and improvements of existing public spaces and recreational facilities that are located within the plan area, which would also include additional opportunities for a limited number of special events within the plan area. The plan would not construct new commercial development, housing, lodging, or new roadways that would induce population growth in the area. Roadway and parking improvements proposed as part of the Master Plan would be constructed to support the proposed facility improvements, and would not, due to their location within an area that is already developed, result in substantial population growth. The proposed event space would result in a temporary increase of people within the plan area. These events would be small (similar to the size of those that occur at Lakeview Commons) and limited to an estimated 10 events per year at the new outdoor event space and 10 events per year at the new Main Street and, thus, would not be anticipated to induce population growth in the City. The existing City Council chambers would be relocated to the new Civic Center. The proposed improvements, given that the types and intensity of land uses within the plan are similar to existing conditions, would not generate new employment that would result in substantial unplanned population growth such that construction of additional housing would be required. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. The recreational opportunities provided by the existing Recreation and Swim Complex would be shifted to the Multigenerational Center. Additionally, City staff offices in the existing Recreation and Swim Complex as well as City staff offices at the Lake Tahoe Airport would be relocated to the Multigenerational Center. Implementation of the project could result in a small increase in employment (fewer than 10 jobs) associated with the potential to expand programs and recreation opportunities. However, the amount of employment generated by the project would be minimal and would not result in substantial unplanned population growth such that construction of additional housing would be required. Occurrence of classes and community events within the center would be temporary, limited to business and special event hours as required by City and TRPA ordinance. These improvements, due to their nature, compatibility with existing land uses in a developed area, would not result in direct or indirect substantial population growth in or around the project site. This impact would be less than significant.

b) Displace substantial numbers of existing people or housing, necessitating the construction of replacement housing elsewhere?

56 Acres Master Plan

No impact. The plan area contains public service and recreation uses. No residences are currently located in the plan area. Thus, implementation of the Master Plan would not result in the relocation of people or housing and would not require the construction of replacement housing. There would be no impact.

Multigenerational Center Project

No impact. No housing is located within the plan area or within the Multigenerational Center Project site. The project would therefore not result in a displacement of people or housing. There would be no impact.

3.14.3 Cumulative Impacts

The cumulative projects listed in Table 3.21-1 would generate temporary, short-term employment and would not be considered to result in a substantial increase in employment. These projects would not result in new or different land uses, or operational employment opportunities that could result in population growth. Employment opportunities resulting from construction activities associated with the cumulative projects would generate temporary, short-term employment and would not be considered to result in a substantial increase in employment. Employment needs for these projects would be met by existing contractors that work in the South Lake Tahoe area. The proposed project would serve residences of the South Lake Tahoe area and would not induce long-term population growth. The project would not combine with other cumulative projects identified in Table 3.21-1 to result in a cumulative permanent increase in employment or population growth. The project would result in no impacts on displacement of housing or people. Thus, the Master Plan and Multigenerational Center **would not make a considerable contribution** to a significant cumulative impact related to population and housing.

3.15 PUBLIC SERVICES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XV. Public Services.				
Would the project:				
a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:				
Fire protection?	☐	☐	☒	☐
Police protection?	☐	☐	☒	☐
Schools?	☐	☐	☐	☒
Parks?	☐	☐	☒	☐
Other public facilities?	☐	☐	☒	☐

3.15.1 Environmental Setting

FIRE PROTECTION

In the Tahoe Basin, federal, state, and local fire districts participate in mutual aid agreements to provide and receive support and services during unplanned emergency events with other cooperating agencies. The plan area is served by South Lake Tahoe Fire Rescue (SLTFR). SLTFR provides fire suppression, fire prevention, and emergency medical services for residents, visitors, and workers within the City of South Lake Tahoe's approximately 17 square mile boundary. Additionally, the South Lake Tahoe Fire Rescue fire department assists other agencies in responding to wildland fires throughout the Tahoe Basin. The department currently operates with 36 fire fighters and three fire stations (City of South Lake Tahoe no date). In 2020, the City of South Lake Tahoe's population was approximately 21,330 (U.S. Census Bureau 2020). Therefore, the ratio of uniformed fire personnel to residents during that time was approximately 1 to 592. In 2020, South Lake Tahoe Fire Rescue conducted a total of 3,353 responses (South Lake Tahoe Fire Rescue 2021). Station Two, located at 2951 Lake Tahoe Boulevard, is the closest fire facility to the planning area at approximately 0.2 mile southwest of the plan area.

POLICE PROTECTION

The South Lake Tahoe Police Department (SLTPD) is the primary jurisdictional law enforcement agency that provides law enforcement service(s) to the City of South Lake Tahoe and plan area. As of 2020, the SLTPD consisted of approximately 73 personnel. Currently, there are including currently are 41 sworn officer positions and 30 civilian support positions, including dispatchers, evidence technicians, records technicians, community service officers, and administrative staff (City of South Lake Tahoe 2021). In 2020, the City of South Lake Tahoe's population was approximately 21,330 (U.S. Census Bureau 2020). Therefore, the ratio of SLTPD sworn officers to residents was approximately 1 to 520. In 2020, SLTPD responded to approximately 31,600 calls for service (SLTPD 2021).

SCHOOLS

The plan area is located within the Lake Tahoe Unified School District (LTUSD). Schools within LTUSD provide Kindergarten through 12th Grade education and include Tahoe Valley Elementary School, Sierra House Elementary School, Lake Tahoe Environmental Science Magnet School, Bijou Community School, South Tahoe Middle School, and South Tahoe High School (LTUSD 2021). Based on data for the 2020–2021 school year, approximately 3,900 students were enrolled within the LTUSD (DOE 2017). Schools identified nearest to the plan area include the Saint Theresa Catholic School, Tahoe Parents Nursery School, and South Lake Tahoe Middle School, which are all located within 0.25 mile of the southern edge of the plan area. A fourth school, the Bijou Community School, is located approximately 0.7 mile east of the plan area.

PARKS

Multiple parks and recreation facilities are located within the plan area and project vicinity, including the City's Recreation and Swim Complex, South Lake Tahoe Ice Arena, Campground by the Lake, and Lakeview Commons. Setting information related to parks is provided in Section 3.16, "Recreation."

3.15.2 Discussion

a) Result in substantial adverse physical impacts associated with the provision of new or physically altered governmental facilities, or the need for new or physically altered governmental facilities, the construction of which could cause significant environmental impacts, in order to maintain acceptable service ratios, response times, or other performance objectives for any of the public services:

Fire protection?

56 Acres Master Plan

Less-than-significant impact. The Master Plan would include redevelopment of an existing developed recreation area in a central location within the City. The redevelopment includes enhancing the existing recreation amenities through relocation of maintenance and vector control facilities outside of the plan area, reduction in the size of the campground and adding camping cabins, provision of nature and fitness play areas, outdoor flexible event space, increase in shared-use paths and connectivity throughout the plan area, demolition of the existing Recreation and Swim Complex, and the new Main Street that provides a connection between US 50 and Rufus Allen through the plan area. The new Main Street would enhance access for fire and emergency service providers through the middle of the plan area. Existing fire hydrants are located throughout the plan area and at the time the individual projects in the Master Plan area designed, the location of additional fire hydrants would be identified, and additional hydrants would be installed. The Master Plan would not construct housing or otherwise result in an increase in population (refer to Section 3.14, "Population and Housing").

Overall, implementation of the Master Plan would reduce the number of buildings in the plan area and remove maintenance facilities that are not consistent with recreation uses. However, there would be temporary increases in people in the plan area associated with special events that occur, there would not be new types of uses that would substantially change the demand for fire and emergency services compared to existing conditions. Additionally, as described under item g) in Section 3.9, "Hazards and Hazardous Materials," the Master Plan would not result in a greater fire risk than currently exists and would reduce potential fire hazards associated with campfire rings with the reduction in number of campsites. For the reasons described herein, implementation of the Master Plan would not result in a substantial increase in demand for fire and emergency services or require construction or provision of additional fire protection facilities. This impact would be less than significant.

Multigenerational Center Project
Less-than-significant impact. See discussion under "56 Acres Master Plan," above.

Police protection?

56 Acres Master Plan
Less-than-significant impact. Operation of new event spaces proposed under the Master Plan (i.e., Main Street and outdoor event space) could temporarily and intermittently result in increased need for security or police services within the plan area.

Currently, special events are hosted at Lakeview Commons and athletic events are held at the ice arena and Recreation and Swim Complex, which result in temporary increases in people in the plan area. These events would continue to occur in the plan area, with athletic events at the Recreation and Swim Complex shifted to the Multigenerational Center. Implementation of the Master Plan would increase the number of special events in the plan area with the new Main Street and outdoor event space. Up to 10 events could be held at each of these facilities each year, with the Main Street closed to traffic during events in that area. The events could attract from 250–500 people at each event. However, because the City Parks and Recreation Department would schedule events at facilities in the plan area through the event application process, overlapping events that would exceed the capacity for police and security services would not be scheduled. Additionally, the Special Event Application Guidelines provide a list of requirements for event planners to meet that would minimize adverse effects related to traffic and safety (Thomaselli, pers. comm., 2021). As identified in the event application process, event organizers are required to provide security and develop a security plan in coordination with the City Police. For some events, the City may also require the presence of police to ensure public safety and the safety and/or security plan must include a commitment on the part of the organizer to provide or fund sufficient resources to complement those provided by the City and successfully implement the safety plan. Because special events would be required to obtain approval through the City Parks and Recreation Department and would comply with requirements for security and police services, as needed and identified early in the event planning process, the potential increase in demand for police services associated with temporary increases of people in the plan area associated with special events at the Main Street and new outdoor event space would be accommodated through the event planning process. Thus, the increase in people in the plan area from additional special events would not adversely affect police service ratios or response times.

Because the City limits the number of events that occur at one time and require event planners to implement measures to manage traffic and security, the additional events would not result in substantial adverse physical impacts associated with the provision of new or physically altered police facilities, or the need for new or physically altered police facilities resulting in significant environmental impacts and acceptable service ratios and response times would be maintained. This impact would be less than significant.

Multigenerational Center Project
Less-than-significant impact. See discussion under "56 Acres Master Plan," above.

Schools?

56 Acres Master Plan
No impact. The Master Plan consists of improvements to recreational facilities and open space and would not construct or provide new or expanded school facilities within the plan area. The Master Plan would not permanently increase the population in the surrounding community and, thus, no additional school services would be required. There would be no impact.

Multigenerational Center Project
No impact. See discussion under "56 Acres Master Plan," above.

Parks?

56 Acres Master Plan

Less-than-significant impact. The proposed project includes development of recreation facilities and would not result in additional increases in demand for park facilities that would result in the need for new or physically altered park facilities. See the discussion under b) in Section 3.16.2 in Section 3.16, "Recreation." This IS/MND analyzes the physical effects of constructing the Master Plan and Multigenerational Center in Sections 3.1 through 3.20. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. See discussion under "56 Acres Master Plan," above.

Other public facilities?

56 Acres Master Plan

Less-than-significant impact. The Master Plan would result in the construction of a new Civic Center located in the center of the planning area. The City Council chambers would be relocated to this building and the building would include administrative offices and provide space for community meetings or events. This IS/MND analyzes the physical effects of constructing these components of the Master Plan in Sections 3.1 through 3.20. Additionally, implementation of the Master Plan would result in the relocation of three public service-related facilities. The vector control facility operated by El Dorado County, City Public Works maintenance facility, and a parks maintenance facility are proposed for removal from the Master Plan area. These facilities would likely be replaced at another location outside of the plan area. The specific location of any replaced facilities are not known at this time. The development of replaced facilities would undergo environmental review pursuant to CEQA and TRPA regulations at the time they are proposed.

The Master Plan would not result in an increase in residents and would include a small potential increase in employment (i.e., up to an estimated 10 jobs); thus, there would not be an increase in demand for other public facilities.

For the reasons described herein, implementation of the Master Plan would not result in the need for other new or expanded public services and would not permanently impact the City or County's ability to provide vector control services or street maintenance. Therefore, this impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. Refer to the discussion under "56 Acres Master Plan," above.

3.15.3 Cumulative Impacts

The cumulative projects listed in Table 3.21-1 consists of improvements to roadway facilities, shore stabilization and lake public access, and a new shared-use trail. These projects would not result in new or different land uses that would increase demand for additional public services. As discussed in Section 3.15.2, "Discussion," the project would result in temporary increases in the need for security or police services during events hosted at the proposed new event facilities. However, these events would be subject to review by the City's permitting process for large events and would be temporary. Emergency access for fire, police, and medical services would be planned and maintained during any event. Implementation of the Master Plan would not result in population increases or substantial changes in land use within the plan area such that expanded public services such as police, fire protection or schools would be provided. The Master Plan and Multigenerational Center project would enhance and continue to provide parks and recreation related public services to the resident community and visitors alike. As the cumulative projects would not result in the need for new or expanded public services, and the propose Master Plan and project would result in a less-than-significant impact, the Master Plan and Multigenerational Center **would not make a considerable contribution** to a cumulative impact related to public services.

3.16 RECREATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVI. Recreation.				
Would the project:				
a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?	☐	☐	☒	☐
b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?	☐	☐	☒	☐

3.16.1 Environmental Setting

The plan area provides a range of recreational opportunities, including day-use activities (e.g., picnicking, beach activities), walking, bicycling, camping, and swimming and classes at the Recreation and Swim Complex. During the winter, many of these activities continue and a winter concessionaire provides additional opportunities for winter recreation activities (e.g., snow karts and snow bikes, snow slide, snow-based play areas).

Numerous recreational activities are also located in close proximity to the plan area. Regan Beach and Bijou Community Park are located within walking distance and approximately 1 mile, respectively, from the plan area and contain the following public recreation amenities:

- beach
- grassy lawn
- volleyball courts
- dog park
- playground
- observation deck
- picnic and barbecue areas
- basketball court
- disc golf course
- open meadow
- restrooms
- bike park
- skateboard park
- Bijou Municipal Golf Course

CAMPGROUNDS

The plan area includes the Campground by the Lake that contains 172 campsites and six tent cabins. Campsites at the campground are available for tent or RV camping. Amenities include restrooms and showers. In 2017, approximately 22,700 people stayed at the Campground by the Lake and approximately 27,600 people stayed in 2018 (Thomaselli, pers. comm., 2021). In 2018, the campground had 75 percent occupancy for the season. The south shore area of Lake Tahoe contains 11 campgrounds, including the Campground by the Lake, with over 1,400 campsites (see Table 3.16-1). The nearest campgrounds to the project area are Tahoe Valley Campground, Camp Richardson campgrounds, and Nevada Beach Campground.

Table 3.16-1 Campgrounds Near the South Shore of Lake Tahoe

Campground	Number of Campsites	Approximate Distance from Campground by the Lake (miles)
Campground by the Lake	172 campsites, 6 tent cabins	0
Tahoe Valley Campground	354 RV sites, 75 tent campsites	3
Camp Richardson Campgrounds (Eagle's Nest and Badger's Den)	211 campsites	5
Nevada Beach Campground	51 campsites	5
Fallen Leaf Campground	201 campsites, 6 yurts	6
Zephyr Cove RV Park and Campground	93 RV sites, 57 tent campsites	6
Camp Shelley	25 campsites	8
Eagle Point Campground	100 campsites	10
Emerald Bay Boat Campground	22 campsites	11
Luther Pass Campground	15 tent campsites	12
D.L. Bliss State Park	151 campsites (includes 1 group site)	13
Total	1,527 campsites 12 yurts/tent cabins	NA

Note: NA = not applicable

Source: compiled by Ascent Environmental in 2021

SHARED-USE PATHS

The plan area and surrounding areas contain a network of shared-use paths, which are paths that support pedestrian and bicycle use with space for two-direction travel. Existing shared-use paths include a continuous path along US 50 from the intersection with Pioneer Trail through the plan area, behind the Harrison Avenue commercial district, back along US 50 continuing west. Some other nearby shared-use paths include a path along Lyons Avenue between US 50 and Rufus Allen Boulevard, Al Tahoe from US 50 to Pioneer Trail, and along Ski Run Boulevard between US 50 and Pioneer Trail. The city contains over 9 miles of shared-use paths and El Dorado County includes 12 miles of shared-use paths (TRPA 2018).

3.16.2 Discussion

a) Increase the use of existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated?

56 Acres Master Plan

Less-than-significant impact. The Master Plan would include construction of new recreation and public service facilities and would not create additional demand for recreation facilities such as a residential or tourist development might.

The various components of the Master Plan would be implemented in phases over 20 years. Existing recreation facilities in the plan area that could be affected by implementation of the Master Plan include the Campground by the Lake, shared-use path on the north side of US 50, and the shared-use path in the portion of the plan area south of US 50. Construction of some of the components, such as the Multigenerational Center project (see below for additional discussion of this component), Civic Center, campground relocation and enhancements, Lakeview Commons Phase 2, Main Street, outdoor event space, and play and gather spaces, would necessarily require temporary closure of some of the existing recreation facilities during construction activities. In particular, the

campground and some of the shared-use paths in the plan area would require closure, which could divert some recreation users to other nearby recreation facilities. However, closure of the shared-use paths would be temporary and recreation users of the shared-use paths would still be able to use existing sidewalks along the roadways in the plan area during construction activities.

Implementation of the Master Plan would result in temporary closure of a portion or all of the campsites at the campground during construction of various components of the Master Plan relocating and reconfiguring the campground. Although the Master Plan would continue to accommodate the campground, the overall number of campsites would be reduced from 172 sites and six tent cabins to 118 campsites for RVs and tents and 17 tent cabins. Including the Campground by the Lake, there are currently 11 campgrounds in the south shore area that provide camping opportunities with over 1,500 campsites. Relocation and configuration of the Campground by the Lake would result in an approximately 2 percent reduction in the number of campsites in the south shore area, which would be partially offset by the increase in tent cabins. During construction of the Master Plan, including the relocated and reconfigured campground, visitors may seek out camping opportunities at other nearby campgrounds. Because nearby campgrounds contain designated campsites that limit the number of visitors at one time, there would not be an increase in use at any one time such that substantial physical deterioration of the facility would occur or be accelerated. Additionally, partial or full closure of the campground would be temporary and use of the plan area for camping would continue once the campground relocation and reconfiguration was completed. Furthermore, with an increase in the number of camping cabins or yurts or tent cabins, this amenity would increase camping opportunities for visitors with limited camping equipment and could expand the times during the year that camping may occur in the project area.

Therefore, the Master Plan would not generate a permanent increase in demand for, or use of, existing recreation facilities outside of the plan area, such that substantial physical deterioration of the facility would occur or be accelerated. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. The Multigenerational Center project would include construction of a new recreation and public service facility that would replace the existing Recreation and Swim Center. The existing Recreation and Swim Center would continue to operate while the Multigenerational Center is being constructed; thus, no existing recreation use of the facility would be displaced during construction of the new facility. As mentioned above for the Master Plan, construction of the Multigenerational Center would temporarily displace some of the campsites in the plan area. However, for the reasons discussed above for the Master Plan, camping opportunities for recreation users of the campground would be temporarily redirected to other nearby campgrounds. Use of nearby campgrounds during temporary closure of the campground in the plan area is discussed above for the 56 Acres Master Plan. The Multigenerational Center would not generate a permanent increase in demand for use of existing recreation facilities outside of the plan area, campgrounds in particular, and would not increase the use of other existing neighborhood and regional parks or other recreational facilities such that substantial physical deterioration of the facility would occur or be accelerated. This impact would be less than significant.

b) Include recreational facilities or require the construction or expansion of recreational facilities that might have an adverse physical effect on the environment?

56 Acres Master Plan

Less-than-significant impact. Construction activities associated with new recreation facilities described for the Master Plan in Chapter 2, "Project Description," would include grading, tree removal, demolition activities, and construction of new buildings. Such activities could require use of vehicles and heavy equipment and would generate noise and air emissions. These construction activities could result in adverse physical effects on the environment, which are assessed in the applicable resource sections of this IS/MND. In particular, these construction activities could result in potential adverse impacts related to air quality, biological resources, cultural resources and tribal cultural resources, geology and soils, hydrology and water quality, and noise. See Section 3.3, "Air Quality;" Section 3.4, "Biological Resources;" Section 3.5, "Cultural Resources;" Section 3.7, "Geology and Soils;" Section 3.10," Hydrology and Water

Quality;" and Section 3.13, "Noise," in this IS/MND for more detailed discussions of how the potential effects of the Master Plan and requirements for reducing construction-related impacts. For the reasons described in the sections listed above, implementation of the Master Plan would result in a less-than-significant impact from construction of recreational facilities associated with the Master Plan.

Multigenerational Center Project

Less-than-significant impact. See discussion for 56 Acres Master Plan, above.

3.16.3 Cumulative Impacts

The geographic area for cumulative recreation impacts includes the south shore area of Tahoe. Recreation demand in the Tahoe region is met with a wide variety and number of recreational facilities and opportunities.

Some of the cumulative projects identified on Table 3.21-1 would result in temporary, short-term closures of publicly owned land that provide recreation opportunities related to walking and bicycling. Public access to these areas would be re-established after completion of the project activities. The Al Tahoe Boulevard Safety and Mobility Project, Middle School SR2S Project - Rufus Allen Connector, Pioneer Trail Pedestrian Improvement Project Phase II, South Lake Tahoe Safety Project, and Dennis T. Machida Memorial Greenway projects would result in safety improvements or provide dedicated facilities related to walking and/or bicycling along Al Tahoe Boulevard, Rufus Allen Boulevard, Pioneer Trail, US 50, and the area between Sierra Tract to Van Sickle Bi-State Park. The Alta Mira Public Access Improvement Project would enhance existing public access that would result in improving the shoreline of this area. Because most of these cumulative projects are located in areas where the public access that would be temporarily lost would be shared-use paths or sidewalks, it is likely that recreation users or visitors would be redirected to use the opposite side of the road. Any potential increased demand on nearby paths or other recreation facilities would not be concentrated such that a substantial physical deterioration of these resources or subsequent adverse effects on the environment would occur. Thus, these cumulative projects would not result in a significant cumulative impact on recreation resources.

For these reasons, the Master Plan and Multigenerational Center, when combined with other cumulative projects, would result in a less-than-significant cumulative impact on recreation resources. The Master Plan and Multigenerational Center would enhance future public access to the plan area for recreation programs, camping, play and gather spaces, circulation and connectivity, and events and the duration of time in which the recreation users would be diverted to other recreation resources would be short-term. Therefore, the Master Plan and Multigenerational Center **would not result in a considerable contribution to a cumulative impact** on recreation resources.

3.17 TRANSPORTATION

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVII. Transportation.				
Would the project:				
a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?	☐	☐	☒	☐
b) Conflict or be inconsistent with CEQA Guidelines Section 15064.3, subdivision (b)?	☐	☐	☒	☐
c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?	☐	☐	☒	☐
d) Result in inadequate emergency access?	☐	☐	☒	☐

3.17.1 Environmental Setting

The impact analysis presented in this section is based primarily on the *56 Acres Master Plan Transportation Analysis* (Transportation Analysis) prepared by LSC Transportation Consultants for the City. The Transportation Analysis, which is included as Appendix C, provides additional data and information related to the impact study.

ROADWAY NETWORK

The city is served by a roadway network consisting of federal and state highways, arterials, collectors, and local roadways. General descriptions of the roadways located in the vicinity of the plan area and their intended function are provided below.

Highway System

The plan area is served by federal highway US 50 which is operated and maintained by Caltrans. A description of US 50 is provided below:

- US 50 is the primary highway serving Lake Tahoe's south shore, and as part of its transcontinental route within the region connects Sacramento County and the State of Nevada. In the plan area, US 50 (also called Lake Tahoe Boulevard) is a bidirectional four lane highway with a center turn lane and a posted speed limit is 40 miles per hour (mph). North of the plan area, pedestrian and bicycle facilities are present including a Class I bike path (i.e., shared-use path) on the north side of US 50.

Roadways

Currently, the City is responsible for operating and maintaining 130 miles of local roadways. The following roadways provide access to the plan area:

- Rufus Allen Boulevard is a north-south two-lane collector roadway southeast of US 50 and east of the plan area. Rufus Allen Boulevard provides direct access to the plan area from US 50. Additionally, it intersects US 50 and provides access to South Tahoe Middle School to the south and recreational uses and residential uses. There are no bicycle or pedestrian facilities present on Rufus Allen Boulevard and the posted speed limit on Rufus Allen Boulevard is 15 mph when children are present.

- **Lyons Avenue** is an east-west two-lane collector roadway. Lyons Avenue connects to the southern end of Rufus Allen Boulevard, south of the plan area, from US 50 and provides access to the plan area. There are no bicycle or pedestrian facilities present on Lyons Avenue. Additionally, it provides access to recreational uses to the south. The posted speed limit is 15 mph when children are present.

BICYCLE AND PEDESTRIAN FACILITIES

The bicycle and pedestrian transportation system in the City of South Lake Tahoe includes local bikeways and trails. These bicycle facilities include Class I Shared-Use Paths, Class II Bike Lanes, Class III Bike Routes, and Class IV Separated Bikeways. The TRPA Active Transportation Plan defines each bicycle facility type in the following ways:

- **Shared-Use Path (Class I):** A shared-use path is a completely separate trail for active transport users. The path is recommended to be 10 feet wide and provide for two direction travel.
- **Bike Lane (Class II):** Bike lanes are striped 6-foot-wide lanes and provide one way travel on a shared roadway with vehicles.
- **Bike Route (Class III):** A bike route is a shared roadway typically located on low-volume and low-speed streets. Signs and painted "sharrows" assist with wayfinding and show the preferred location of the biker within the roadway (TRPA 2016:2-4).

As of 2016, the City's bike and pedestrian system included 8 miles of Class I shared-use paths, 15 miles of Class II bike lanes, 8 miles of Class III bike routes, and 12 miles of sidewalks totaling 43 miles of dedicated bicycle and pedestrian facilities (TRPA 2016:2-5). The site is served by numerous bicycle and pedestrian facilities. A major shared-use path runs along US 50 between San Jose Avenue and Stateline. This shared-use path connects to the plan area and can be accessed from the Rufus Allen Boulevard/US 50 intersection. A designated bike route also runs along Rufus Allan Boulevard along the east side of the plan area. Additionally, bicycle racks are present throughout the city and are typically located adjacent to major businesses, transit stops, and major parking areas.

TRANSIT SYSTEM

Transit service within the plan area is provided by the Tahoe Transportation District (TTD) via fixed route operations and Americans with Disabilities Act (ADA) paratransit service. The plan area is currently served by TTD Route 50, which operates daily between 6:30 a.m. and 8:05 p.m. in the eastbound direction and between 7:00 a.m. and 8:28 p.m. in the westbound direction. The plan area is served by two eastbound stops along US 50 at the Senior Center south of San Francisco Avenue and west of Rufus Allen Boulevard near the library, and two westbound stops north of San Jose Avenue and south of San Francisco Avenue.

TRANSPORTATION REGULATIONS

Senate Bill 743 and CEQA

SB 743, passed in 2013, required the Governor's Office of Planning and Research (OPR) to develop new State CEQA guidelines that address traffic metrics under CEQA. As stated in the legislation, upon adoption of the new guidelines, "automobile delay, as described solely by level of service (LOS) or similar measures of vehicular capacity or traffic congestion shall not be considered a significant impact on the environment pursuant to this division, except in locations specifically identified in the guidelines, if any."

These updates indicated that vehicle miles travelled (VMT) would be the primary metric used to identify transportation impacts. State CEQA Guidelines Section 15064.3 was added on December 28, 2018, to address the determination of significance for transportation impacts, which requires VMT as the basis of transportation analysis instead of congestion (such as LOS). The updated State CEQA Guidelines were approved, and lead agencies had an opt-in period until July 1, 2020 to implement the updated guidelines regarding VMT. As of July 1, 2020, implementation of Section 15064.3 of the updated CEQA Guidelines apply statewide.

State CEQA Guidelines Section 15064.3(b) identifies criteria for analyzing the transportation impacts of a project. Section 15064.3(b)(1) addresses land use projects and describes that projects with specified proximity (i.e., 0.5-mile or less) to "major" or "high quality" transit should be presumed to cause a less-than-significant transportation impact. Additionally, Section 15064.3(b)(1) also describes that projects resulting in a decrease in VMT in the project area as compared to existing conditions should also be presumed to have a less-than-significant effect. Section 15064.3(b)(3), "Qualitative Analysis," explains that there may be conditions under which a qualitative rather than quantitative analysis of VMT is appropriate. This section states that if existing models or methods are not available to estimate the VMT for the particular project being considered, a lead agency may qualitatively analyze VMT generated by a project. Additionally, this section notes that for many projects, a qualitative analysis of construction traffic may be appropriate. Section 15064.3(b)(4), "Methodology," explains that the lead agency has discretion to choose the most appropriate methodology to evaluate VMT subject to other applicable standards such as CEQA Guidelines Section 15151 (standards of adequacy for EIR analyses).

In December of 2018, OPR published the most recent version of the *Technical Advisory on Evaluating Transportation Impacts in CEQA* (Technical Advisory), which provides guidance for VMT analysis. The 2018 Technical Advisory provides guidance related to screening thresholds for small projects to indicate when detailed analysis is needed or if a project can be presumed to result in a less-than-significant VMT impact. The Technical Advisory notes that projects that generate or attract fewer than 110 trips per day generally may be assumed to cause a less-than-significant transportation impact, absent substantial evidence indicating otherwise (OPR 2018).

Project Impact Assessment Guidelines

The TRPA Project Impact Assessment Guidelines (PIA) describe requirements for development projects amendments in the Tahoe Basin. These guidelines reflect 2021 updates to the TRPA Environmental Thresholds, which involved replacement of the previous VMT-based nitrate deposition threshold with a new VMT-based threshold focused on reducing mobile source GHG emissions, reducing dependency on the personal automobile, and creating more sustainable communities. This update resulted in revisions to Chapter 65: "Air Quality/Transportation" of the TRPA Code of Ordinances to establish PIA requirements designed to implement the revised TRPA environmental threshold and ensure that it aligns with recent California legislative changes (i.e., Senate Bill 743, Public Resources Code Section 21099, and California Code of Regulations Section 15064.3) that have occurred relative to transportation impact analysis and the use of VMT as the primary metric.

This document provides a basis for preparing a VMT analysis in compliance with Chapter 65 of the TRPA Code of Ordinances and the Project Impact Assessment and Air Quality Mitigation Fee Framework.

Some project types, as outlined in TRPA Code Subparagraph 65.2.3.D and listed below, are presumed to result in a less-than-significant VMT impact absent any evidence to the contrary (TRPA 2021a). The following screening criteria are potentially applicable to the project:

- **Projects Generating Low VMT:** Projects will be screened from further transportation analysis using the following vehicle miles travelled calculations:
  - 1,300 in-Basin VMT within town centers and the half-mile buffer around them.
  - 715 in-Basin VMT in all other areas.
- **Redevelopment Projects**: For projects replacing an existing development or use, the net average daily VMT generation should be considered against the screening criteria. This requires calculating both existing average daily VMT and average daily VMT under the proposed project.

The TRPA Code requires that projects that involve more than 650 daily VMT must describe and evaluate the significance of all impacts in the Initial Environmental Checklist. A project that is not screened out must analyze whether it meets the standard of significance.

Environmental Thresholds

As prescribed by the Compact, TRPA adopted environmental thresholds in 1982 covering nine resources or topics including air quality which included a VMT-based standard. This standard was originally adopted to address nitrate deposition concerns which, over time improved substantially. As a result, nitrate deposition is no longer a significant contributor to lake clarity issues (TRPA 2021b). In recognition of this, in April 2021, the Governing Board removed the nitrate deposition threshold and replaced it with a new mobility-related threshold under a new category heading (TRPA 2021b):

- TSC1: Reduce Annual Daily Average VMT Per Capita by 6.8 percent from 12.48, the 2018 baseline, to 11.63 in 2045.

The new VMT thresholds sets forth an efficiency based VMT standard that better aligns with identified polices goals and affords consistency with California and Nevada state policies with respect to GHG emissions reduction and aligns with and is responsive to meaningful change in the regional land use and the transportation system.

Code of Ordinances

Changes in daily vehicle trip ends (DVTE) as a result of additional development and transferred development, and all changes in project operation are discussed in Section 65.2, "Traffic and Air Quality Mitigation Program," of the TRPA Code. Fees are assessed in accordance with TRPA's Mitigation Fee Schedule (TRPA 2020) on an individual project basis for projects that increase DVTE. The purpose of the fee program is to offset impacts from indirect sources of air pollution. Temporary activities are governed by TRPA Code Section 2.3.6, and construction projects are required to comply with TRPA's standard conditions of approval.

3.17.2 Discussion

a) Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle, and pedestrian facilities?

56 Acres Master Plan

Less-than-significant impact.

Bicycle and Pedestrian Facilities

The Community Plan, which encompasses the Master Plan, contains a Traffic Circulation and Parking Goal to reduce automobile dependency and "improve the movement of people, goods, and services within the Bijou/Al Tahoe area, and the Region, consistent with the economic and environmental goals of the community plan" (City of South Lake Tahoe and TRPA 1995:I-3). The Community Plan Transportation Element includes the following objective and related policies to increase active transportation in the area that are applicable to the Master Plan:

Objective 4: To improve circulation, reduce vehicle trips, and to improve public access to the recreational areas, a network of bike trails and sidewalks shall be constructed.

- **Policy A:** Extend and provide additional bike trails within the Community Plan area and to recreation areas.
- **Policy B:** Provide adequate sidewalks in commercial areas which are maintained free of snow on a year-round basis.
- **Policy C:** Pedestrian and bicycle facilities identified in the Plan shall be identified and constructed as part of the CIP (City of South Lake Tahoe and TRPA 1995:III-2).

The TRPA Bicycle and Pedestrian Master Plan identifies proposed shared use paths along the southeast side of the plan area and on US 50 east of the Master Plan area (TRPA 2016:4-31). Additionally, the City of South Lake Tahoe General Plan proposes Class II bike lanes along US 50 as well as Class I bike facilities connecting the existing shared-use bike path north of US 50 at Harrison Avenue south to Los Angeles Avenue where another shared-use path is present (City of South Lake Tahoe 2011:TC-13).

As identified in Chapter 2, "Project Description," an objective of Master Plan implementation is to "improve pedestrian and bicycle circulation and access, including pedestrian access throughout the plan area and the beach/lakefront area and connections to surrounding destinations and the regional network." The proposed Master Plan includes an existing and proposed comprehensive network of multipurpose bicycle/pedestrian facilities within the plan area. These facilities are designed in locations that align the paths with signalized intersections along US 50 and provide crosswalks for bicyclists and pedestrians. Thus, bicyclists and pedestrians would be provided with protected crossing of US 50.

The Master Plan would provide several areas for public gathering and include the addition of internal shared-use paths to various points of interest. Additionally, implementation of Lakeview Commons Phase 2 improvements as part of the Master Plan, in the northern portion of the Master Plan area, would enhance bicycle and pedestrian access to the beach, create more usable space at the park, and provide safer connections to the rest of the Master Plan area facilities. As identified in the City's General Plan Policy TC-3.12, the City shall also provide bike racks and bike storage at all public buildings, parks, and recreation areas, and shall require bicycle racks or lockers for significant new private development projects or substantial additions" (City of South Lake Tahoe 2011:TC-15).

Because the Master Plan would retain existing shared-use paths in the plan area and would construct the Lakeview Commons Phase 2 boardwalk and additional bicycle and pedestrian connections within the plan area, the Master Plan would not conflict with any existing facilities. Internal circulation improvements would enhance access to the various land uses provided by the Master Plan for bicyclists and pedestrians. Therefore, buildout of the Master Plan would not conflict with a program, plan, ordinance, or policy addressing bicycle and pedestrian facilities. Thus, the impact would be less than significant.

Transit Service

The TRPA Regional Transportation Plan envisions a built-out transit system by 2045 with frequent service operating every 15 minutes along US 50 in the Master Plan corridor (TRPA 2021c:53-54). As previously described, the Master Plan area is served by TTD Route 50. Stops are located along US 50 at Modesto Avenue, San Jose Avenue, and Rufus Allen Boulevard. The Master Plan would not conflict with any of the existing bus stops along US 50. Additionally, the Master Plan would improve transit accessibility by relocating the Multigenerational Center closer to a transit stop and moving City Hall, which is not currently served by transit, to the plan area where transit is provided. The projects proposed under the Master Plan are expected to increase transit ridership due to an increase of visitors utilizing the facilities in the area and the nature of infill development which tends to locate desirable destinations closer to residences. The existing transit system has adequate capacity to meet the anticipated demand; however, according to the OPR Technical Advisory, lead agencies should not treat an increase in transit ridership as an adverse impact when analyzing impacts to transit (OPR 2018:19). Although additional transit users may slow service, an increased demand in ridership ultimately enhances operations through improved service changes.

Policy TC-2.4 of the City of South Lake Tahoe General Plan states that the City shall "provide and maintain Regional Transit Centers in the Stateline and Tahoe Valley areas, and a Neighborhood Transit Center in the Lakeview Commons area. The transit centers will connect regional buses, trolleys, local shuttles, bike trails, and pedestrian facilities (year-round sidewalks, bus shelters, and lighting), and will include space for hotel and resort shuttle bus pick-up and drop-off." Additionally, the General Plan identifies the Master Plan area as the general location for the future neighborhood transit center in the Lakeview Commons area (City of South Lake Tahoe 2011:TC-9 and TC-10).

The portion of the City in the plan area is a centralized location in the south shore area that contains a shared-use path extending from near Stateline to west of the plan area, contains several transit stops, is adjacent to US 50, and is adjacent to a variety of uses (e.g., recreation, commercial, tourist accommodations, and residential areas); thus, the area currently provides features of a neighborhood transit location. Implementation of the Master Plan would not conflict with the use of this area for neighborhood transit-related uses.

The overall improvements related to bicycle and pedestrian access and circulation would also enhance the experience for transit riders in the Master Plan area by providing safer first/last mile options. Additionally, the Master Plan would retain the transit stops along US 50 to support the General Plan vision for the neighborhood transit center identified

in the area. Therefore, buildout of the Master Plan would not conflict with a with a program, plan, ordinance, or policy addressing transit service. Thus, the impact would be less than significant.

Multigenerational Center Project
Less-than-significant impact.

Bicycle and Pedestrian Facilities
Implementation of the Multigenerational Center would include construction of new shared-use paths that would connect to nearby existing paths. As part of relocating the existing campground, any existing paths would be replaced and/or rerouted to maintain bicycle and connectivity within the plan area and to surrounding areas. Additionally, as described above for the Master Plan, the Multigenerational Center would provide bike racks and bike storage at the new facility consistent with General Plan Policy TC-3.12. Because the Multigenerational Center project would maintain bicycle and pedestrian connectivity in the plan area and provide other bicycle infrastructure, the Multigenerational Center would not conflict with a with a program, plan, ordinance, or policy addressing bicycle and pedestrian facilities. Thus, the impact would be less than significant.

Transit Service
The Multigenerational Center would replace the existing Recreation and Swim Complex, although at a location in the northern part of the plan area next to the library and US 50, which is also near the location of an existing transit center. Thus, the Multigenerational Center's closer proximity to an existing transit stop compared to the Recreation and Swim Complex accessed on Rufus Allen Boulevard, could encourage more Multigenerational Center users to utilize transit. The overall improvements related to bicycle and pedestrian access and circulation, along with the Multigenerational Center's proximity to transit, would also enhance the experience for transit riders in the Master Plan area by providing safer first/last mile options. As detailed above for the Master Plan, although the Multigenerational Center may generate additional transit ridership, lead agencies should not treat increased demand as an adverse impact to transit service, and additional ridership could benefit the overall transit system (OPR 2018:19). Therefore, the Multigenerational Center would not conflict with a with a program, plan, ordinance, or policy addressing transit service. Thus, the impact would be less than significant.

b) Conflict or be inconsistent with CEQA Guidelines section 15064.3(b), which pertains to vehicle miles travelled?

The City has yet to adopt VMT thresholds or guidelines to meet the state requirements set by SB 743 and that address CEQA Guidelines Section 15064.3. Therefore, in the absence of adopted VMT guidelines and thresholds of significance, the VMT analysis herein relies on the guidance provided in CEQA Guidelines Section 15064.3 and the OPR Technical Advisory; and was conducted in accordance with the TRPA PIA as described below. The TRPA PIA includes a small project screening criteria indicating that projects resulting in a net increase of average annual daily VMT less than 1,300 within a town or regional center or a half-mile distance of a town or regional center (such as the location of the plan area) is considered a low-VMT project and can be presumed to result in a less-than-significant impact. Additionally, it should be noted that the VMT estimation was conducted such that trip lengths were not truncated at jurisdictional or the Lake Tahoe Basin boundary, and the entirety of trip lengths were accounted for. This was conducted to ensure that trip lengths outside of the Tahoe Basin were included in the VMT analysis, as many destinations and recreational elements in the area attract visitors from outside the region.

Project-generated VMT was calculated by multiplying the average daily trips generated by the proposed land uses by the average trip length for each use category and summing the VMT for each individual land uses. The total change in VMT for the project was calculated by subtracting the existing VMT generated by uses on the project site from the VMT of proposed project, adding the net change in VMT elsewhere for each land use, and then summing over all land use categories. For additional details regarding the VMT data, assumptions, and analysis see Appendix C.

56 Acres Master Plan
Less-than-significant impact.

Construction

As detailed in Chapter 2, "Project Description," buildout and construction of the Master Plan would occur over the span of 20 years. Construction activities would be temporary and intermittent in nature; and thus, would not result in long-term increases in vehicular trips. Additionally, the VMT of construction workers is not newly generated; instead, it is redistributed throughout the regional roadway network based on the different work sites in which workers travel to each day. Therefore, construction workers are not generating new VMT each day, only redistributing it. Thus, construction activities are not expected to significantly increase VMT in the region.

Operations

As detailed in Chapter 2, "Project Description," the Master Plan area consists of the implementation of various facilities across 56 acres and would encompass a variety of land uses including a Multigenerational Center, campground, civic center, cultural center, and ice arena. The Transportation Analysis calculated the anticipated VMT that would be generated by the projects contained within the Master Plan. Table 3.17-1 depicts the VMT from the existing land uses and the estimated future VMT with Master Plan implementation as identified in the Transportation Analysis. For detailed VMT data, assumptions, and analysis see Appendix C.

Table 3.17-1 Master Plan VMT

Land Use	Existing VMT	Future Buildout VMT	Change in VMT Elsewhere[1]	Total Change in VMT
Multigenerational Center	1,433	2,229	0	796
Ice Skating Center	1,546	1,546	0	0
Campground	7,262	4,977	0	-2,285
Cabins	485	3,468	0	2,983
Library	1,164	1,164	0	0
Senior Center	103	103	0	0
Historical Museum	6	6	0	0
Art Center	98	98	0	0
Chamber Office	227	227	0	0
Outdoor Event Spaces	69	173	0	104
Passive Park Space	5	14	0	9
Municipal Office Uses	0	1,087	-1,514	-427
Maintenance Yard	58	0	58	0
Vector Control	33	0	32	-1
Fire Training Facility	34	0	31	-3
Total	12,523	15,092	-1,393	1,176
Percent Change				9%

[1] The net change in VMT for the Master Plan is calculated by taking the VMT from the buildout on the Master Plan site, subtracting the existing VMT and adding the net change in VMT elsewhere for each land use, and then summing over all land use categories.

Source: Appendix A

As presented in Table 3.17-1, the total net VMT per day generated by the Master Plan would be 1,176; thus, not exceeding the TRPA screening criteria for projects generating low VMT (i.e., 1,300 in-Basin VMT within town centers and the half-mile buffer around them). It should be noted that although projects that meet the screening criteria contained within the PIA are presumed to result in a less-than-significant VMT impact, the mobility mitigation fee must still be paid (TRPA 2021a:12).

Summary

As detailed above, VMT related to construction activities are temporary in nature and redistributed throughout the transportation network, not newly generated. Additionally, the operational activities of the Master Plan would

produce less than 1,300 newly generated VMT; and thus, the Master Plan meets the screening criteria established in the TRPA PIA and is presumed to result in a less-than-significant impact. For this reason, the Master Plan would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact.

Construction

Multigenerational Center construction activities would begin in 2022 and the building would be operational in 2024. Therefore, construction activities would be temporary and intermittent in nature; and thus, would not result in long-term increases in vehicular trips. Additionally, the VMT of construction workers is not newly generated; instead, it is redistributed throughout the regional roadway network based on the different work sites in which workers travel to each day. Therefore, construction workers are not generating new VMT each day, only redistributing it. Further, even if the trips generated during Multigenerational Center construction were considered to be new trips, as detailed in the modeling referenced in Section 3.8, "Greenhouse Gas Emissions", approximately 27 daily trips would be generated by construction workers during the phase of construction requiring the greatest number of workers (i.e., building construction). Therefore, the number of daily construction trips generated would be fewer than 110 trips per day; thus, satisfying the screening thresholds for small projects as detailed in the OPR Technical Advisory. Therefore, construction activities would not significantly increase VMT in the region.

Operations

As presented previously, the anticipated newly generated VMT for the entire buildout of the Master Plan is 1,176 VMT per day. As detailed above, the Master Plan would be considered a low VMT generating project under the TRPA PIA screening criteria. Therefore, due to the manner in which VMT was estimated and because the Multigenerational Center is only one land use of the larger Master Plan, the project would not exceed the screening criteria. Furthermore, as shown in Table 3.17-2 the estimated net total VMT attributed to the Multigenerational Center is 796 VMT per day. Therefore, the Multigenerational Center would be considered a low-generating VMT project and would be presumed to result in a less-than-significant VMT impact.

Table 3.17-2 Multigenerational Center VMT

Existing VMT	Future Buildout VMT	Change in VMT Elsewhere[1]	Total Change in VMT
1,433	2,229	NA	796

Notes: NA = not applicable

[1] The net change in VMT for the Multigenerational Center is calculated by taking the VMT from the buildout on the Master Plan site, subtracting the existing VMT and adding the net change in VMT elsewhere for each land use, and then summing over all land use categories.

Source: Appendix A

Summary

VMT related to construction activity is not considered to be newly generated, rather temporary and redistributed through the roadway network. Additionally, construction VMT would generate fewer than 110 daily trips; thus, the Multigenerational Center meets the screening criteria established in the OPR Technical Advisory for small projects. Operational VMT attributed to the Multigenerational Center would not exceed the threshold for low VMT-generating projects as defined in the TRPA PIA and would be presumed to not cause a significant impact. For this reason, the Multigenerational Center would not conflict or be inconsistent with CEQA Guidelines Section 15064.3(b). This impact would be less than significant.

c) Substantially increase hazards due to a geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?

56 Acres Master Plan

Less-than-significant impact. The Master Plan would include the construction of a new "Main Street" that would extend from Tallac Avenue on the west to Rufus Allen Boulevard on the east and include a new entry to the

campground and civic center. The new road and parking areas would be required to comply with all City design standards and regulations. Additionally, in accordance with City standards, the new roadway would be required to provide adequate sight distance at all access points. The Master Plan would be required to comply with the following local and regional policies and standards related to project design:

- City of South Lake Tahoe Municipal Code: Chapter 6.10 and 6.55 of the municipal code pertain to land use development design standards and plan area regulations for the City of South Lake Tahoe.
- TRPA Code of Ordinances: compiles all the laws and ordinances needed to implement the region's goals and policies through a memorandum of understanding that allows for implementation and regulation by the City Planning Division.
- City-wide Design Standards Checklist: compiles the City's design standards into one resource document.
- Parking, Driveway, and Loading Space Checklist: sets forth standards for driveways, parking, and loading facilities to minimize interference with traffic flow on the street and highway system of the City and to discourse the establishment of unnecessary impervious surfaces.
- Community Plan Standards and Guidelines Checklist: establishes special design standards for the community plan area to achieve the desired urban form.

Buildout of the plan area would take place over approximately 20 years. Encroachment permits from the City would be required, and traffic control plans would be developed to demonstrate appropriate traffic handling during construction activities for all work that will or may impact the traveling public (e.g., the transport of equipment and materials to the project area). If any work related to the Master Plan encroaches into Caltrans right of way, such as construction of the new Main Street intersection at US 50 at the intersection of US 50 and Tallac Avenue, all construction activity must comply with Caltrans regulations in the following documents:

- California Manual of Uniform Traffic Control Devices: adopts uniform standards and specifications for all official traffic control devices in California
- Caltrans Highway Design Manual: establishes uniform policies and procedures to carry out the state highway design functions of Caltrans
- Caltrans Encroachment Permits: must be obtained for all proposed activities related to the placement of encroachments within, under, or over the state highway rights of way
- Work Zone Safety Standards, Traffic Safety Devices and Traffic Safety Systems Guidance: establishes policies and procedures for traffic safety systems, including barriers, guardrail, crash attenuators, and end treatments and provides guidance for application of safety systems.
- All other applicable Caltrans regulations and documents

All access and roadway related improvements associated with the Master Plan would be constructed in accordance with applicable City and state design, safety standards, and permit requirements. For these reasons, the Master Plan would not substantially increase hazards due to geometric design features or incompatible uses; therefore, the impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. The Multigenerational Center would include the construction of a new roadways for internal circulation. The Multigenerational Center would provide vehicular access from Rufus Allen Boulevard and reconfigure the existing parking lot near the library to accommodate additional parking spaces including the construction of a new driveway. Improvements to the roadway and parking areas would be required to comply with all City design standards and regulations. Additionally, in accordance with City standards, the adequate sight distance would be provided at all access points. The Multigenerational Center would be required to comply with the following local and regional policies and standards related to design:

- City of South Lake Tahoe Municipal Code: Chapter 6.10 and 6.55 of the municipal code pertain to land use development design standards and plan area regulations for the City of South Lake Tahoe
- TRPA Code of Ordinances: compiles all the laws and ordinances needed to implement the region's goals and policies through a memorandum of understanding which allows for implementation and regulation by the City Planning Division
- City-wide Design Standards Checklist: compiles the City's design standards into one resource document
- Parking Driveway, and Loading Space Checklist: sets forth standards for driveways, parking, and loading facilities to minimize interference with traffic flow on the street and highway system of the City and to discourse the establishment of unnecessary impervious surfaces
- Community Plan Standards and Guidelines Checklist: establishes special design standards for the community plan area to achieve the desired urban form

As detailed above, all access and roadway related improvements associated with the Multigenerational Center would be constructed in accordance with applicable City design, safety standards, and permit requirements. For these reasons, the Multigenerational Center would not substantially increase hazards due to geometric design features or incompatible uses; therefore, the impact would be less than significant.

d) Result in inadequate emergency access?

56 Acres Master Plan

Less-than-significant impact. As discussed in item c), the Master Plan would be required to meet all City and Caltrans construction safety standards as applicable. The Master Plan would also follow provisions set forth in the most current edition of the California Fire Code as adopted by the City of South Lake Tahoe. Chapter 33 of the 2019 California Fire Code contains applicable standards for fire safety during construction and demolition including required provisions for emergency access. Appendix D of the California Fire Code contains minimum dimensions and design standards for fire apparatus roads to maintain adequate emergency access during operations. Furthermore, the Master Plan would be subject to review and inspections by the City and responsible emergency service agencies to ensure any potential impacts to emergency vehicles and evacuation are minimized. Additionally, the construction of the new east/west "Main Street", which would bisect the Master Plan area and enhance connectivity between US 50 and Rufus Allen Boulevard, could provide improved access in the case of an emergency. Therefore, the buildout of the Master Plan would not result in inadequate emergency access; thus, the impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. As discussed in item c), the Multigenerational Center would be required to meet all City construction safety standards as applicable. The Multigenerational Center would also follow provisions set forth in the most current edition of the California Fire Code as adopted by the City of South Lake Tahoe. The Multigenerational Center would include the construction of a new paved access road and turn around on the southwest side of the facility. Right of way is secured for the implementation of future fire access roads between the access road and the parking lot as well as the existing paved pathway west of the Multigenerational Center. Chapter 33 of the 2019 California Fire Code contains applicable standards for fire safety during construction and demolition including required provisions for emergency access. Appendix D of the California Fire Code contains minimum dimensions and design standards for fire apparatus roads in order to maintain adequate emergency access during operations. Furthermore, the Multigenerational Center would be subject to review and inspections by the City and responsible emergency service agencies to ensure any potential impacts to emergency vehicles and evacuation are minimized. Additionally, the internal roadway and parking improvements enhance connectivity and circulation and could provide improved access in the case of an emergency. Therefore, the Multigenerational Center would not result in inadequate emergency access; thus, the impact would be less than significant.

3.17.3 Cumulative Impacts

Buildout of the Master Plan would include internal bicycle and pedestrian facility improvements including construction of multi-use paths and bike storage. The consistency of the Master Plan with the RTP, City General Plan, ATP, and Bijou/Al Tahoe Community Plan results in no conflicts with a program, plan, ordinance or policy addressing bicycle and pedestrian systems. Additionally, implementation of the Master Plan would improve transit accessibility by relocating the Multigenerational Center and City Hall. Additionally, the plan area will maintain the existing bus stops along US 50. Therefore, there would be no conflict with existing or planned future transit infrastructure or transit service in the area. For these reasons, the Master Plan's incremental contribution to cumulative transit, bicycle, and pedestrian impacts would not be cumulatively considerable such that a new significant transportation impact would occur.

The implementation of the Master Plan would result in an increase in average daily VMT; however, it would not exceed the applicable TRPA screening criteria (i.e., 1,300 in-Basin VMT within town centers and the half-mile buffer around them). Additionally, the recreation and active transportation projects shown in Table 3.21-1 would presumably reduce VMT (i.e., Al Tahoe Boulevard Safety and Mobility Project, Middle School SR2S Project - Rufus Allen Connector, Pioneer Trail Pedestrian Improvement Project Phase II, South Lake Tahoe Safety Project, and Dennis T. Machida Memorial Greenway Shared-Use Trail). Thus, when considered with other past, present, and reasonably foreseeable future projects, the project would have a less than cumulatively considerable contribution to VMT impacts.

Cumulative impacts associated with emergency access and road design are primarily a localized effect. However, cumulative impacts from project-generated construction effects on transportation may result if other future planned construction activities were to take place close to the project site and cumulatively combine to exacerbate the construction-related transportation impacts of the project. As such, the cumulative projects with the potential to result in a significant cumulative impact associated with construction phase emergency access and road design features would be the projects located in the immediate vicinity of the project site as emergency responders attempt to respond to emergency and as vehicles use the project site ingress and egress locations while merging on to the primary roadways. Given there are very few projects in the immediate vicinity of the project site and because they will also need to demonstrate compliance with applicable design standards and emergency service provider design and emergency response requirements, they would not impede emergency access or cause a potential transportation-related hazard. Therefore, cumulative impacts from nearby projects would not be significant. Thus, when considered with other past, present, and reasonably foreseeable future projects, the project would have a less than cumulatively considerable contribution to emergency access and transportation hazards impacts.

3.18 TRIBAL CULTURAL RESOURCES

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XVIII. Tribal Cultural Resources.				
Has a California Native American Tribe requested consultation in accordance with Public Resources Code section 21080.3.1(b)?	☐ Yes			☒ No
Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:				
a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?	☐	☐	☐	☒
b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?	☐	☒	☐	☐

3.18.1 Environmental Setting

Among the many peoples that occupied the Lake Tahoe region, the Washoe Tribe have been recognized as the primary indigenous residents of the area. Physical evidence of Washoe occupation dates back at least 2,000 years within the Kings Beach complex; however, ancestral lines of the Washoe Tribe may date beyond the archaeological record. The Washoe language is unique to the region and is thought to be older than any other Sierran and Great Basin language spoken by neighboring tribes; it is most likely a distinct branch of the Hokan language groups. *Da ow a ga*, "Lake Tahoe" in the Washoe language, is considered a sacred water and the center of the Washoe world (PaleoWest 2021).

Beyond the Lake itself, Washoe territory extends from the edge of the Great Basin to the east at the Pah Pah range, to the crest of the Sierra Nevada Mountains in the west, to Honey Lake in the north and the Sonora Pass in the south. Within this region, the Washoe Tribe inhabited both the Pine Nut Mountains and the Virginia Range in the broader Lake Tahoe region. The Washoe engaged in a hunter-gatherer lifestyle travelling throughout these regions utilizing a diversity of alpine and foothill resources. Like other semisedentary hunter-gatherer groups the Washoe utilized both opportunistic foraging camps and seasonal round residential camps strategically placed along waterways throughout the area (PaleoWest 2021).

The seasonal round starts in spring when groups of younger people leave winter camps and return to the lake to begin fishing and gathering resources. At the beginning of summer, the remainder of the tribe would meet them. Summer months were spent at Lake Tahoe with some small forays being conducted to gather resources like medicinal and marsh plants and seeds in adjacent alpine valleys. Men often hunted large game in high elevations to supplement the diet year-round but did so most in the fall when the game was most plentiful. Fall was an

exceptionally important time of year as the Washoe would move to the Pine Nut Hills to harvest acorns and pine nuts, staple foods in the Washoe diet. These resources played an essential role in the Washoe lifeways as it would sustain the tribe through winter months where family groups spent the season at base camps along the Truckee River, and proximal to Donner, Cold, and Martis creeks. These winter months were a time when the Washoe told stories, repaired tools, and wove baskets in preparation for the more productive seasons. While this seasonal round was employed by most of the Washoe, some individuals would winter at the Lake, and at times throughout the year take longer trips to gather extra local resources and tool stone (PaleoWest 2021).

The Washoe lifeway was fairly consistent until 1858 when western expansion and the discovery of the Comstock Lode saw considerable numbers of Euro-Americans moving west. As a result, Washoe lands were colonized, and tribal members were displaced as settlers, ranchers, and miners moved into the region. Though the impact of these events devastated Washoe communities and culture, the traditions of Washoe Tribe survived the American Expansion, and modern members continue to practice their ancestral heritage at *Da ow a ga* today (PaleoWest 2021).

TRIBAL CONSULTATION

Under PRC Sections 21080.3.1 and 21082.3 (AB 52), the lead agency must consult with tribes traditionally and culturally affiliated with the project site that have requested formal notification and responded with a request for consultation. The parties must consult in good faith. Consultation is deemed concluded when the parties agree to measures to mitigate or avoid a significant effect on a tribal cultural resource when one is present or when a party concludes that mutual agreement cannot be reached. Mitigation measures agreed on during the consultation process must be recommended for inclusion in the environmental document.

On June 8, 2021, the City sent notification letters that the project was being addressed under CEQA, as required by PRC Section 21080.3.1, to the four Native American tribes that had previously requested such notifications, the Ione Band of Miwok Indians, the Shingle Springs Band of Miwok Indians, the United Auburn Indian Community of the Auburn Rancheria, and the Washoe Tribe of Nevada and California. No responses were received, and AB 52 consultation is complete.

A record search of NAHC Sacred Lands File (SLF) for the plan area was completed on October 8, 2021. The NAHC search indicated that the SLF was negative for the presence of Native American resources within the plan area.

3.18.2 Discussion

Would the project cause a substantial adverse change in the significance of a tribal cultural resource, defined in Public Resources Code section 21074 as either a site, feature, place, cultural landscape that is geographically defined in terms of the size and scope of the landscape, sacred place, or object with cultural value to a California Native American tribe, and that is:

a) Listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources as defined in Public Resources Code section 5020.1(k)?

56 Acres Master Plan

No impact. The NCIC records search (File #ELD-21-22) revealed that the plan area contains no tribal cultural resources that are listed or eligible for listing in the California Register of Historical Resources, or in a local register of historical resources. Therefore, there would be no impact.

Multigenerational Center Project

No impact. See discussion for 56 Acres Master Plan, above.

b) A resource determined by the lead agency, in its discretion and supported by substantial evidence, to be significant pursuant to criteria set forth in subdivision (c) of Public Resources Code Section 5024.1. In applying the criteria set forth in subdivision (c) of Public Resource Code Section 5024.1, the lead agency shall consider the significance of the resource to a California Native American tribe?

56 Acres Master Plan

Less than significant with mitigation incorporated. The NAHC SLF was negative. Anna Cheng, Cultural Regulatory Assistant for the United Auburn Indian Community (UAIC) of the Auburn Rancheria, replied to the AB 52 notification letter stating that the UAIC defers to the Washoe Tribe for projects in the Truckee and Tahoe Basin.; No other tribes replied to the AB 52 notification letter. No resources within the plan area have been identified as tribal cultural resources as defined by PRC Section 21074. However, subsequent discretionary projects may be required to prepare site-specific project-level analysis to fulfill CEQA requirements, which may include additional AB 52 consultation that could lead to the identification of tribal cultural resources. Therefore, this impact would be potentially significant.

Mitigation Measure 3.18-1: Protect Tribal Cultural Resources in Subsequent Discretionary Projects

This mitigation measure applies to the 56 Acres Master Plan.

If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process required under PRC Section 21080.3.2, implementing agencies and/or project sponsors shall implement the following measures, where feasible and necessary, to address site-specific impacts and avoid or minimize the significant adverse impacts:

> Public agencies shall, when feasible, avoid damaging effects to any tribal cultural resource (PRC Section 21084.3[a]). If the lead agency determines that a project may cause a substantial adverse change to a tribal cultural resource, and measures are not otherwise identified in the consultation process, provisions in the PRC describe mitigation measures that, if determined by the lead agency to be feasible, may avoid or minimize the significant adverse impacts (PRC Section 21084.3[b]). Examples include:
>
> - avoiding and preserving the resources in place, including planning and constructing to avoid the resources and protect the cultural and natural context, or planning greenspace, parks, or other open space to incorporate the resources with culturally appropriate protection and management criteria;
> - treating the resource with culturally appropriate dignity, taking into account the tribal cultural values and meaning of the resource, including:
> - protecting the cultural character and integrity of the resource;
> - protecting the traditional use of the resource;
> - protecting the confidentiality of the resource; and
> - establishing permanent conservation easements or other interests in real property, with culturally appropriate management criteria for the purposes of preserving or using the resources or places.

Mitigation Measure 3.18-2: Unanticipated Discovery of Tribal Cultural Resources

This mitigation measure applies to the 56 Acres Master Plan.

If any suspected tribal cultural resources are discovered during ground disturbing construction activities, including midden soil, artifacts, chipped stone, exotic rock (nonnative), or unusual amounts of baked clay, shell, or bone, all work shall cease within 100 feet of the find. Appropriate tribal representative(s) shall be immediately notified and shall determine if the find is a tribal cultural resource (pursuant to PRC Section 21074). The tribal representative will make recommendations for further evaluation and treatment, as necessary.

Preservation in place is the preferred alternative under CEQA and the tribes' protocols, and every effort must be made to preserve the resources in place, including through project redesign. Culturally appropriate treatment may

be, but is not limited to, processing materials for reburial, minimizing handling of cultural objects, leaving objects in place within the landscape, returning objects to a location within the project vicinity where they will not be subject to future impacts. The Tribe does not consider curation of tribal cultural resources to be appropriate or respectful and request that materials not be permanently curated, unless approved by the Tribe. Treatment that preserves or restores the cultural character and integrity of a tribal cultural resource may include tribal monitoring, culturally appropriate recovery of cultural objects, and reburial of cultural objects or cultural soil.

Significance after Mitigation

Implementation of Mitigation Measures 3.18-1 and 3.18-2 would reduce impacts associated with tribal cultural resources to a less-than-significant level because they would require the performance of professionally accepted and legally compliant procedures for the identification and protection of tribal cultural resources associated with subsequent projects and by requiring preservation options and proper curation if significant artifacts are encountered during the construction.

Multigenerational Center Project

Less than significant with mitigation incorporated. As described above, the NAHC SLF was negative The UAIC was the only tribe to reply to the AB 52 notification letters and had indicated the UAIC defers to the Washoe Tribe for projects in the Tahoe Basin; therefore, no resources within the plan area have been identified as tribal cultural resources as defined by PRC Section 21074. Additionally, the pedestrian survey of the area identified no archaeological resources, including indigenous materials. Nevertheless, it is possible that yet-undiscovered tribal cultural resources could be encountered or damaged during ground-disturbing construction activities. This impact would be potentially significant.

Mitigation Measure 3.18-3: Unanticipated Discovery of Tribal Cultural Resources

This mitigation measure applies to the Multigenerational Center Project.

Implement Mitigation Measure 3.18-2.

Significance after Mitigation

Implementation of Mitigation Measure 3.18-3 would reduce impacts associated with tribal cultural resources to a less-than-significant level by requiring preservation options and proper curation if significant artifacts are encountered during the construction.

3.18.3 Cumulative Impacts

The geographic scope for the analysis of cumulative impacts to tribal cultural resources is the historic lands of the Washoe people. Beyond Lake Tahoe itself, Washoe territory extends from the edge of the Great Basin to the east at the Pah Pah range, to the crest of the Sierra Nevada Mountains in the west, to Honey Lake in the north and the Sonora Pass in the south.

Because all significant tribal cultural resources are unique and nonrenewable members of finite classes, meaning there are a limited number of significant cultural resources, all adverse effects erode a dwindling resource base. Tribal cultural systems are represented by the total inventory of all sites and other remains in the region. As a result, a meaningful approach to preserving and managing cultural resources must focus on the likely distribution of tribal cultural resources, rather than on a single project or parcel boundary.

The historic lands of the Washoe people have been affected by development since 1858 when western expansion and the discovery of the Comstock Lode saw considerable numbers of Euro-Americans moving west. As a result, Washoe lands were colonized, and tribal members were displaced as settlers, ranchers, and miners moved into the region. These activities have resulted in an existing significant adverse effect on tribal cultural resources and cumulative development, including projects described in Table 3.21-1, continues to contribute to the disturbance of these resources.

No known tribal cultural resources are located within the boundaries of the plan area; nonetheless, project-related earth-disturbing activities could damage undiscovered tribal cultural resources. The Master Plan and Multigenerational Center, in combination with other development in the region, could contribute to ongoing substantial adverse changes in the significance of tribal cultural resources resulting from urban development and conversion of natural lands. Cumulative development could result in potentially significant tribal cultural resource impacts.

Implementation of Mitigation Measures 3.18-1, 3.18-2, and 3.18-3 would ensure that the Master Plan's and Multigenerational Center project's contribution to cumulatively significant tribal cultural resource impacts would not be considerable by requiring preservation options and proper care of significant artifacts if they are recovered. With implementation of this mitigation measure, the Master Plan's and Multigenerational Center project's contribution to these impacts would be offset. Further, cumulative development would be required to implement similar mitigation to avoid/reduce impacts to tribal cultural resources. Therefore, the Master Plan **would not have a considerable contribution** to any significant cumulative impact related to tribal cultural resources.

3.19 UTILITIES AND SERVICE SYSTEMS

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XIX. Utilities and Service Systems.				
Would the project:				
a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?	☐	☐	☒	☐
b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?	☐	☒	☐	☐
c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?	☐	☐	☒	☐
d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?	☐	☐	☒	☐
e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?	☐	☐	☒	☐

3.19.1 Environmental Setting

WATER SUPPLY

South Tahoe Public Utility District (STPUD) provides water services to the plan area. The STPUD service area encompasses 27,000 acres and extends west to include Emerald Bay, east to the California Nevada State Line, and south to include Christmas Valley. The service area includes most, but not all, of the City of South Lake Tahoe and portions of unincorporated El Dorado County. In 2020, the demand for water within the STPUD service area was 5,778 acre-feet per year (afy). STPUD water supplies are reliant on groundwater sources to meet its water system demands. STPUD has adequate supplies to meet demands during normal, dry, and multiple dry year water conditions over the course of the 25-year planning period of the Urban Water Management Plan (UWMP) (STPUD 2021:7-4 through 7-6).

Table 3.19-1 represents multiple dry year water demand and supply in the STPUD service area. However, the water demand and supply during the first year of a multiple dry year scenario is equal to the water demand and supply during a normal water year and during a single dry year (STPUD 2021:7-4 through 7-6).

Table 3.19-1 Multiple Dry Years Water Demand and Supply in the STPUD Service Area

		2025	2030	2035	2040	2045
First Year[1]	Water Supply (afy)	32,050	32,050	32,050	32,050	32,050
	Water Demand (afy)	5,886	5,996	6,108	6,222	6,338
	Difference (afy)	26,164	26,054	25,942	25,828	25,712
Second Year	Water Supply (afy)	28,131	28,131	28,131	28,131	28,131
	Water Demand (afy)	5,908	6,018	6,130	6,245	6,361
	Difference (afy)	22,223	22,113	22,001	21,886	21,770
Third Year	Water Supply (afy)	22,355	22,355	22,355	22,355	22,355
	Water Demand (afy)	5,930	6,040	6,153	6,268	6,385
	Difference (afy)	16,425	16,315	16,202	16,087	15,970
Fourth Year	Water Supply (afy)	18,125	18,125	18,125	18,125	18,125
	Water Demand (afy)	5,952	6,063	6,176	6,291	6,409
	Difference (afy)	12,173	12,062	11,949	11,834	11,716
Fifth Year	Water Supply (afy)	13,851	13,851	13,851	13,851	13,851
	Water Demand (afy)	5,974	6,085	6,199	6,315	6,432
	Difference (afy)	7,877	7,766	7,652	7,536	7,419

[1] The water supply and demand during the first year of a multiple dry year scenario is equal to the water supply and demand estimated for normal water years and during a single dry year.

Source: STPUD 2021:7-4 through 7-6

WASTEWATER

STPUD provides wastewater collection and treatment services for the plan area. The wastewater service area for STPUD is the same as described above for the water supply. Currently, the STPUD wastewater treatment plant has a total capacity of 7.7 million gallons per day (mgd) and treats 4 mgd (STPUD 2021:6-5) and, thus, approximately 3.7 mgd of wastewater treatment capacity is available. All of the wastewater treated by STPUD is recycled and is used for irrigation on lands outside the Basin and as emergency fire water supply in Alpine County and near Luther Pass.

SOLID WASTE

South Tahoe Refuse and Recycling Services (STR) provides waste removal services for the South Lake Tahoe area. Waste is collected and transport to the Materials Recovery Facility (MRF) located at the STR transfer station in South Lake Tahoe, where it is sorted to meet California's mandatory solid waste diversion requirements. The MRF initiates or improves separation of aluminum cans, glass, plastics, cardboard, different grades of paper, tin, metals, appliances, milled wood, green waste, stumps, construction debris, and tires from waste that cannot be recycled (STR 2021). The STR MRF is permitted for a maximum permitted throughput (i.e., the maximum amount of material the facility is allowed to receive, process, handle or dispose per day) of 370 tons per day (CalRecycle 2021a).

Waste collected by STR is disposed of at Lockwood Regional Landfill in Storey County, Nevada. The Lockwood Regional Landfill, located in Nevada, covers 856 acres and has a total waste volume of 302 million cubic yards (NDEP 2013). In 2016, the Lockwood Regional Landfill accepted an average of 2,960 tons of solid waste per day. The volume of waste conveyed to the Lockwood Regional Landfill from California communities accounts for 7.5 percent of municipal solid waste. The Lockwood Regional Landfill has a remaining capacity of 267 million cubic yards and an estimated closure date of 2150 (NDEP 2017).

According to the California Department of Resources Recycling and Recovery (CalRecycle) Countywide, Regionwide, and Statewide Jurisdiction Diversion/Disposal Progress Report for the South Lake Tahoe region, the average annual disposal

rate per person was 6.90 pounds per day per person based off population estimates and was 16.50 pounds per person based on employment within the jurisdiction, which is less than the City's per resident disposal rate target of 9.4 and per employee disposal rate target of 24.2 (CalRecycle 2021b). Thus, the City is currently in compliance with the disposal targets of the California Integrated Waste Management Act of 1989 (AB 939), which required cities and counties to divert 25 percent of all solid waste from landfill facilities by January 1, 1995 and 50 percent by January 1, 2000.

ELECTRICITY AND NATURAL GAS

Electrical services for the plan area are provided by Liberty Utilities. Natural gas services are provided by the Southwest Gas Corporation. The utility companies project that, based on their forecasting and growth trends in the region, their existing capacity would substantially exceed the future demand that could be generated (TRPA 2012:3.13-20 through 3.13-21).

3.19.2 Discussion

a) Require or result in the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities, the construction or relocation of which could cause significant environmental effects?

56 Acres Master Plan

Less than significant with mitigation incorporated. The plan area is currently served by infrastructure for water, wastewater, electricity, natural gas, and telecommunications services. Implementation of the Master Plan would maintain the existing types of land uses within the plan area, which include public service, indoor and outdoor recreation facilities, public spaces, and event space. The Master Plan would include removal or relocation of some existing buildings and facilities, construction of new facilities, and no changes to some facilities. A summary of the changes to the facilities in the plan area that require utilities services is provided in Table 3.19-2.

As Master Plan facilities are constructed, new utility connections would be constructed to connect to existing utility infrastructure in and adjacent to the plan area. Constructing utility connections for each proposed facility may require activities such as excavation and grading that would occur during construction of each subsequent project. The analysis of the potential environmental effects of construction activities related to relocating or providing new utility lines within the plan area is included in Sections 3.1 through 3.21 of this IS/MND.

Two water mains provide service to the plan area. One of the water mains is located along Rufus Allen Boulevard near the northeastern portion of the plan area and the other is located along Rufus Allen Boulevard near the southeastern edge of the plan area. The water mains are either 8-inch in diameter or 6-inch diameter. Preliminary modeling for buildout of the Master Plan indicates that if the water mains are 6-inch diameter, they would not meet the STPUD fire flow standards (2,500 gallons per minute [gpm] at a velocity of 10 feet/second or less for public service or recreation uses) (Ryan, pers. comm., 2021). If the existing water mains are 6-inch mains, the 2,500-gpm flow would move at 15 feet/second, exceeding their velocity threshold.

Regarding wastewater services, the increased wastewater production generated by the Master Plan elements (see Table 3.19-2) is expected to be within the treatment capacity of the wastewater treatment plant and export system. Analysis of potential impacts using STPUD's sewer hydraulic model, indicated the increased wastewater production from the Master Plan would not have a detrimental impact on the wastewater conveyance system (Ryan, pers. comm., 2021). Thus, new water or wastewater infrastructure would be required to be constructed outside of the plan area.

Before receiving permit approval from TRPA or the City of South Lake Tahoe, future individual projects under the Master Plan would be required to comply with Section 32.6 of the TRPA Code, which requires that a project applicant demonstrate that the project would be served by facilities that have adequate water, wastewater, electrical, and natural gas supply. For this reason and because the analysis of potential environmental effects of utilities construction

activities are addressed in Sections 3.1 through 3.21 of this IS/MND, the Master Plan would result in a less-than-significant impact related to the relocation or construction of new or expanded wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities. However, because capacity of the water supply infrastructure along Rufus Allen Boulevard may not meet STPUD fire flow requirements for a public service and recreation use such as the Master Plan, this impact related to water supply infrastructure would be potentially significant.

See Section 3.10, "Hydrology and Water Quality," for a discussion of potential stormwater drainage-related impacts.

Table 3.19-2 Summary of Existing and Proposed Master Plan Facilities that Require Utilities Services

Building/Area	Existing Uses	Proposed Buildout
Recreation and Swim Complex (existing)/Multigenerational Center (proposed)	39,000 sq. ft.	64,220 sq. ft.
Campground – RV and tent campsites	172 campsites - 18 sites with water hookups - 1 sewer waste dump station	118 campsites - Water and electric hookups included at all sites - Up to 20% (23) of the sites with wastewater hookups - 1 sewer waste dump station
Campground – Tent Cabins	7 tent cabins	17 tent cabins
Campground - Restrooms	2 restroom buildings 2 shower buildings	3 restroom buildings 2 shower buildings
New Civic Center Building	NA	25,000 sq. ft.
Public Works Maintenance Yard	3,860 sq. ft.	Relocated off site
Parks Maintenance Yard	1,000-2,000 sq. ft. (estimated for the maintenance shop building)	Relocated off site
Vector Control Building	3,400 sq. ft.	Relocated off site
Ice Skating Center	37,000 sq. ft.	no change
Library	15,000 sq. ft.	no change
Senior Center	10,000 sq. ft.	no change
Historical Museum	2,100 sq. ft.	no change
Art Center	1,140 sq. ft.	no change
Ambulance JPA Building (former Tahoe Chamber office)	3,000 sq. ft.	no change
Fire Training Facility	2,250 sq. ft.	no change[1]

Notes: NA = not applicable

[1] The building that is used for the fire training facility would remain, but the fire training use would be relocated off site.

Source: compiled by Ascent Environmental in 2021

Mitigation Measure 3.19-1: Ensure Sufficient Fire Flow Capacity in the STPUD Water Supply System

This mitigation measure is required for the Master Plan.

Prior to occupancy of Master Plan facilities, the City shall coordinate with STPUD to confirm fire flow water demands for buildout of the Master Plan and confirm the size of the existing water mains. If STPUD confirms that the plan-generated fire flow water demands would exceed the velocity threshold of 10 feet/second in either or both water mains in Rufus Allen Boulevard, then STPUD and the City shall develop plans for and construct improvements to one or both of the water mains such that the STPUD fire flow requirements for the Master Plan (i.e., 2,500 gallons per minute at a velocity of 10 feet/second) would be met. The City shall be responsible for covering the cost of improvements that would be needed to serve buildout of the Master Plan. The plans developed by the City in coordination with STPUD shall identify the timing of the improvements, and that the capacity of the line (or lines) will be available prior to occupancy of the structures served by the water lines.

Significance after Mitigation

Implementation of Mitigation Measure 3.19-1 would reduce potentially significant impacts related to sufficient capacity in the STPUD water supply system because the City would coordinate with STPUD to ensure the water main in Rufus Allen Boulevard serving the Master Plan area would meet STPUD fire flow requirements.

If the Master Plan would require replacement of one of the water mains in Rufus Allen Boulevard, then the City would construct, in consultation with STPUD, and pay for the necessary improvement prior to the use of the new facilities served by the water main. The City and STPUD would coordinate the completion of these improvements.

Replacement of the water main along the northern end of Rufus Allen Boulevard would likely include trenching activities along the northeast corner of the plan area and within or adjacent to Rufus Allen Boulevard, which could potentially be just outside of the plan area. If the water main along the southeastern edge of the plan area would be replaced, then trenching activities would be necessary along the southeast edge of the plan area and within or adjacent to Rufus Allen Boulevard, which could potentially be just outside of the plan area. The pipe replacement would not result in ground disturbance of any previously undisturbed areas. Because the construction activities would adhere to standard construction practices (including construction outside of noise-sensitive times of day), no unique noise impacts would occur. No new above ground structures would be constructed; thus, there would be no significant effects on views from a scenic roadway.

Multigenerational Center Project

Less than significant with mitigation incorporated. Implementation of the Multigenerational Center Project would require the placement of utility connections, such as water, wastewater, electricity, natural gas, and telecommunications connections from existing infrastructure to the Multigenerational Center to support its operation. Similar to the discussion of the Master Plan, above, because the project would be required to comply with Section 32.6 of the TRPA Code assuring utilities services would be provided and the potential environmental effects of utilities construction activities are addressed in Sections 3.1 through 3.21 of this IS/MND, the Multigenerational Center would result in a less-than-significant impact related to the relocation or construction of new or expanded water, wastewater treatment or stormwater drainage, electric power, natural gas, or telecommunication facilities. However, as described above, peliminary modeling indicates that if the water mains serving the Multigenerational Center are 6-inch diameter, they would not meet the STPUD fire flow standards (2,500 gallons per minute [gpm] at a velocity of 10 feet/second or less for public service or recreation uses) (Ryan, pers. comm., 2021). Therefore, this impact would be potentially significant.

Mitigation Measure 3.19-2: Ensure Sufficient Fire Flow Capacity in the STPUD Water Supply System

This mitigation measure is required for the Multigenerational Center.

Implement Mitigation Measure 3.19-1.

Significance after Mitigation

Implementation of Mitigation Measure 3.19-2 would reduce potentially significant impacts related to sufficient capacity in the STPUD water supply system because the City would coordinate with STPUD to ensure the water main in Rufus Allen Boulevard serving the Multigenerational Center would meet STPUD fire flow requirements prior to occupancy of the facility.

b) Have sufficient water supplies available to serve the project and reasonably foreseeable future development during normal, dry, and multiple dry years?

56 Acres Master Plan

Less-than-significant impact. As described in Chapter 2, "Project Description," buildout of the plan area would occur over an estimated 20 years. Although implementation of the Master Plan would remove some uses within the plan area and relocate some uses within the plan area, the Master Plan would result in an overall small increase in water demand.

Currently, water supply at the campground is provided by a few community water spigots located throughout the campground. Although the number of campsites would decrease, the new campground would include water supply hookups for all 118 campsites compared to the 18 campsites with water supply hookups under current conditions (see Table 3.19-2). The provision of water supply connections at each campsite would provide RVs with a continuous, readily available water supply and provides an opportunity for RV back up water supply tanks to be filled. With implementation of the Master Plan, a third restroom building would also be added. Although there would be an increase in the number of water supply fixtures in the campground, the size of the campground would be reduced by 54 campsites under the Master Plan compared with existing conditions. With these changes, it is likely that the increase in water demand for the campground would be minimal.

The Master Plan would result in demolition of the existing Recreation and Swim Complex building, which would eliminate water demand from that existing use. However, the new Multigenerational Center building that would replace that building (although at a location closer to the library) would be approximately 25,000 sq. ft. larger than the existing recreation facility (see Table 3.19-2); thus, there would be a slight increase in water demand with the new facility when compared with the existing Recreation and Swim Complex.

The proposed Civic Center building would also be a new source of water supply demand. However, the reduction in water demand associated with removal of the existing vector control building, Public Works maintenance yard building, and Parks maintenance building would not offset the increase in demand associated with the Civic Center, which would be a larger building than these three buildings combined (see Table 3.19-2).

In 2040 during normal water year and single dry year conditions, STPUD's available water supply would still be more than four times greater than the planned water demand for the entire service area (see the first year in Table 3.19-1. During the worst year of multiple dry year conditions in 2040, STPUD's available water supply would be approximately 1.2 times greater than the planned water demand for the entire service area (see the fifth year in Table 3.19-1). Thus, it could be reasonably assumed that there would be sufficient water supply for the increase in water demand associated with the changes proposed by the Master Plan. Additionally, Julie Ryan, Engineering Department Manager for STPUD, confirmed the increased water demand associated with the Master plan would be within STPUD's available water source capacity (Ryan, pers. comm., 2021). This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. See discussion under "56 Acre Master Plan," above.

c) Result in a determination by the wastewater treatment provider that serves or may serve the project that it has adequate capacity to serve the project's projected demand, in addition to the provider's existing commitments?

56 Acres Master Plan

Less-than-significant impact. As described in Chapter 2, "Project Description," buildout of the plan area would occur over an estimated 20 years. Although implementation of the Master Plan would remove some uses within the plan area and relocate some uses within the plan area, the Master Plan would result in an overall small increase in demand for wastewater conveyance and treatment.

Under the Master Plan, the campground would include an additional restroom building compared to existing conditions, would include wastewater connections at up to 20 percent of the campsites (i.e., up to 23 campsites), and would continue to provide a sewer waste dump for RVs (see Table 3.19-2). Although there would be an increase in the wastewater fixtures in the campground, the size of the campground would be reduced by 54 campsites under the Master Plan compared with existing conditions. With these changes, it is likely that any increase in wastewater conveyance and treatment demand for the campground would be minimal.

The Master Plan would result in demolition of the existing Recreation and Swim Complex building, which would eliminate wastewater flows from that existing use. However, the new Multigenerational Center building that would replace that building (although at a location closer to the library) would be approximately 25,000 sq. ft. larger than

the existing recreation facility (see Table 3.19-2); thus, there would be a slight increase in wastewater conveyance and treatment demand with the new facility when compared with the existing Recreation and Swim Complex.

The proposed Civic Center building would also be a new use requiring wastewater conveyance and treatment. However, the reduction in wastewater flows associated with removal of the existing vector control building, Public Works maintenance yard building, and Parks maintenance building would not offset the increase in wastewater conveyance and treatment demand associated with the Civic Center, which would be a larger building than these three buildings combined (see Table 3.19-2).

As described above under the "Wastewater" section, the wastewater treatment plant treats 4 mgd collected from the STPUD service area but has a capacity of 7.7 mgd. Julie Ryan, Engineering Department Manager for STPUD, stated that based on the information provided about the Master Plan (see Table 3.19-2), the increased wastewater production would be within the treatment capacity of the wastewater treatment plant and export system. Analysis of potential impacts using STPUD's sewer hydraulic model, indicated the increased wastewater production from the Master Plan would not have a detrimental impact on the wastewater conveyance system (Ryan, pers. comm., 2021). Thus, there would be sufficient wastewater treatment capacity for the increase in demand for wastewater treatment associated with the changes proposed by the Master Plan. The Master Plan would not result in a determination that the existing wastewater facilities do not have enough capacity to serve the proposed project. Therefore, this impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. See discussion under "56 Acres Master Plan," above.

d) Generate solid waste in excess of State or local standards, or in excess of the capacity of local infrastructure, or otherwise impair the attainment of solid waste reduction goals?

56 Acres Master Plan

Less-than-significant impact. Operation of the project may increase solid waste output from the site compared to existing conditions. However, this would not impair the attainment of solid waste reduction goals. The waste produced per resident and per employee within the City's jurisdiction is in attainment with state requirements for waste diversion (CalRecycle 2021b). Events occurring at the event space would be required to undergo the permitting process required by the City and may choose to sign up for special event recycling services in coordination with the STR service providers. Waste produced from the site would be processed in accordance with waste reduction and diversion efforts. The Master Plan would not produce waste in excess of local infrastructure capacities and would not impair the attainment of solid waste reduction goals.

Solid waste collection for the Master Plan is provided by STR. Recyclable materials are collected as part of the solid waste collection service and sorted at the MRF. Operations in the plan area under the Master Plan could generate up to an estimated 520 tons per year of solid waste, which would be an average of 1.4 tons per day (modeled by Ascent Environmental in 2021). Because the plan area currently contains uses that generate solid waste and the Master Plan would not result in a substantial increase in uses in the plan area, 520 tons/year of solid waste would likely only be a relatively small increase over existing conditions.

Solid waste generated by special events would increase with the anticipated increase in number of events that could occur with implementation of the Master Plan, but the sizes of the events would not exceed that of the existing special events at Lakeview Commons. As identified in the guidelines for special events, the City requires special events to identify effective waste management that will result in minimal impacts to the event facility and surrounding environment. An effective waste management plan is required, including providing recycling containers onsite and trash collection. Event producers are encouraged to strive for a Zero-Waste event by requiring vendors to use recycled content products, compostable cups, utensils, and materials, providing effective and sufficient recycling containers, and maintaining efficient refuse collection during and after the event. The City requires the event organizer to make arrangements for waste removal and the pickup and haul away of any additional litter and refuse that is due specifically to their event and those attending it using STR (City of South Lake Tahoe 2021).

After recyclable materials are separated from solid waste at the MRF in South Lake Tahoe, the residual solid waste is hauled to Lockwood Regional Landfill for disposal. The MRF is permitted to receive 370 tons of material daily (CalRecycle 2021a). With implementation of the Master Plan, the average amount of solid waste generated on a daily basis would be 1.4 tons per day, which would be 0.4 percent of the permitted daily collection amount at the MRF. The Lockwood Regional Landfill has a disposal capacity of 302.5 million cubic yards with a remaining capacity of more than 267 million cubic yards (NDEP 2017). There is sufficient capacity at the MRF and Lockwood Regional Landfill to accept the anticipated incremental increase in solid waste generated by the Master Plan.

Construction and demolition (C&D) waste would be generated by demolition of the Recreation and Swim Complex, vector control building, Public Works maintenance yard, and Parks maintenance yard and construction of the Civic Center, Multigenerational Center, and other proposed facilities. In accordance with Section 5.408 of the CALGreen Code, individual projects under the Master Plan would implement a Construction Waste Management Plan for recycling and/or salvaging for reuse of a minimum of 65 percent of C&D debris generated during project construction.

In compliance with TRPA Policy PS-3.3 requiring garbage pick-up service in the Basin, the Master Plan would continue to have solid waste collection provided by STR. As described above under the "Solid Waste" section, the City is in compliance with state targets for waste diversion from landfills. Because the Master Plan would be served by STR, which separates recyclable materials from solid waste at the MRF, the Master Plan would comply with state requirements for solid waste diversion.

The increase in solid waste generation that would occur with implementation of the Master Plan would not result in an increase in solid waste that would cause the MRF or Lockwood Regional Landfill to exceed permitted capacities. The Project would also comply with all relevant regulations related to solid waste reduction and recycling. This impact would be **less than significant**.

Multigenerational Center Project
Less-than-significant impact. See discussion under "56 Acres Master Plan," above.

e) Comply with federal, state, and local management and reduction statutes and regulations related to solid waste?

56 Acres Master Plan
Less-than-significant impact. See the discussion under item d), above.

Multigenerational Center Project
Less-than-significant impact. See the discussion under item d), above.

3.19.3 Cumulative Impacts

The cumulative projects listed in Table 3.21-1 consist largely of improvements to roadway facilities, shore stabilization and lake public access, and a new shared-use trail and would not result in an increase in demand for water, wastewater, electricity, natural gas, or telecommunications services. Thus, these projects would not cumulatively combine with the Master Plan to result in impacts on demand for utilities services.

As discussed under items a) and c) in Section 3.6.2, above, there would be sufficient wastewater treatment capacity to serve the Master Plan and sufficient capacity in the wastewater conveyance infrastructure to collect additional wastewater generated by the Master Plan. Currently, there is 3.7 mgd of capacity in the STPUD wastewater treatment plan, which is ample capacity to serve projected future development in the STPUD service area, including buildout of the Master Plan. No project would be permitted without confirmation from STPUD that available capacity exists at the wastewater treatment plant and that conveyance capacity also exists. For these reasons, there would be no significant cumulative impact on wastewater conveyance and wastewater treatment infrastructure; therefore, the Master Plan and Multigenerational Center **would not make a considerable contribution** to a cumulative impact on wastewater treatment and conveyance services.

As identified under item b), above, there would be sufficient water supply to serve the Master Plan. As identified in the STPUD UWMP, there would be sufficient water supplies to meet future water demand under normal, dry, and multiple dry year conditions (STPUD 2021:7-4 through 7-6; see Table 3.19-1). Additionally, individual projects are required to obtain approval of a water connection by STPUD, which could include a capacity analysis to be performed by a project applicant to ensure the areas of the system being tapped for service are adequate to serve the project. If deficiencies are found, any infrastructure improvements required to serve the project would be a condition of the project. For these reasons, the Master Plan and Multigenerational Center **would not make a considerable contribution** to a cumulative impact on water supply services.

The amount of solid waste generated in the plan area with implementation of the Master Plan would not substantially change compared to solid waste currently generated in the plan area. The proposed project and the cumulative projects listed in Table 3.21-1 would result in the one-time generation of solid waste during construction. The cumulative projects would not result in generating solid waste during operations. Lockwood Regional Landfill, which has approximately 267 million cubic yards of available capacity, would have sufficient capacity to accept cumulative generation of solid waste from construction of the Master Plan and projects listed in Table 3.21-1. For these reasons, the Master Plan and Multigenerational Center **would not make a considerable contribution** to a cumulative impact on solid waste services.

The cumulative projects would not generate permanent demand for electricity or natural gas services and, thus, would not combine with the Master Plan to result in cumulative impacts on electrical and natural gas services. TRPA Code Section 32.6 requires that projects must be served with adequate electrical supply. Any new development would be located near existing electric and gas infrastructure, and projects requiring new or modified utility installation, connections, and expansion would be subject to the requirements of the applicable utility providers, Liberty Utilities and Southwest Gas Corporation. The utility companies project that, based on their forecasting and growth trends in the region, their existing capacity would substantially exceed the future demand that could be generated (TRPA 2012:3.13-20 through 3.13-21). For these reasons, the Master Plan and Multigenerational Center **would not make a considerable contribution** to a cumulative impact on energy services.

3.20 WILDFIRE

ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XX. Wildfire.				
Is the project located in or near state responsibility areas or lands classified as high fire hazard severity zones?				
If located in or near state responsibility areas or lands classified as very high fire hazard severity zones, would the project:		☒ Yes		☐ No
a) Substantially impair an adopted emergency response plan or emergency evacuation plan?	☐	☐	☒	☐
b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?	☐	☐	☒	☐
c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?	☐	☐	☒	☐
d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?	☐	☐	☒	☐

3.20.1 Environmental Setting

See the "Wildland Fire Hazards" section under Section 3.9.1, in Section 3.9, "Hazards and Hazardous Materials," for a discussion of the existing wildland fire hazards in the plan area. The project area is located within a Very High FHSZ Local Responsibility Area (CAL FIRE 2009).

3.20.2 Discussion

a) Substantially impair an adopted emergency response plan or emergency evacuation plan?

56 Acres Master Plan

Less-than-significant impact. See discussion under f) under Section 3.9.2, "Discussion," in Section 3.9, "Hazards and Hazardous Materials."

Multigenerational Center Project

Less-than-significant impact. See discussion under f) under Section 3.9.2, "Discussion," in Section 3.9, "Hazards and Hazardous Materials."

b) Due to slope, prevailing winds, and other factors, exacerbate wildfire risks, and thereby expose project occupants to pollutant concentrations from a wildfire or the uncontrolled spread of a wildfire?

56 Acres Master Plan

Less-than-significant impact. Fire risk resulting from implementation of the Master Plan would primarily result from construction activities and operation of the campground. However, the Master Plan would not result in any new uses that would create a greater fire risk than currently exists. As discussed under g) Section 3.9.2, "Discussion," in Section 3.9, "Hazards and Hazardous Materials," implementation of the Master Plan would be required to comply with existing building regulations and defensible space requirements that reduce fire risk to the extent feasible (e.g., PRC Section 4291, Uniform Fire Code, Uniform Building Code, TRPA Code Section 13.5.3.F.4.a). Additionally, with the reduced-size campground, there would be a reduction in the number of campfire rings in the plan area and campfires would continue to be subject to fire restrictions implemented by South Lake Tahoe Fire Rescue during periods of high fire risk. Construction activities would take measures to reduce fire risk such as, fire suppression equipment on the premises in accordance with local fire codes and standards. Implementation of the Master Plan would not exacerbate wildfire risk compared to existing conditions. Therefore, this impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. Refer to the discussion under "56 Acres Master Plan," above.

c) Require the installation of associated infrastructure (such as roads, fuel breaks, emergency water sources, power lines or other utilities) that may exacerbate fire risk or that may result in temporary or ongoing impacts to the environment?

56 Acres Master Plan

Less-than-significant impact. Implementation of the project would construct additional road improvements, utility connections, and emergency water connections within the plan area. If feasible, electric lines would be moved underground. However, the plan area is already developed and contains these facilities under existing conditions. Construction and operation of the Master Plan would be required to comply with existing codes and standards designed to reduce risk of loss from fire within the plan area, such as vegetation management and maintaining defensible space. The Master Plan would not result in increased fire risk compared to existing conditions. The Master Plan would therefore have a less-than-significant impact.

Multigenerational Center Project

Less-than-significant impact. Refer to the discussion under "56 Acres Master Plan," above.

d) Expose people or structures to significant risks, including downslope or downstream flooding or landslides, as a result of runoff, post-fire slope instability, or drainage changes?

56 Acres Master Plan

Less-than-significant impact. Areas downslope of the plan area includes vegetation, US 50, El Dorado Beach, and the lakeshore zone. However, the proposed plan area does not contain steep terrain or slopes that would be subject to risks from landslides. As the plan area, project site, and adjacent areas do not contain steep terrain and are generally developed, run off is primarily urban in nature and does not present a substantial risk to people or structures. The Master Plan and Multigenerational Center Project would not alter these conditions.

Drainage at the site would be temporarily impacted by construction activities; however, construction would occur in compliance with existing TRPA, state, local, and federal regulations regarding run off, stormwater, and related construction activities as described under c) in Section 3.10.2 under Section 3.10, "Hydrology and Water Quality." Additionally, Sections 3.7, "Geology and Soils," and 3.10, "Hydrology and Water Quality," do not indicate that

substantial landslide or flooding events would occur in the project area (see item a-iv) under Section 3.7.2 and item c) under Section 3.10.2, respectively). The plan area and adjacent areas are developed and flat with a gradual slope towards Lake Tahoe in the north and do not contain burn scars or steep terrain that would be subject to post-fire slope instability. Therefore, implementation of the Master Plan would not expose people or structures to significant risks relating to fire, slope instability, or run off that is substantially greater than existing conditions. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. Refer to the discussion under "56 Acres Master Plan," above.

3.20.3 Cumulative Impacts

The geographic area for cumulative impacts related to wildland fire hazards encompasses the Lake Tahoe Basin. The proposed project is located within a very high fire hazard area, as discussed in Section 3.9, "Hazards and Hazardous Materials," and Section 3.20.1, "Environmental Setting." Past wildfires in the region have resulted in significant losses of property and substantial damage to habitat and environmental resources. Additionally, past development in the forested landscape has increased the risk to life and property when fires do occur and increased the potential for ignition of wildland fires through increased human presence and activity. The cumulative projects listed in Table 3.21-1 consists of improvements to roadway facilities, shore stabilization and lake public access, and a new shared-use trail. These projects would not result in new or different land uses that would permanently increase fire risk in the region by increasing development within fire hazard zones. The proposed Master Plan and Multigenerational Center would result in development and facilities improvements within the plan area but would not increase fire risk above existing conditions. All construction, building design, and event activities would be subject to existing codes and standards designed to reduce fire risk and increase safety for site visitors, such as inclusion of defensible space into site design, ensuring proper emergency access, coordinating with local emergency service providers during events. As cumulative projects do not permanently increase fire risk, and the proposed plan activities would be permanent but do not substantially increase fire risk compared to existing conditions, the Master Plan and Multigenerational Center **would not make a considerable contribution** to a significant cumulative impact.

3.21 CUMULATIVE IMPACTS AND MANDATORY FINDINGS OF SIGNIFICANCE

	ENVIRONMENTAL ISSUES	Potentially Significant Impact	Less Than Significant with Mitigation Incorporated	Less-Than-Significant Impact	No Impact
XX.	Mandatory Findings of Significance.				
a)	Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?	☐	☐	☒	☐
b)	Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)	☐	☒	☐	☐
c)	Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?	☐	☒	☐	☐

3.21.1 Cumulative Setting

Section 15130(a) of the State CEQA Guidelines requires a discussion of the cumulative impacts of a project when the project's incremental effect is cumulatively considerable. Where a project's incremental effect is not cumulatively considerable, the effect need not be considered significant, but the basis for concluding the incremental effect is not cumulatively considerable must be briefly described. Cumulatively considerable, as defined in State CEQA Guidelines Section 15065(a)(3), means that the "incremental effects of an individual project are significant when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects." State CEQA Guidelines Section 15355 defines a cumulative impact as two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. Cumulative impacts can result from individually minor but collectively significant projects taking place over time. Cumulative impacts are discussed in each resource section, following discussions of the project-specific impacts.

Probable existing and future projects considered in the cumulative analysis are in the project vicinity and have the possibility of interacting with the 56 Acres Master Plan and Multigenerational Center Project to generate a cumulative impact (Table 3.21-1). This list of projects was considered in the analysis of the cumulative impacts for resource topics within the geographic scope of each resource topic (as described in the cumulative impact analysis within each resource section).

Table 3.21-1 Cumulative Projects List

Project Name	Location	Description	Project Status
Al Tahoe Boulevard Safety and Mobility Project	Al Tahoe Boulevard	Constructs a Class I shared-use path and Class II bicycle lanes along Al Tahoe Boulevard in the vicinity of the South Tahoe Middle School. The limits of the project are Al Tahoe Boulevard between US 50 and Johnson Boulevard.	Under construction with completion anticipated in 2022.
Al Tahoe Government Center Best Management Practices	Al Tahoe Boulevard and Johnson Boulevard	The Al Tahoe Government Center serves multiple jurisdictions and is a priority location in need of improved water quality infrastructure. TRPA will work with City of South Lake Tahoe and El Dorado County to plan, permit and install stormwater infiltration Best Management Practices.	Project planning in progress with anticipated completion in 2023.
Alta Mira Public Access Improvement Project	3339 Lake Tahoe Boulevard	Improvements to public lakefront property at El Dorado Beach in South Lake Tahoe focused on public access, open space, view corridors, shoreline stability, and water quality. In 2019, the Conservancy repaired severe shoreline, drainage infrastructure, and public access failures. In 2020, the Conservancy initiated comprehensive planning including environmental review.	Project planning in progress with anticipated completion in 2031.
Middle School SR2S Project - Rufus Allen Connector	Rufus Allen Boulevard	This project proposes a Class 1 Bike and Pedestrian trail along Rufus Allen Boulevard providing safe routes to school with access to the Al Tahoe Elementary School, Al Tahoe Middle School, St. Theresa School/Church, Boys and Girls Club, and the South Tahoe Middle School via a new trail connector across Lake Tahoe Unified School District property. Improvements along Rufus Allen Boulevard are proposed to address urban stormwater water quality and flooding. Project begins at US 50 and Rufus Allen Boulevard and connects to the Al Tahoe Boulevard Class 1 project.	Project planning in progress with anticipated completion in 2022.
Pioneer Trail Pedestrian Improvement Project Phase II	Pioneer Trail from Ski Run Boulevard to Larch Avenue	The Pioneer Trail Pedestrian Improvement Project - Phase II is an upgrade to Pioneer Trail that will provide five-foot wide sidewalks, ADA compliant crossings, street lighting, minor stormwater infrastructure and landscaping on each side of the roadway between Larch Avenue and Ski Run Boulevard. The improvements also include transit system upgrades through the placement of bus shelter pads with electrical connection capability	Construction to begin in 2022.
South Lake Tahoe Safety Project	US 50 between the "Y" and Ski Run Boulevard	This Caltrans project would improve pedestrian and bicyclist safety between the US 50/State Route 89 'Y' and Pioneer Trail in South Lake Tahoe. This project proposes to improve roadway lighting and implement a complete street vision for the corridor by installing a green bike lane treatment and enhanced visibility crosswalks. The project would also improve bicycle signage throughout the project limits and install a two-stage turn queue box for bike crossings at multiple locations for additional bicycle safety. The project would include some new crosswalks at Rufus Allen, Lakeview and Tallac Intersections. The project would also install pedestrian signals at mid-block crossings between Truckee Road and River Drive, between Brockway Avenue and Blue Lake Avenue, and between Herbert Avenue and Ski Run Boulevard. These mid-block crossings will provide cyclists and pedestrians a safe opportunity to cross the highway. A full signalized intersection would be installed on US 50 at Johnson Boulevard.	Project planning in progress. Construction anticipated to being in 2023 and be completed in 2025.
Dennis T. Machida Memorial Greenway	Sierra Boulevard to Van Sickle Bi-State Park	The approved Dennis T. Machida Memorial Greenway connects Sierra Tract and Van Sickle Bi-State Park in the core of South Lake Tahoe, establishing the backbone of the non-motorized transportation network in the South Shore. Project approval occurred in 2011 and the 3.86-mile trail, including neighborhood connectors, is being constructed in phases. Future projects could extend the Greenway to Meyers and the South Lake Tahoe WYE.	Project planning and implementation in progress with anticipated completion in 2031.

Source: Compiled by Ascent Environmental in 2021

3.21.2 Discussion

a) Does the project have the potential to substantially degrade the quality of the environment, substantially reduce the habitat of a fish or wildlife species, cause a fish or wildlife population to drop below self-sustaining levels, threaten to eliminate a plant or animal community, substantially reduce the number or restrict the range of an endangered, rare, or threatened species, or eliminate important examples of the major periods of California history or prehistory?

56 Acres Master Plan

Less-than-significant impact. Wildlife and plant species that occur in the plan area are common species associated with urban and residential areas in the Tahoe Basin. No special-status plant or animal species are expected to occur regularly in the plan area due to the absence of suitable breeding habitat, high disturbance levels associated with existing urban uses, and no historic documentation of occurrences in the plan area. Because habitats in the plan area are fragmented and highly disturbed, native species occur there in relatively low abundance and diversity. The plan area is within a commercial core and developed recreation area; the Master Plan would be implemented mostly on existing developed lands.

The area surrounding the plan area core includes commercial and residential development, a major highway corridor (US 50/Lake Tahoe Boulevard) and other roadways, and disturbed conifer forest in fragmented undeveloped areas. Due to the developed conditions and land uses of the plan area and surrounding areas, the existing level of disturbance on and adjacent to the plan area is high. The quality and functions of biological resources in the plan area would not change substantially with implementation of the Master Plan. For these reasons, construction and operation of facilities, changes in services and uses, and other features proposed for the Master Plan would not substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of endangered, rare, or threatened species. This impact would be less than significant.

Multigenerational Center Project

Less-than-significant impact. For the same reasons described above for the Master Plan, any potential effects of construction and operation of facilities for the Multigenerational Center would not substantially reduce the habitat of a fish or wildlife species; cause a fish or wildlife population to drop below self-sustaining levels; threaten to eliminate a plant or animal community; or substantially reduce the number or restrict the range of endangered, rare, or threatened species. This impact would be less than significant.

b) Does the project have impacts that are individually limited, but cumulatively considerable? ("Cumulatively considerable" means that the incremental effects of a project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.)

56 Acres Master Plan

Less than significant with mitigation incorporated. The cumulative projects considered in combination with the Master Plan are listed in Table 3.21-1. These projects primarily consist of improvements to roadway facilities, shore stabilization and lake public access, and a new shared-use trail. Each of the resource sections provides an analysis of cumulative effects of the Master Plan when combined with these cumulative projects (see "Cumulative Impacts" in Section 3.1 through Section 3.20). Possible cumulative impacts related to cultural resources, hazards and hazardous materials, and tribal cultural resources would be minimized with implementation of Mitigation Measures 3.5-1, 3.5-2, 3.9-1, 3.9-2, 3.18-1, and 3.18-2 incorporated into the Master Plan. The cumulative impacts associated with the Master Plan would be less than significant with mitigation incorporated.

Multigenerational Center Project

Less than significant with mitigation incorporated. See discussion of the Master Plan, above. Possible cumulative impacts related to cultural resources and tribal cultural resources would be minimized with implementation of Mitigation Measures 3.5-1, 3.5-2, 3.18-1, and 3.18-2 incorporated into the Multigenerational Center. The cumulative impacts associated with the Multigenerational Center would be less than significant with mitigation incorporated.

c) Does the project have environmental effects that will cause substantial adverse effects on human beings, either directly or indirectly?

56 Acres Master Plan

Less than significant with mitigation incorporated. No project-related environmental effects were identified that would cause substantial adverse effects on human beings. As discussed in Section 3.9, "Hazards and Hazardous Materials," the Master Plan has the potential to result in adverse effects on human beings related to hazardous materials during construction. With implementation of mitigation measures committed to by the lead agency (Mitigation Measures 3.9-1 and 3.9-2), impacts from the Master Plan related to the risk of an accidental release of hazardous substances that could adversely affect human health or the environment during construction would be reduced to a less-than-significant level.

Multigenerational Center Project

Less-than-significant impact. Environmental effects of the Multigenerational Center have been determined to pose a less-than-significant impact on humans.

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4 REFERENCES

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No references were used in this chapter.

2 Project Description

No references were used in this chapter.

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3.21 Mandatory Findings of Significance

No references were used in this chapter.

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Appendix A

Air Quality and Greenhouse Gases Emissions Modeling Data

56 Acre Master Plan - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

56 Acre Master Plan

El Dorado-Lake Tahoe County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	25.00	1000sqft	0.57	25,000.00	0
Parking Lot	617.00	Space	5.55	246,800.00	0
Arena	24.59	1000sqft	7.90	24,590.00	0
Arena	70.00	1000sqft	22.50	70,000.00	0
City Park	3.30	Acre	3.30	143,748.00	0
Motel	16.00	Room	0.72	31,363.20	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2040
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	127.6	**CH4 Intensity (lb/MWhr)**	0.006	**N2O Intensity (lb/MWhr)**	0.001

1.3 User Entered Comments & Non-Default Data

Project Characteristics - The GHG EFs are scaled using Liberty Utility's natural gas mix and internsity factor (published by TRPA) for the year 2018.

Land Use - Motel - Cabins - 16 proposed
City Park - Public Park - 3.3 Acre proposed
Arena - Ice Skating - 24.590 ksf
Arena - Outdoor Event Space - 70 ksf
Government (Civic Center) - Government Civic Center - 25 ksf
Parking lot - Parking - 296 spaces

56 Acre Master Plan - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Construction Phase - The duration of different construction phases is scaled up using the duration of construction phases in the Multigenerational Center.

Trips and VMT -

Grading -

Architectural Coating - SMAQMD recommends using paint with new VOC contents for archetectural coating. For the modeling, Nonflat Coating's VOC limit of 100 g/l is assumed.

Vehicle Trips - As provided by the Traffic study

Vehicle Emission Factors - Using 2021 EMFAC EF

Vehicle Emission Factors - Using 2021 EMFAC EF

Vehicle Emission Factors - Using 2021 EMFAC EF

Area Coating -

Water And Wastewater -

Solid Waste -

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblConstructionPhase	NumDays	30.00	7.00
tblConstructionPhase	NumDays	75.00	14.00
tblConstructionPhase	NumDays	740.00	700.00
tblConstructionPhase	NumDays	55.00	35.00
tblConstructionPhase	NumDays	55.00	35.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.006
tblProjectCharacteristics	CO2IntensityFactor	0	127.6
tblProjectCharacteristics	N2OIntensityFactor	0	0.001

56 Acre Master Plan - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
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tblVehicleEF	HHD	1.0000e-006	0.00
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tblVehicleEF	HHD	0.03	47.81
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tblVehicleEF	HHD	0.06	0.09
tblVehicleEF	HHD	0.03	0.03
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tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	5.0000e-006	0.00
tblVehicleEF	HHD	0.02	0.22
tblVehicleEF	HHD	1.3600e-003	3.7710e-003
tblVehicleEF	HHD	1.0000e-006	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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tblVehicleEF	HHD	0.34	0.22
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tblVehicleEF	HHD	0.03	48.72
tblVehicleEF	HHD	5.52	38.47
tblVehicleEF	HHD	2.46	1.50
tblVehicleEF	HHD	3.67	2.94
tblVehicleEF	HHD	2.0510e-003	0.01
tblVehicleEF	HHD	0.06	0.09
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.02	0.02
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tblVehicleEF	HHD	5.0000e-006	0.00
tblVehicleEF	HHD	6.15	42.77
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tblVehicleEF	HHD	3.67	2.94
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tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.02	0.02

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	HHD	3.0000e-006	0.00
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tblVehicleEF	HHD	0.03	0.02
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tblVehicleEF	LDA	0.02	0.97
tblVehicleEF	LDA	2.8300e-003	4.8730e-003
tblVehicleEF	LDA	0.08	0.17
tblVehicleEF	LDA	7.6200e-004	1.0480e-003
tblVehicleEF	LDA	0.02	0.04

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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tblVehicleEF	LDA	0.00	0.49
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tblVehicleEF	LDA	0.46	0.04
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tblVehicleEF	LDA	1.17	0.00
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tblVehicleEF	LDA	0.10	0.16
tblVehicleEF	LDA	0.04	8.3440e-003
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EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDT1	7.9700e-004	1.6200e-003
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tblVehicleEF	LDT1	1.31	0.00
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tblVehicleEF	LDT1	0.13	0.22
tblVehicleEF	LDT1	0.04	0.01
tblVehicleEF	LDT1	6.6000e-004	7.6500e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

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tblVehicleEF	LDT1	0.09	0.22
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.16	0.27
tblVehicleEF	LDT1	0.04	0.01
tblVehicleEF	LDT1	6.6000e-004	7.6500e-004
tblVehicleEF	LDT1	9.3400e-004	1.4050e-003
tblVehicleEF	LDT1	0.01	2.51
tblVehicleEF	LDT1	2.3640e-003	5.0780e-003
tblVehicleEF	LDT1	0.12	0.29
tblVehicleEF	LDT1	0.01	2.51
tblVehicleEF	LDT1	3.4490e-003	7.4100e-003
tblVehicleEF	LDT1	0.13	0.31
tblVehicleEF	LDT2	1.0740e-003	1.5050e-003
tblVehicleEF	LDT2	1.0740e-003	1.6410e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.00	0.64
tblVehicleEF	LDT2	0.48	0.04
tblVehicleEF	LDT2	2.18	0.00
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.16	0.25
tblVehicleEF	LDT2	0.04	0.01
tblVehicleEF	LDT2	6.9600e-004	6.8700e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDT2	9.1000e-004	1.1500e-003
tblVehicleEF	LDT2	0.05	1.79
tblVehicleEF	LDT2	3.6310e-003	4.9600e-003
tblVehicleEF	LDT2	0.14	0.23
tblVehicleEF	LDT2	0.05	1.79
tblVehicleEF	LDT2	5.2520e-003	7.2200e-003
tblVehicleEF	LDT2	0.16	0.26
tblVehicleEF	LDT2	1.2430e-003	1.4470e-003
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.00	0.88
tblVehicleEF	LDT2	0.00	0.59
tblVehicleEF	LDT2	0.58	0.04
tblVehicleEF	LDT2	0.58	0.04
tblVehicleEF	LDT2	1.68	0.00
tblVehicleEF	LDT2	1.68	0.00
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.14	0.22
tblVehicleEF	LDT2	0.04	0.01
tblVehicleEF	LDT2	6.9600e-004	6.8700e-004
tblVehicleEF	LDT2	9.1000e-004	1.1500e-003
tblVehicleEF	LDT2	0.15	2.07
tblVehicleEF	LDT2	4.0880e-003	5.2790e-003
tblVehicleEF	LDT2	0.11	0.19
tblVehicleEF	LDT2	0.15	2.07
tblVehicleEF	LDT2	5.9180e-003	7.6840e-003
tblVehicleEF	LDT2	0.12	0.20
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.17	0.28
tblVehicleEF	LDT2	0.04	0.01

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDT2	6.9600e-004	6.8700e-004
tblVehicleEF	LDT2	9.1000e-004	1.1500e-003
tblVehicleEF	LDT2	0.02	1.72
tblVehicleEF	LDT2	3.4920e-003	4.8370e-003
tblVehicleEF	LDT2	0.16	0.27
tblVehicleEF	LDT2	0.02	1.72
tblVehicleEF	LDT2	5.0480e-003	7.0400e-003
tblVehicleEF	LDT2	0.18	0.29
tblVehicleEF	LHD1	4.0890e-003	0.06
tblVehicleEF	LHD1	4.0890e-003	0.06
tblVehicleEF	LHD1	3.9710e-003	3.4820e-003
tblVehicleEF	LHD1	3.9710e-003	3.5310e-003
tblVehicleEF	LHD1	9.6930e-003	0.02
tblVehicleEF	LHD1	9.6930e-003	0.02
tblVehicleEF	LHD1	0.19	0.52
tblVehicleEF	LHD1	0.38	0.10
tblVehicleEF	LHD1	0.92	2.78
tblVehicleEF	LHD1	0.04	0.61
tblVehicleEF	LHD1	0.31	0.41
tblVehicleEF	LHD1	0.23	0.34
tblVehicleEF	LHD1	8.0400e-004	9.4420e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	9.6500e-003	9.3980e-003
tblVehicleEF	LHD1	6.9290e-003	0.01
tblVehicleEF	LHD1	2.1400e-004	1.1700e-004
tblVehicleEF	LHD1	1.6870e-003	2.00
tblVehicleEF	LHD1	0.02	0.26
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.05	0.08

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD1	1.6870e-003	2.00
tblVehicleEF	LHD1	0.02	0.36
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.05	0.09
tblVehicleEF	LHD1	4.1070e-003	0.06
tblVehicleEF	LHD1	4.0280e-003	3.4480e-003
tblVehicleEF	LHD1	9.0160e-003	0.02
tblVehicleEF	LHD1	0.19	0.54
tblVehicleEF	LHD1	0.19	0.51
tblVehicleEF	LHD1	0.38	0.10
tblVehicleEF	LHD1	0.38	0.10
tblVehicleEF	LHD1	0.83	2.78
tblVehicleEF	LHD1	0.83	2.78
tblVehicleEF	LHD1	0.04	0.61
tblVehicleEF	LHD1	0.29	0.39
tblVehicleEF	LHD1	0.22	0.31
tblVehicleEF	LHD1	8.0400e-004	9.4420e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	9.6500e-003	9.3980e-003
tblVehicleEF	LHD1	6.9290e-003	0.01
tblVehicleEF	LHD1	2.1400e-004	1.1700e-004
tblVehicleEF	LHD1	4.7130e-003	2.32
tblVehicleEF	LHD1	0.02	0.26
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.04	0.08
tblVehicleEF	LHD1	4.7130e-003	2.32
tblVehicleEF	LHD1	0.02	0.36
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.05	0.09

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD1	0.04	0.61
tblVehicleEF	LHD1	0.31	0.42
tblVehicleEF	LHD1	0.25	0.36
tblVehicleEF	LHD1	8.0400e-004	9.4420e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	9.6500e-003	9.3980e-003
tblVehicleEF	LHD1	6.9290e-003	0.01
tblVehicleEF	LHD1	2.1400e-004	1.1700e-004
tblVehicleEF	LHD1	6.5100e-004	1.91
tblVehicleEF	LHD1	0.02	0.26
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.05	0.09
tblVehicleEF	LHD1	6.5100e-004	1.91
tblVehicleEF	LHD1	0.02	0.36
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.05	0.10
tblVehicleEF	LHD2	1.7890e-003	0.02
tblVehicleEF	LHD2	1.7890e-003	0.02
tblVehicleEF	LHD2	5.4100e-003	5.8020e-003
tblVehicleEF	LHD2	5.4100e-003	5.8130e-003
tblVehicleEF	LHD2	2.6240e-003	4.1410e-003
tblVehicleEF	LHD2	2.6240e-003	3.8610e-003
tblVehicleEF	LHD2	0.12	0.47
tblVehicleEF	LHD2	0.55	0.16
tblVehicleEF	LHD2	0.36	1.49
tblVehicleEF	LHD2	0.09	1.35
tblVehicleEF	LHD2	0.53	0.86
tblVehicleEF	LHD2	0.08	0.09
tblVehicleEF	LHD2	1.6220e-003	0.02

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.0000e-005	2.2000e-005
tblVehicleEF	LHD2	4.2400e-004	0.50
tblVehicleEF	LHD2	0.01	0.15
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.2400e-004	0.50
tblVehicleEF	LHD2	0.01	0.18
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.7940e-003	0.02
tblVehicleEF	LHD2	5.4310e-003	5.7940e-003
tblVehicleEF	LHD2	2.4410e-003	4.3300e-003
tblVehicleEF	LHD2	0.12	0.47
tblVehicleEF	LHD2	0.12	0.46
tblVehicleEF	LHD2	0.55	0.16
tblVehicleEF	LHD2	0.55	0.16
tblVehicleEF	LHD2	0.32	1.49
tblVehicleEF	LHD2	0.32	1.49
tblVehicleEF	LHD2	0.09	1.35
tblVehicleEF	LHD2	0.51	0.82
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	1.6220e-003	0.02
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.0000e-005	2.2000e-005

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD2	1.1800e-003	0.57
tblVehicleEF	LHD2	0.01	0.15
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.1800e-003	0.57
tblVehicleEF	LHD2	0.01	0.18
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	0.09	1.35
tblVehicleEF	LHD2	0.54	0.87
tblVehicleEF	LHD2	0.08	0.09
tblVehicleEF	LHD2	1.6220e-003	0.02
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.0000e-005	2.2000e-005
tblVehicleEF	LHD2	1.6400e-004	0.49
tblVehicleEF	LHD2	0.01	0.15
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.6400e-004	0.49
tblVehicleEF	LHD2	0.01	0.18
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	MCY	0.34	0.15
tblVehicleEF	MCY	0.34	0.16
tblVehicleEF	MCY	0.26	0.17
tblVehicleEF	MCY	0.26	0.14
tblVehicleEF	MCY	0.00	12.10

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MCY	18.37	9.0110e-003
tblVehicleEF	MCY	10.12	0.00
tblVehicleEF	MCY	1.18	0.55
tblVehicleEF	MCY	0.28	0.11
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.3000e-003	2.1240e-003
tblVehicleEF	MCY	2.7220e-003	3.2120e-003
tblVehicleEF	MCY	1.15	5.39
tblVehicleEF	MCY	2.30	0.99
tblVehicleEF	MCY	2.05	1.32
tblVehicleEF	MCY	1.15	5.39
tblVehicleEF	MCY	2.87	1.21
tblVehicleEF	MCY	2.24	1.43
tblVehicleEF	MCY	0.33	0.15
tblVehicleEF	MCY	0.21	0.20
tblVehicleEF	MCY	0.00	12.31
tblVehicleEF	MCY	0.00	12.11
tblVehicleEF	MCY	17.66	9.0110e-003
tblVehicleEF	MCY	17.66	9.0110e-003
tblVehicleEF	MCY	8.19	0.00
tblVehicleEF	MCY	8.19	0.00
tblVehicleEF	MCY	1.00	0.47
tblVehicleEF	MCY	0.25	0.10
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.3000e-003	2.1240e-003
tblVehicleEF	MCY	2.7220e-003	3.2120e-003
tblVehicleEF	MCY	3.88	8.19
tblVehicleEF	MCY	2.22	0.99
tblVehicleEF	MCY	1.62	1.05

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MCY	3.88	8.19
tblVehicleEF	MCY	2.77	1.22
tblVehicleEF	MCY	1.76	1.14
tblVehicleEF	MCY	1.25	0.58
tblVehicleEF	MCY	0.30	0.12
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.3000e-003	2.1240e-003
tblVehicleEF	MCY	2.7220e-003	3.2120e-003
tblVehicleEF	MCY	0.25	4.74
tblVehicleEF	MCY	2.38	0.99
tblVehicleEF	MCY	2.37	1.51
tblVehicleEF	MCY	0.25	4.74
tblVehicleEF	MCY	2.97	1.21
tblVehicleEF	MCY	2.58	1.65
tblVehicleEF	MDV	1.1320e-003	1.6610e-003
tblVehicleEF	MDV	1.1320e-003	1.8110e-003
tblVehicleEF	MDV	0.04	0.06
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.00	0.67
tblVehicleEF	MDV	0.49	0.04
tblVehicleEF	MDV	2.30	0.00
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.18	0.31
tblVehicleEF	MDV	0.04	0.01
tblVehicleEF	MDV	6.7700e-004	6.8700e-004
tblVehicleEF	MDV	9.3600e-004	1.2100e-003
tblVehicleEF	MDV	0.07	1.96
tblVehicleEF	MDV	4.0510e-003	5.8760e-003
tblVehicleEF	MDV	0.17	0.30

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MDV	0.07	1.96
tblVehicleEF	MDV	5.8470e-003	8.5430e-003
tblVehicleEF	MDV	0.19	0.32
tblVehicleEF	MDV	1.3090e-003	1.5970e-003
tblVehicleEF	MDV	0.03	0.07
tblVehicleEF	MDV	0.00	0.92
tblVehicleEF	MDV	0.00	0.62
tblVehicleEF	MDV	0.58	0.04
tblVehicleEF	MDV	0.58	0.04
tblVehicleEF	MDV	1.76	0.00
tblVehicleEF	MDV	1.76	0.00
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.16	0.28
tblVehicleEF	MDV	0.04	0.01
tblVehicleEF	MDV	6.7700e-004	6.8700e-004
tblVehicleEF	MDV	9.3600e-004	1.2100e-003
tblVehicleEF	MDV	0.21	2.29
tblVehicleEF	MDV	4.5500e-003	6.2490e-003
tblVehicleEF	MDV	0.14	0.23
tblVehicleEF	MDV	0.21	2.29
tblVehicleEF	MDV	6.5750e-003	9.0870e-003
tblVehicleEF	MDV	0.15	0.26
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.20	0.34
tblVehicleEF	MDV	0.04	0.01
tblVehicleEF	MDV	6.7700e-004	6.8700e-004
tblVehicleEF	MDV	9.3600e-004	1.2100e-003
tblVehicleEF	MDV	0.03	1.88
tblVehicleEF	MDV	3.8980e-003	5.7310e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MDV	0.20	0.33
tblVehicleEF	MDV	0.03	1.88
tblVehicleEF	MDV	5.6230e-003	8.3310e-003
tblVehicleEF	MDV	0.21	0.37
tblVehicleEF	MH	4.4750e-003	4.9190e-003
tblVehicleEF	MH	4.4750e-003	5.0080e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.00	0.29
tblVehicleEF	MH	0.26	0.10
tblVehicleEF	MH	1.31	0.00
tblVehicleEF	MH	1.40	1.65
tblVehicleEF	MH	0.24	0.35
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.6600e-004	1.8400e-004
tblVehicleEF	MH	0.31	2.34
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.31	2.34
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	4.5670e-003	4.8540e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.00	0.29
tblVehicleEF	MH	0.00	0.28
tblVehicleEF	MH	0.27	0.10
tblVehicleEF	MH	0.27	0.10

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MH	1.15	0.00
tblVehicleEF	MH	1.15	0.00
tblVehicleEF	MH	1.32	1.56
tblVehicleEF	MH	0.22	0.32
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.6600e-004	1.8400e-004
tblVehicleEF	MH	0.84	2.68
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.84	2.68
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	1.41	1.67
tblVehicleEF	MH	0.26	0.37
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.6600e-004	1.8400e-004
tblVehicleEF	MH	0.13	2.27
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.13	2.27
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.07	0.09
tblVehicleEF	MHD	5.2540e-003	0.03
tblVehicleEF	MHD	5.2540e-003	0.03
tblVehicleEF	MHD	8.8600e-004	6.5200e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MHD	8.8600e-004	6.6800e-004
tblVehicleEF	MHD	0.01	3.7110e-003
tblVehicleEF	MHD	0.01	3.4530e-003
tblVehicleEF	MHD	0.77	0.07
tblVehicleEF	MHD	0.14	0.20
tblVehicleEF	MHD	1.06	8.51
tblVehicleEF	MHD	0.72	10.13
tblVehicleEF	MHD	1.39	0.38
tblVehicleEF	MHD	1.62	1.24
tblVehicleEF	MHD	2.0000e-004	3.0680e-003
tblVehicleEF	MHD	0.13	0.05
tblVehicleEF	MHD	6.6630e-003	3.5480e-003
tblVehicleEF	MHD	1.5100e-004	4.8000e-005
tblVehicleEF	MHD	4.9300e-004	0.25
tblVehicleEF	MHD	0.03	0.27
tblVehicleEF	MHD	0.01	8.2880e-003
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	4.9300e-004	0.25
tblVehicleEF	MHD	0.04	0.34
tblVehicleEF	MHD	0.01	9.8750e-003
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	4.9940e-003	0.03
tblVehicleEF	MHD	9.0800e-004	6.4000e-004
tblVehicleEF	MHD	0.01	3.8920e-003
tblVehicleEF	MHD	0.68	0.07
tblVehicleEF	MHD	0.68	0.07
tblVehicleEF	MHD	0.14	0.20
tblVehicleEF	MHD	0.14	0.20
tblVehicleEF	MHD	0.95	7.95

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MHD	0.95	9.11
tblVehicleEF	MHD	0.69	9.65
tblVehicleEF	MHD	1.32	0.36
tblVehicleEF	MHD	1.61	1.24
tblVehicleEF	MHD	1.7700e-004	2.6960e-003
tblVehicleEF	MHD	0.13	0.05
tblVehicleEF	MHD	6.6630e-003	3.5480e-003
tblVehicleEF	MHD	1.5100e-004	4.8000e-005
tblVehicleEF	MHD	1.3670e-003	0.30
tblVehicleEF	MHD	0.03	0.27
tblVehicleEF	MHD	0.01	8.3430e-003
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	1.3670e-003	0.30
tblVehicleEF	MHD	0.04	0.34
tblVehicleEF	MHD	0.01	9.9560e-003
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.77	10.78
tblVehicleEF	MHD	1.40	0.39
tblVehicleEF	MHD	1.63	1.24
tblVehicleEF	MHD	2.3300e-004	3.5820e-003
tblVehicleEF	MHD	0.13	0.05
tblVehicleEF	MHD	6.6630e-003	3.5480e-003
tblVehicleEF	MHD	1.5100e-004	4.8000e-005
tblVehicleEF	MHD	1.9500e-004	0.24
tblVehicleEF	MHD	0.03	0.26
tblVehicleEF	MHD	0.01	8.2480e-003
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	1.9500e-004	0.24
tblVehicleEF	MHD	0.04	0.33

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MHD	0.01	9.8160e-003
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	OBUS	7.4230e-003	0.10
tblVehicleEF	OBUS	7.4230e-003	0.10
tblVehicleEF	OBUS	1.9710e-003	0.02
tblVehicleEF	OBUS	1.9710e-003	0.02
tblVehicleEF	OBUS	0.02	3.8000e-003
tblVehicleEF	OBUS	0.02	3.5110e-003
tblVehicleEF	OBUS	0.73	0.28
tblVehicleEF	OBUS	0.24	0.21
tblVehicleEF	OBUS	1.81	8.80
tblVehicleEF	OBUS	0.49	4.27
tblVehicleEF	OBUS	1.44	1.09
tblVehicleEF	OBUS	1.09	0.99
tblVehicleEF	OBUS	1.6500e-004	4.2280e-003
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	8.8800e-003	0.02
tblVehicleEF	OBUS	1.8200e-004	3.5000e-005
tblVehicleEF	OBUS	1.3060e-003	0.46
tblVehicleEF	OBUS	0.06	0.56
tblVehicleEF	OBUS	0.02	0.04
tblVehicleEF	OBUS	0.09	0.02
tblVehicleEF	OBUS	1.3060e-003	0.46
tblVehicleEF	OBUS	0.07	0.72
tblVehicleEF	OBUS	0.02	0.06
tblVehicleEF	OBUS	0.09	0.02
tblVehicleEF	OBUS	7.5540e-003	0.10
tblVehicleEF	OBUS	2.0390e-003	0.02
tblVehicleEF	OBUS	0.01	3.9900e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	OBUS	0.72	0.29
tblVehicleEF	OBUS	0.72	0.28
tblVehicleEF	OBUS	0.25	0.21
tblVehicleEF	OBUS	0.25	0.21
tblVehicleEF	OBUS	1.59	8.68
tblVehicleEF	OBUS	1.59	8.97
tblVehicleEF	OBUS	0.46	4.09
tblVehicleEF	OBUS	1.36	1.04
tblVehicleEF	OBUS	1.07	0.99
tblVehicleEF	OBUS	1.4600e-004	3.6880e-003
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	8.8800e-003	0.02
tblVehicleEF	OBUS	1.8200e-004	3.5000e-005
tblVehicleEF	OBUS	3.5810e-003	0.56
tblVehicleEF	OBUS	0.06	0.59
tblVehicleEF	OBUS	0.02	0.04
tblVehicleEF	OBUS	0.08	0.02
tblVehicleEF	OBUS	3.5810e-003	0.56
tblVehicleEF	OBUS	0.07	0.75
tblVehicleEF	OBUS	0.02	0.06
tblVehicleEF	OBUS	0.09	0.02
tblVehicleEF	OBUS	0.52	4.53
tblVehicleEF	OBUS	1.45	1.10
tblVehicleEF	OBUS	1.10	0.99
tblVehicleEF	OBUS	1.9000e-004	4.9730e-003
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	8.8800e-003	0.02
tblVehicleEF	OBUS	1.8200e-004	3.5000e-005
tblVehicleEF	OBUS	5.3600e-004	0.44

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	OBUS	0.05	0.52
tblVehicleEF	OBUS	0.02	0.04
tblVehicleEF	OBUS	0.09	0.02
tblVehicleEF	OBUS	5.3600e-004	0.44
tblVehicleEF	OBUS	0.07	0.68
tblVehicleEF	OBUS	0.02	0.06
tblVehicleEF	OBUS	0.10	0.02
tblVehicleEF	SBUS	0.05	0.46
tblVehicleEF	SBUS	0.05	0.46
tblVehicleEF	SBUS	1.1720e-003	8.3300e-004
tblVehicleEF	SBUS	1.1720e-003	8.4800e-004
tblVehicleEF	SBUS	4.3740e-003	0.01
tblVehicleEF	SBUS	4.3740e-003	0.01
tblVehicleEF	SBUS	2.47	0.09
tblVehicleEF	SBUS	0.13	0.18
tblVehicleEF	SBUS	0.62	20.81
tblVehicleEF	SBUS	1.37	8.77
tblVehicleEF	SBUS	1.32	0.59
tblVehicleEF	SBUS	1.93	0.72
tblVehicleEF	SBUS	4.1200e-004	2.6010e-003
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	8.1380e-003	4.2820e-003
tblVehicleEF	SBUS	5.5000e-005	1.3600e-004
tblVehicleEF	SBUS	7.4000e-004	0.78
tblVehicleEF	SBUS	0.23	2.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	7.4000e-004	0.78

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	SBUS	0.33	3.04
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.03	0.08
tblVehicleEF	SBUS	0.05	0.46
tblVehicleEF	SBUS	1.1980e-003	8.2300e-004
tblVehicleEF	SBUS	3.4260e-003	0.01
tblVehicleEF	SBUS	2.46	0.09
tblVehicleEF	SBUS	2.46	0.09
tblVehicleEF	SBUS	0.14	0.18
tblVehicleEF	SBUS	0.14	0.18
tblVehicleEF	SBUS	0.40	20.72
tblVehicleEF	SBUS	0.40	20.93
tblVehicleEF	SBUS	1.32	8.42
tblVehicleEF	SBUS	1.25	0.56
tblVehicleEF	SBUS	1.93	0.71
tblVehicleEF	SBUS	3.6200e-004	2.2800e-003
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	8.1380e-003	4.2820e-003
tblVehicleEF	SBUS	5.5000e-005	1.3600e-004
tblVehicleEF	SBUS	2.0380e-003	0.96
tblVehicleEF	SBUS	0.23	2.12
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	2.0380e-003	0.96
tblVehicleEF	SBUS	0.33	3.05
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	1.45	9.24

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	SBUS	1.34	0.60
tblVehicleEF	SBUS	1.93	0.73
tblVehicleEF	SBUS	4.8300e-004	3.0440e-003
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	8.1380e-003	4.2820e-003
tblVehicleEF	SBUS	5.5000e-005	1.3600e-004
tblVehicleEF	SBUS	3.0600e-004	0.75
tblVehicleEF	SBUS	0.23	2.10
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.03	0.08
tblVehicleEF	SBUS	3.0600e-004	0.75
tblVehicleEF	SBUS	0.32	3.03
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	UBUS	0.04	2.8350e-003
tblVehicleEF	UBUS	0.04	2.8350e-003
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	0.00	0.07
tblVehicleEF	UBUS	0.21	0.22
tblVehicleEF	UBUS	2.97	0.00
tblVehicleEF	UBUS	0.46	0.33
tblVehicleEF	UBUS	0.28	0.00
tblVehicleEF	UBUS	0.10	0.11
tblVehicleEF	UBUS	0.02	0.03
tblVehicleEF	UBUS	4.6360e-003	6.2200e-003
tblVehicleEF	UBUS	3.4200e-004	0.00
tblVehicleEF	UBUS	1.4600e-003	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	0.16	0.00
tblVehicleEF	UBUS	1.4600e-003	0.00
tblVehicleEF	UBUS	0.05	0.07
tblVehicleEF	UBUS	0.17	0.00
tblVehicleEF	UBUS	0.04	2.8350e-003
tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.00	0.07
tblVehicleEF	UBUS	0.00	0.07
tblVehicleEF	UBUS	0.22	0.22
tblVehicleEF	UBUS	0.22	0.22
tblVehicleEF	UBUS	2.25	0.00
tblVehicleEF	UBUS	2.25	0.00
tblVehicleEF	UBUS	0.45	0.33
tblVehicleEF	UBUS	0.26	0.00
tblVehicleEF	UBUS	0.10	0.11
tblVehicleEF	UBUS	0.02	0.03
tblVehicleEF	UBUS	4.6360e-003	6.2200e-003
tblVehicleEF	UBUS	3.4200e-004	0.00
tblVehicleEF	UBUS	4.3320e-003	0.00
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	0.13	0.00
tblVehicleEF	UBUS	4.3320e-003	0.00
tblVehicleEF	UBUS	0.06	0.07
tblVehicleEF	UBUS	0.15	0.00
tblVehicleEF	UBUS	0.47	0.33
tblVehicleEF	UBUS	0.30	0.00
tblVehicleEF	UBUS	0.10	0.11
tblVehicleEF	UBUS	0.02	0.03

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	UBUS	4.6360e-003	6.2200e-003
tblVehicleEF	UBUS	3.4200e-004	0.00
tblVehicleEF	UBUS	5.0200e-004	0.00
tblVehicleEF	UBUS	0.01	0.06
tblVehicleEF	UBUS	0.17	0.00
tblVehicleEF	UBUS	5.0200e-004	0.00
tblVehicleEF	UBUS	0.05	0.07
tblVehicleEF	UBUS	0.19	0.00
tblVehicleTrips	CC_TL	6.60	4.28
tblVehicleTrips	CC_TL	6.60	2.60
tblVehicleTrips	CC_TL	6.60	2.60
tblVehicleTrips	CC_TL	6.60	47.40
tblVehicleTrips	CNW_TL	6.60	4.28
tblVehicleTrips	CNW_TL	6.60	2.60
tblVehicleTrips	CNW_TL	6.60	2.60
tblVehicleTrips	CNW_TL	6.60	47.40
tblVehicleTrips	CW_TL	14.70	4.28
tblVehicleTrips	CW_TL	14.70	2.60
tblVehicleTrips	CW_TL	14.70	2.60
tblVehicleTrips	CW_TL	14.70	47.40
tblVehicleTrips	ST_TR	10.71	2.37
tblVehicleTrips	ST_TR	1.96	136.12
tblVehicleTrips	ST_TR	0.00	8.98
tblVehicleTrips	ST_TR	3.35	0.00
tblVehicleTrips	SU_TR	10.71	2.37
tblVehicleTrips	SU_TR	2.19	136.12
tblVehicleTrips	SU_TR	0.00	8.98
tblVehicleTrips	SU_TR	3.35	0.00
tblVehicleTrips	WD_TR	10.71	2.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	WD_TR	0.78	136.12
tblVehicleTrips	WD_TR	33.98	8.98
tblVehicleTrips	WD_TR	3.35	0.00

2.0 Emissions Summary

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.3201	2.4507	3.2490	8.6500e-003	0.5292	0.0798	0.6090	0.1677	0.0748	0.2426	0.0000	781.5479	781.5479	0.0884	0.0368	794.7162
2026	0.3085	2.3261	3.1894	8.6400e-003	0.4279	0.0738	0.5016	0.1154	0.0694	0.1848	0.0000	781.7087	781.7087	0.0779	0.0388	795.2194
2027	0.8647	1.9206	2.6919	7.0200e-003	0.3369	0.0641	0.4010	0.0908	0.0602	0.1511	0.0000	633.1874	633.1874	0.0706	0.0289	643.5739
2028	0.1809	4.9400e-003	0.0123	3.0000e-005	2.2000e-003	2.2000e-004	2.4200e-003	5.9000e-004	2.1000e-004	8.0000e-004	0.0000	2.5396	2.5396	9.0000e-005	4.0000e-005	2.5526
Maximum	**0.8647**	**2.4507**	**3.2490**	**8.6500e-003**	**0.5292**	**0.0798**	**0.6090**	**0.1677**	**0.0748**	**0.2426**	**0.0000**	**781.7087**	**781.7087**	**0.0884**	**0.0388**	**795.2194**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2025	0.3201	2.4507	3.2490	8.6500e-003	0.5292	0.0798	0.6090	0.1677	0.0748	0.2426	0.0000	781.5475	781.5475	0.0884	0.0368	794.7158
2026	0.3085	2.3261	3.1894	8.6400e-003	0.4279	0.0738	0.5016	0.1154	0.0694	0.1848	0.0000	781.7083	781.7083	0.0779	0.0388	795.2191
2027	0.8647	1.9206	2.6919	7.0200e-003	0.3369	0.0641	0.4010	0.0908	0.0602	0.1511	0.0000	633.1871	633.1871	0.0706	0.0289	643.5736
2028	0.1809	4.9400e-003	0.0123	3.0000e-005	2.2000e-003	2.2000e-004	2.4200e-003	5.9000e-004	2.1000e-004	8.0000e-004	0.0000	2.5396	2.5396	9.0000e-005	4.0000e-005	2.5526
Maximum	**0.8647**	**2.4507**	**3.2490**	**8.6500e-003**	**0.5292**	**0.0798**	**0.6090**	**0.1677**	**0.0748**	**0.2426**	**0.0000**	**781.7083**	**781.7083**	**0.0884**	**0.0388**	**795.2191**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2025**	**3-31-2025**	0.7613	0.7613
2	**4-1-2025**	**6-30-2025**	0.6596	0.6596
3	**7-1-2025**	**9-30-2025**	0.6668	0.6668
4	**10-1-2025**	**12-31-2025**	0.6794	0.6794
5	**1-1-2026**	**3-31-2026**	0.6553	0.6553
6	**4-1-2026**	**6-30-2026**	0.6507	0.6507
7	**7-1-2026**	**9-30-2026**	0.6579	0.6579
8	**10-1-2026**	**12-31-2026**	0.6698	0.6698

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

9	**1-1-2027**	**3-31-2027**	0.6466	0.6466
10	**4-1-2027**	**6-30-2027**	0.6426	0.6426
11	**7-1-2027**	**9-30-2027**	0.6496	0.6496
12	**10-1-2027**	**12-31-2027**	0.8326	0.8326
13	**1-1-2028**	**3-31-2028**	0.1992	0.1992
		Highest	0.8326	0.8326

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7910	6.0000e-005	6.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	3.0000e-005	0.0000	0.0144
Energy	7.8600e-003	0.0715	0.0600	4.3000e-004		5.4300e-003	5.4300e-003		5.4300e-003	5.4300e-003	0.0000	134.4947	134.4947	4.1600e-003	1.8700e-003	135.1561
Mobile	0.7385	0.2622	0.5160	2.0100e-003	0.2337	1.6700e-003	0.2354	0.0680	1.1500e-003	0.0692	0.0000	185.1196	185.1196	0.1590	0.0131	192.9887
Waste						0.0000	0.0000		0.0000	0.0000	31.2890	0.0000	31.2890	1.8491	0.0000	77.5172
Water						0.0000	0.0000		0.0000	0.0000	14.6314	16.3927	31.0241	1.5036	0.0356	79.2255
Total	**1.5373**	**0.3337**	**0.5829**	**2.4400e-003**	**0.2337**	**7.1200e-003**	**0.2408**	**0.0680**	**6.6000e-003**	**0.0746**	**45.9204**	**336.0205**	**381.9409**	**3.5159**	**0.0506**	**484.9018**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.7910	6.0000e-005	6.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	3.0000e-005	0.0000	0.0144
Energy	7.8600e-003	0.0715	0.0600	4.3000e-004		5.4300e-003	5.4300e-003		5.4300e-003	5.4300e-003	0.0000	134.4947	134.4947	4.1600e-003	1.8700e-003	135.1561
Mobile	0.7385	0.2622	0.5160	2.0100e-003	0.2337	1.6700e-003	0.2354	0.0680	1.1500e-003	0.0692	0.0000	185.1196	185.1196	0.1590	0.0131	192.9887
Waste						0.0000	0.0000		0.0000	0.0000	31.2890	0.0000	31.2890	1.8491	0.0000	77.5172
Water						0.0000	0.0000		0.0000	0.0000	14.6314	16.3927	31.0241	1.5036	0.0356	79.2255
Total	**1.5373**	**0.3337**	**0.5829**	**2.4400e-003**	**0.2337**	**7.1200e-003**	**0.2408**	**0.0680**	**6.6000e-003**	**0.0746**	**45.9204**	**336.0205**	**381.9409**	**3.5159**	**0.0506**	**484.9018**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2025	1/9/2025	5	7	
2	Grading	Grading	1/10/2025	1/29/2025	5	14	
3	Building Construction	Building Construction	1/30/2025	10/6/2027	5	700	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4	Paving	Paving	10/7/2027	11/24/2027	5	35	
5	Architectural Coating	Architectural Coating	11/25/2027	1/12/2028	5	35	

Acres of Grading (Site Preparation Phase): 10.5

Acres of Grading (Grading Phase): 42

Acres of Paving: 5.55

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 226,430; Non-Residential Outdoor: 75,477; Striped Parking Area: 14,808 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	225.00	89.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	45.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0688	0.0000	0.0688	0.0354	0.0000	0.0354	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6500e-003	0.0883	0.0627	1.3000e-004		3.8000e-003	3.8000e-003		3.5000e-003	3.5000e-003	0.0000	11.7135	11.7135	3.7900e-003	0.0000	11.8082
Total	**8.6500e-003**	**0.0883**	**0.0627**	**1.3000e-004**	**0.0688**	**3.8000e-003**	**0.0726**	**0.0354**	**3.5000e-003**	**0.0389**	**0.0000**	**11.7135**	**11.7135**	**3.7900e-003**	**0.0000**	**11.8082**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	2.1500e-003	1.0000e-005	7.7000e-004	0.0000	7.8000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5799	0.5799	1.0000e-005	2.0000e-005	0.5848
Total	**2.6000e-004**	**1.7000e-004**	**2.1500e-003**	**1.0000e-005**	**7.7000e-004**	**0.0000**	**7.8000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.5799**	**0.5799**	**1.0000e-005**	**2.0000e-005**	**0.5848**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0688	0.0000	0.0688	0.0354	0.0000	0.0354	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	8.6500e-003	0.0883	0.0627	1.3000e-004		3.8000e-003	3.8000e-003		3.5000e-003	3.5000e-003	0.0000	11.7134	11.7134	3.7900e-003	0.0000	11.8081
Total	**8.6500e-003**	**0.0883**	**0.0627**	**1.3000e-004**	**0.0688**	**3.8000e-003**	**0.0726**	**0.0354**	**3.5000e-003**	**0.0389**	**0.0000**	**11.7134**	**11.7134**	**3.7900e-003**	**0.0000**	**11.8081**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.6000e-004	1.7000e-004	2.1500e-003	1.0000e-005	7.7000e-004	0.0000	7.8000e-004	2.1000e-004	0.0000	2.1000e-004	0.0000	0.5799	0.5799	1.0000e-005	2.0000e-005	0.5848
Total	**2.6000e-004**	**1.7000e-004**	**2.1500e-003**	**1.0000e-005**	**7.7000e-004**	**0.0000**	**7.8000e-004**	**2.1000e-004**	**0.0000**	**2.1000e-004**	**0.0000**	**0.5799**	**0.5799**	**1.0000e-005**	**2.0000e-005**	**0.5848**

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0644	0.0000	0.0644	0.0256	0.0000	0.0256	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0203	0.1956	0.1843	4.3000e-004		7.9200e-003	7.9200e-003		7.2800e-003	7.2800e-003	0.0000	38.1544	38.1544	0.0123	0.0000	38.4629
Total	**0.0203**	**0.1956**	**0.1843**	**4.3000e-004**	**0.0644**	**7.9200e-003**	**0.0724**	**0.0256**	**7.2800e-003**	**0.0329**	**0.0000**	**38.1544**	**38.1544**	**0.0123**	**0.0000**	**38.4629**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	3.7000e-004	4.7800e-003	1.0000e-005	1.7100e-003	1.0000e-005	1.7200e-003	4.6000e-004	1.0000e-005	4.6000e-004	0.0000	1.2886	1.2886	3.0000e-005	3.0000e-005	1.2995
Total	**5.8000e-004**	**3.7000e-004**	**4.7800e-003**	**1.0000e-005**	**1.7100e-003**	**1.0000e-005**	**1.7200e-003**	**4.6000e-004**	**1.0000e-005**	**4.6000e-004**	**0.0000**	**1.2886**	**1.2886**	**3.0000e-005**	**3.0000e-005**	**1.2995**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0644	0.0000	0.0644	0.0256	0.0000	0.0256	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0203	0.1956	0.1843	4.3000e-004		7.9200e-003	7.9200e-003		7.2800e-003	7.2800e-003	0.0000	38.1543	38.1543	0.0123	0.0000	38.4628
Total	**0.0203**	**0.1956**	**0.1843**	**4.3000e-004**	**0.0644**	**7.9200e-003**	**0.0724**	**0.0256**	**7.2800e-003**	**0.0329**	**0.0000**	**38.1543**	**38.1543**	**0.0123**	**0.0000**	**38.4628**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	5.8000e-004	3.7000e-004	4.7800e-003	1.0000e-005	1.7100e-003	1.0000e-005	1.7200e-003	4.6000e-004	1.0000e-005	4.6000e-004	0.0000	1.2886	1.2886	3.0000e-005	3.0000e-005	1.2995
Total	**5.8000e-004**	**3.7000e-004**	**4.7800e-003**	**1.0000e-005**	**1.7100e-003**	**1.0000e-005**	**1.7200e-003**	**4.6000e-004**	**1.0000e-005**	**4.6000e-004**	**0.0000**	**1.2886**	**1.2886**	**3.0000e-005**	**3.0000e-005**	**1.2995**

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1641	1.4964	1.9302	3.2400e-003		0.0633	0.0633		0.0596	0.0596	0.0000	278.3033	278.3033	0.0654	0.0000	279.9389
Total	**0.1641**	**1.4964**	**1.9302**	**3.2400e-003**		**0.0633**	**0.0633**		**0.0596**	**0.0596**	**0.0000**	**278.3033**	**278.3033**	**0.0654**	**0.0000**	**279.9389**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2025

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0135	0.5982	0.1423	2.1200e-003	0.0630	3.1000e-003	0.0661	0.0182	2.9600e-003	0.0212	0.0000	202.9995	202.9995	6.5000e-004	0.0302	212.0114
Worker	0.1127	0.0716	0.9226	2.7100e-003	0.3305	1.6600e-003	0.3322	0.0879	1.5300e-003	0.0895	0.0000	248.5089	248.5089	6.1000e-003	6.5400e-003	250.6107
Total	**0.1262**	**0.6698**	**1.0649**	**4.8300e-003**	**0.3935**	**4.7600e-003**	**0.3982**	**0.1061**	**4.4900e-003**	**0.1106**	**0.0000**	**451.5084**	**451.5084**	**6.7500e-003**	**0.0367**	**462.6222**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1641	1.4964	1.9302	3.2400e-003		0.0633	0.0633		0.0596	0.0596	0.0000	278.3030	278.3030	0.0654	0.0000	279.9385
Total	**0.1641**	**1.4964**	**1.9302**	**3.2400e-003**		**0.0633**	**0.0633**		**0.0596**	**0.0596**	**0.0000**	**278.3030**	**278.3030**	**0.0654**	**0.0000**	**279.9385**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2025

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0135	0.5982	0.1423	2.1200e-003	0.0630	3.1000e-003	0.0661	0.0182	2.9600e-003	0.0212	0.0000	202.9995	202.9995	6.5000e-004	0.0302	212.0114
Worker	0.1127	0.0716	0.9226	2.7100e-003	0.3305	1.6600e-003	0.3322	0.0879	1.5300e-003	0.0895	0.0000	248.5089	248.5089	6.1000e-003	6.5400e-003	250.6107
Total	**0.1262**	**0.6698**	**1.0649**	**4.8300e-003**	**0.3935**	**4.7600e-003**	**0.3982**	**0.1061**	**4.4900e-003**	**0.1106**	**0.0000**	**451.5084**	**451.5084**	**6.7500e-003**	**0.0367**	**462.6222**

3.4 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1785	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6549	302.6549	0.0711	0.0000	304.4335
Total	**0.1785**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6549**	**302.6549**	**0.0711**	**0.0000**	**304.4335**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2026

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0143	0.6286	0.1530	2.2700e-003	0.0685	3.2100e-003	0.0717	0.0198	3.0700e-003	0.0229	0.0000	216.9994	216.9994	6.9000e-004	0.0321	226.5938
Worker	0.1158	0.0702	0.9374	2.8600e-003	0.3594	1.7000e-003	0.3611	0.0956	1.5700e-003	0.0972	0.0000	262.0545	262.0545	6.0300e-003	6.6700e-003	264.1921
Total	**0.1301**	**0.6988**	**1.0904**	**5.1300e-003**	**0.4279**	**4.9100e-003**	**0.4328**	**0.1154**	**4.6400e-003**	**0.1201**	**0.0000**	**479.0538**	**479.0538**	**6.7200e-003**	**0.0388**	**490.7859**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1784	1.6273	2.0991	3.5200e-003		0.0689	0.0689		0.0648	0.0648	0.0000	302.6545	302.6545	0.0711	0.0000	304.4331
Total	**0.1784**	**1.6273**	**2.0991**	**3.5200e-003**		**0.0689**	**0.0689**		**0.0648**	**0.0648**	**0.0000**	**302.6545**	**302.6545**	**0.0711**	**0.0000**	**304.4331**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2026

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0143	0.6286	0.1530	2.2700e-003	0.0685	3.2100e-003	0.0717	0.0198	3.0700e-003	0.0229	0.0000	216.9994	216.9994	6.9000e-004	0.0321	226.5938
Worker	0.1158	0.0702	0.9374	2.8600e-003	0.3594	1.7000e-003	0.3611	0.0956	1.5700e-003	0.0972	0.0000	262.0545	262.0545	6.0300e-003	6.6700e-003	264.1921
Total	**0.1301**	**0.6988**	**1.0904**	**5.1300e-003**	**0.4279**	**4.9100e-003**	**0.4328**	**0.1154**	**4.6400e-003**	**0.1201**	**0.0000**	**479.0538**	**479.0538**	**6.7200e-003**	**0.0388**	**490.7859**

3.4 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1361	1.2407	1.6004	2.6800e-003		0.0525	0.0525		0.0494	0.0494	0.0000	230.7599	230.7599	0.0542	0.0000	232.1160
Total	**0.1361**	**1.2407**	**1.6004**	**2.6800e-003**		**0.0525**	**0.0525**		**0.0494**	**0.0494**	**0.0000**	**230.7599**	**230.7599**	**0.0542**	**0.0000**	**232.1160**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0106	0.4638	0.1155	1.7000e-003	0.0522	2.3400e-003	0.0546	0.0151	2.2400e-003	0.0173	0.0000	162.3503	162.3503	5.1000e-004	0.0240	169.5004
Worker	0.0833	0.0485	0.6704	2.1200e-003	0.2740	1.2200e-003	0.2753	0.0729	1.1200e-003	0.0740	0.0000	194.0555	194.0555	4.1900e-003	4.7900e-003	195.5882
Total	**0.0939**	**0.5123**	**0.7859**	**3.8200e-003**	**0.3263**	**3.5600e-003**	**0.3298**	**0.0880**	**3.3600e-003**	**0.0914**	**0.0000**	**356.4058**	**356.4058**	**4.7000e-003**	**0.0287**	**365.0886**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1361	1.2407	1.6004	2.6800e-003		0.0525	0.0525		0.0494	0.0494	0.0000	230.7596	230.7596	0.0542	0.0000	232.1157
Total	**0.1361**	**1.2407**	**1.6004**	**2.6800e-003**		**0.0525**	**0.0525**		**0.0494**	**0.0494**	**0.0000**	**230.7596**	**230.7596**	**0.0542**	**0.0000**	**232.1157**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0106	0.4638	0.1155	1.7000e-003	0.0522	2.3400e-003	0.0546	0.0151	2.2400e-003	0.0173	0.0000	162.3503	162.3503	5.1000e-004	0.0240	169.5004
Worker	0.0833	0.0485	0.6704	2.1200e-003	0.2740	1.2200e-003	0.2753	0.0729	1.1200e-003	0.0740	0.0000	194.0555	194.0555	4.1900e-003	4.7900e-003	195.5882
Total	**0.0939**	**0.5123**	**0.7859**	**3.8200e-003**	**0.3263**	**3.5600e-003**	**0.3298**	**0.0880**	**3.3600e-003**	**0.0914**	**0.0000**	**356.4058**	**356.4058**	**4.7000e-003**	**0.0287**	**365.0886**

3.5 Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0160	0.1502	0.2551	4.0000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	35.0337	35.0337	0.0113	0.0000	35.3170
Paving	7.2700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0233**	**0.1502**	**0.2551**	**4.0000e-004**		**7.3200e-003**	**7.3200e-003**		**6.7400e-003**	**6.7400e-003**	**0.0000**	**35.0337**	**35.0337**	**0.0113**	**0.0000**	**35.3170**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.8000e-004	5.7000e-004	7.8600e-003	2.0000e-005	3.2100e-003	1.0000e-005	3.2300e-003	8.5000e-004	1.0000e-005	8.7000e-004	0.0000	2.2754	2.2754	5.0000e-005	6.0000e-005	2.2933
Total	**9.8000e-004**	**5.7000e-004**	**7.8600e-003**	**2.0000e-005**	**3.2100e-003**	**1.0000e-005**	**3.2300e-003**	**8.5000e-004**	**1.0000e-005**	**8.7000e-004**	**0.0000**	**2.2754**	**2.2754**	**5.0000e-005**	**6.0000e-005**	**2.2933**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.0160	0.1502	0.2551	4.0000e-004		7.3200e-003	7.3200e-003		6.7400e-003	6.7400e-003	0.0000	35.0337	35.0337	0.0113	0.0000	35.3169
Paving	7.2700e-003					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**0.0233**	**0.1502**	**0.2551**	**4.0000e-004**		**7.3200e-003**	**7.3200e-003**		**6.7400e-003**	**6.7400e-003**	**0.0000**	**35.0337**	**35.0337**	**0.0113**	**0.0000**	**35.3169**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	9.8000e-004	5.7000e-004	7.8600e-003	2.0000e-005	3.2100e-003	1.0000e-005	3.2300e-003	8.5000e-004	1.0000e-005	8.7000e-004	0.0000	2.2754	2.2754	5.0000e-005	6.0000e-005	2.2933
Total	**9.8000e-004**	**5.7000e-004**	**7.8600e-003**	**2.0000e-005**	**3.2100e-003**	**1.0000e-005**	**3.2300e-003**	**8.5000e-004**	**1.0000e-005**	**8.7000e-004**	**0.0000**	**2.2754**	**2.2754**	**5.0000e-005**	**6.0000e-005**	**2.2933**

3.6 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3100e-003	0.0155	0.0244	4.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	3.4469	3.4469	1.9000e-004	0.0000	3.4516
Total	**0.6082**	**0.0155**	**0.0244**	**4.0000e-005**		**7.0000e-004**	**7.0000e-004**		**7.0000e-004**	**7.0000e-004**	**0.0000**	**3.4469**	**3.4469**	**1.9000e-004**	**0.0000**	**3.4516**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2027

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2600e-003	1.3200e-003	0.0182	6.0000e-005	7.4400e-003	3.0000e-005	7.4700e-003	1.9800e-003	3.0000e-005	2.0100e-003	0.0000	5.2658	5.2658	1.1000e-004	1.3000e-004	5.3074
Total	**2.2600e-003**	**1.3200e-003**	**0.0182**	**6.0000e-005**	**7.4400e-003**	**3.0000e-005**	**7.4700e-003**	**1.9800e-003**	**3.0000e-005**	**2.0100e-003**	**0.0000**	**5.2658**	**5.2658**	**1.1000e-004**	**1.3000e-004**	**5.3074**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.6059					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	2.3100e-003	0.0155	0.0244	4.0000e-005		7.0000e-004	7.0000e-004		7.0000e-004	7.0000e-004	0.0000	3.4469	3.4469	1.9000e-004	0.0000	3.4516
Total	**0.6082**	**0.0155**	**0.0244**	**4.0000e-005**		**7.0000e-004**	**7.0000e-004**		**7.0000e-004**	**7.0000e-004**	**0.0000**	**3.4469**	**3.4469**	**1.9000e-004**	**0.0000**	**3.4516**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2027

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	2.2600e-003	1.3200e-003	0.0182	6.0000e-005	7.4400e-003	3.0000e-005	7.4700e-003	1.9800e-003	3.0000e-005	2.0100e-003	0.0000	5.2658	5.2658	1.1000e-004	1.3000e-004	5.3074
Total	**2.2600e-003**	**1.3200e-003**	**0.0182**	**6.0000e-005**	**7.4400e-003**	**3.0000e-005**	**7.4700e-003**	**1.9800e-003**	**3.0000e-005**	**2.0100e-003**	**0.0000**	**5.2658**	**5.2658**	**1.1000e-004**	**1.3000e-004**	**5.3074**

3.6 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1795					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8000e-004	4.5800e-003	7.2400e-003	1.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0227
Total	**0.1802**	**4.5800e-003**	**7.2400e-003**	**1.0000e-005**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**1.0213**	**1.0213**	**6.0000e-005**	**0.0000**	**1.0227**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2028

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	3.6000e-004	5.0900e-003	2.0000e-005	2.2000e-003	1.0000e-005	2.2100e-003	5.9000e-004	1.0000e-005	5.9000e-004	0.0000	1.5183	1.5183	3.0000e-005	4.0000e-005	1.5299
Total	**6.3000e-004**	**3.6000e-004**	**5.0900e-003**	**2.0000e-005**	**2.2000e-003**	**1.0000e-005**	**2.2100e-003**	**5.9000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.5183**	**1.5183**	**3.0000e-005**	**4.0000e-005**	**1.5299**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.1795					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	6.8000e-004	4.5800e-003	7.2400e-003	1.0000e-005		2.1000e-004	2.1000e-004		2.1000e-004	2.1000e-004	0.0000	1.0213	1.0213	6.0000e-005	0.0000	1.0227
Total	**0.1802**	**4.5800e-003**	**7.2400e-003**	**1.0000e-005**		**2.1000e-004**	**2.1000e-004**		**2.1000e-004**	**2.1000e-004**	**0.0000**	**1.0213**	**1.0213**	**6.0000e-005**	**0.0000**	**1.0227**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2028

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.3000e-004	3.6000e-004	5.0900e-003	2.0000e-005	2.2000e-003	1.0000e-005	2.2100e-003	5.9000e-004	1.0000e-005	5.9000e-004	0.0000	1.5183	1.5183	3.0000e-005	4.0000e-005	1.5299
Total	**6.3000e-004**	**3.6000e-004**	**5.0900e-003**	**2.0000e-005**	**2.2000e-003**	**1.0000e-005**	**2.2100e-003**	**5.9000e-004**	**1.0000e-005**	**5.9000e-004**	**0.0000**	**1.5183**	**1.5183**	**3.0000e-005**	**4.0000e-005**	**1.5299**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

56 Acre Master Plan - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7385	0.2622	0.5160	2.0100e-003	0.2337	1.6700e-003	0.2354	0.0680	1.1500e-003	0.0692	0.0000	185.1196	185.1196	0.1590	0.0131	192.9887
Unmitigated	0.7385	0.2622	0.5160	2.0100e-003	0.2337	1.6700e-003	0.2354	0.0680	1.1500e-003	0.0692	0.0000	185.1196	185.1196	0.1590	0.0131	192.9887

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	58.28	58.28	58.28	66,406	66,406
Arena	165.90	165.90	165.90	189,037	189,037
City Park	449.20	449.20	449.20	311,318	311,318
Government (Civic Center)	224.50	224.50	224.50	125,601	125,601
Motel	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	897.87	897.87	897.87	692,362	692,362

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	4.28	4.28	4.28	0.00	81.00	19.00	66	28	6
Arena	4.28	4.28	4.28	0.00	81.00	19.00	66	28	6
City Park	2.60	2.60	2.60	33.00	48.00	19.00	66	28	6
Government (Civic Center)	2.60	2.60	2.60	75.00	20.00	5.00	50	34	16
Motel	47.40	47.40	47.40	19.00	62.00	19.00	58	38	4
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.493892	0.059218	0.219804	0.141013	0.027602	0.005981	0.012190	0.004071	0.000638	0.000674	0.030860	0.000950	0.003108
City Park	0.493892	0.059218	0.219804	0.141013	0.027602	0.005981	0.012190	0.004071	0.000638	0.000674	0.030860	0.000950	0.003108
Government (Civic Center)	0.493892	0.059218	0.219804	0.141013	0.027602	0.005981	0.012190	0.004071	0.000638	0.000674	0.030860	0.000950	0.003108
Motel	0.493892	0.059218	0.219804	0.141013	0.027602	0.005981	0.012190	0.004071	0.000638	0.000674	0.030860	0.000950	0.003108
Parking Lot	0.493892	0.059218	0.219804	0.141013	0.027602	0.005981	0.012190	0.004071	0.000638	0.000674	0.030860	0.000950	0.003108

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	56.7169	56.7169	2.6700e-003	4.4000e-004	56.9161
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	56.7169	56.7169	2.6700e-003	4.4000e-004	56.9161
NaturalGas Mitigated	7.8600e-003	0.0715	0.0600	4.3000e-004		5.4300e-003	5.4300e-003		5.4300e-003	5.4300e-003	0.0000	77.7778	77.7778	1.4900e-003	1.4300e-003	78.2400
NaturalGas Unmitigated	7.8600e-003	0.0715	0.0600	4.3000e-004		5.4300e-003	5.4300e-003		5.4300e-003	5.4300e-003	0.0000	77.7778	77.7778	1.4900e-003	1.4300e-003	78.2400

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	85573.2	4.6000e-004	4.1900e-003	3.5200e-003	3.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	4.5665	4.5665	9.0000e-005	8.0000e-005	4.5937
Arena	243600	1.3100e-003	0.0119	0.0100	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	12.9994	12.9994	2.5000e-004	2.4000e-004	13.0767
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	483500	2.6100e-003	0.0237	0.0199	1.4000e-004		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	25.8014	25.8014	4.9000e-004	4.7000e-004	25.9547
Motel	644827	3.4800e-003	0.0316	0.0266	1.9000e-004		2.4000e-003	2.4000e-003		2.4000e-003	2.4000e-003	0.0000	34.4105	34.4105	6.6000e-004	6.3000e-004	34.6149
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**7.8600e-003**	**0.0714**	**0.0600**	**4.3000e-004**		**5.4300e-003**	**5.4300e-003**		**5.4300e-003**	**5.4300e-003**	**0.0000**	**77.7778**	**77.7778**	**1.4900e-003**	**1.4200e-003**	**78.2400**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Arena	243600	1.3100e-003	0.0119	0.0100	7.0000e-005		9.1000e-004	9.1000e-004		9.1000e-004	9.1000e-004	0.0000	12.9994	12.9994	2.5000e-004	2.4000e-004	13.0767
Arena	85573.2	4.6000e-004	4.1900e-003	3.5200e-003	3.0000e-005		3.2000e-004	3.2000e-004		3.2000e-004	3.2000e-004	0.0000	4.5665	4.5665	9.0000e-005	8.0000e-005	4.5937
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	483500	2.6100e-003	0.0237	0.0199	1.4000e-004		1.8000e-003	1.8000e-003		1.8000e-003	1.8000e-003	0.0000	25.8014	25.8014	4.9000e-004	4.7000e-004	25.9547
Motel	644827	3.4800e-003	0.0316	0.0266	1.9000e-004		2.4000e-003	2.4000e-003		2.4000e-003	2.4000e-003	0.0000	34.4105	34.4105	6.6000e-004	6.3000e-004	34.6149
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**7.8600e-003**	**0.0714**	**0.0600**	**4.3000e-004**		**5.4300e-003**	**5.4300e-003**		**5.4300e-003**	**5.4300e-003**	**0.0000**	**77.7778**	**77.7778**	**1.4900e-003**	**1.4200e-003**	**78.2400**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	103770	6.0060	2.8000e-004	5.0000e-005	6.0271
Arena	295400	17.0973	8.0000e-004	1.3000e-004	17.1573
City Park	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	267000	15.4535	7.3000e-004	1.2000e-004	15.5078
Motel	227383	13.1606	6.2000e-004	1.0000e-004	13.2068
Parking Lot	86380	4.9995	2.4000e-004	4.0000e-005	5.0171
Total		**56.7170**	**2.6700e-003**	**4.4000e-004**	**56.9161**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.3 Energy by Land Use - Electricity

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Arena	103770	6.0060	2.8000e-004	5.0000e-005	6.0271
Arena	295400	17.0973	8.0000e-004	1.3000e-004	17.1573
City Park	0	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	267000	15.4535	7.3000e-004	1.2000e-004	15.5078
Motel	227383	13.1606	6.2000e-004	1.0000e-004	13.2068
Parking Lot	86380	4.9995	2.4000e-004	4.0000e-005	5.0171
Total		**56.7170**	**2.6700e-003**	**4.4000e-004**	**56.9161**

6.0 Area Detail

6.1 Mitigation Measures Area

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.7910	6.0000e-005	6.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	3.0000e-005	0.0000	0.0144
Unmitigated	0.7910	6.0000e-005	6.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	3.0000e-005	0.0000	0.0144

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1835					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6069					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.3000e-004	6.0000e-005	6.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	3.0000e-005	0.0000	0.0144
Total	**0.7910**	**6.0000e-005**	**6.9000e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0135**	**0.0135**	**3.0000e-005**	**0.0000**	**0.0144**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.1835					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.6069					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	6.3000e-004	6.0000e-005	6.9000e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005	0.0000	0.0135	0.0135	3.0000e-005	0.0000	0.0144
Total	**0.7910**	**6.0000e-005**	**6.9000e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**	**0.0000**	**0.0135**	**0.0135**	**3.0000e-005**	**0.0000**	**0.0144**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	31.0241	1.5036	0.0356	79.2255
Unmitigated	31.0241	1.5036	0.0356	79.2255

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	40.7465 / 2.60084	26.2149	1.3284	0.0315	68.7971
City Park	0 / 3.93189	0.7965	4.0000e-005	1.0000e-005	0.7993
Government (Civic Center)	4.96649 / 3.04398	3.7477	0.1619	3.8400e-003	8.9399
Motel	0.405868 / 0.0450965	0.2650	0.0132	3.1000e-004	0.6892
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**31.0241**	**1.5036**	**0.0356**	**79.2255**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Arena	40.7465 / 2.60084	26.2149	1.3284	0.0315	68.7971
City Park	0 / 3.93189	0.7965	4.0000e-005	1.0000e-005	0.7993
Government (Civic Center)	4.96649 / 3.04398	3.7477	0.1619	3.8400e-003	8.9399
Motel	0.405868 / 0.0450965	0.2650	0.0132	3.1000e-004	0.6892
Parking Lot	0 / 0	0.0000	0.0000	0.0000	0.0000
Total		**31.0241**	**1.5036**	**0.0356**	**79.2255**

8.0 Waste Detail

8.1 Mitigation Measures Waste

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	31.2890	1.8491	0.0000	77.5172
Unmitigated	31.2890	1.8491	0.0000	77.5172

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	2.6	0.5278	0.0312	0.0000	1.3075
City Park	0.28	0.0568	3.3600e-003	0.0000	0.1408
Government (Civic Center)	142.5	28.9262	1.7095	0.0000	71.6635
Motel	8.76	1.7782	0.1051	0.0000	4.4054
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**31.2890**	**1.8491**	**0.0000**	**77.5172**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.2 Waste by Land Use

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Arena	2.6	0.5278	0.0312	0.0000	1.3075
City Park	0.28	0.0568	3.3600e-003	0.0000	0.1408
Government (Civic Center)	142.5	28.9262	1.7095	0.0000	71.6635
Motel	8.76	1.7782	0.1051	0.0000	4.4054
Parking Lot	0	0.0000	0.0000	0.0000	0.0000
Total		**31.2890**	**1.8491**	**0.0000**	**77.5172**

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

56 Acre Master Plan

El Dorado-Lake Tahoe County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Government (Civic Center)	25.00	1000sqft	0.57	25,000.00	0
Parking Lot	617.00	Space	5.55	246,800.00	0
Arena	24.59	1000sqft	7.90	24,590.00	0
Arena	70.00	1000sqft	22.50	70,000.00	0
City Park	3.30	Acre	3.30	143,748.00	0
Motel	16.00	Room	0.72	31,363.20	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2040
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	127.6	**CH4 Intensity (lb/MWhr)**	0.006	**N2O Intensity (lb/MWhr)**	0.001

1.3 User Entered Comments & Non-Default Data

Project Characteristics - The GHG EFs are scaled using Liberty Utility's natural gas mix and internsity factor (published by TRPA) for the year 2018.

Land Use - Motel - Cabins - 16 proposed
City Park - Public Park - 3.3 Acre proposed
Arena - Ice Skating - 24.590 ksf
Arena - Outdoor Event Space - 70 ksf
Government (Civic Center) - Government Civic Center - 25 ksf
Parking lot - Parking - 296 spaces

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Construction Phase - The duration of different construction phases is scaled up using the duration of construction phases in the Multigenerational Center.

Trips and VMT -

Grading -

Architectural Coating - SMAQMD recommends using paint with new VOC contents for archetectural coating. For the modeling, Nonflat Coating's VOC limit of 100 g/l is assumed.

Vehicle Trips - As provided by the Traffic study

Vehicle Emission Factors - Using 2021 EMFAC EF

Vehicle Emission Factors - Using 2021 EMFAC EF

Vehicle Emission Factors - Using 2021 EMFAC EF

Area Coating -

Water And Wastewater -

Solid Waste -

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblConstructionPhase	NumDays	30.00	7.00
tblConstructionPhase	NumDays	75.00	14.00
tblConstructionPhase	NumDays	740.00	700.00
tblConstructionPhase	NumDays	55.00	35.00
tblConstructionPhase	NumDays	55.00	35.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.006
tblProjectCharacteristics	CO2IntensityFactor	0	127.6
tblProjectCharacteristics	N2OIntensityFactor	0	0.001

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleEF	HHD	0.02	0.23
tblVehicleEF	HHD	0.02	0.24
tblVehicleEF	HHD	1.3520e-003	3.7720e-003
tblVehicleEF	HHD	1.3520e-003	3.7740e-003
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	6.91	0.10
tblVehicleEF	HHD	0.34	0.22
tblVehicleEF	HHD	0.03	47.81
tblVehicleEF	HHD	5.79	40.27
tblVehicleEF	HHD	2.54	1.56
tblVehicleEF	HHD	3.67	2.94
tblVehicleEF	HHD	2.3260e-003	0.02
tblVehicleEF	HHD	0.06	0.09
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	3.0000e-006	0.00
tblVehicleEF	HHD	1.4000e-005	9.3500e-004
tblVehicleEF	HHD	0.47	3.25
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	5.0000e-006	0.00
tblVehicleEF	HHD	1.4000e-005	9.3500e-004
tblVehicleEF	HHD	0.54	3.78
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	5.0000e-006	0.00
tblVehicleEF	HHD	0.02	0.22
tblVehicleEF	HHD	1.3600e-003	3.7710e-003
tblVehicleEF	HHD	1.0000e-006	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	HHD	6.82	0.10
tblVehicleEF	HHD	6.82	0.10
tblVehicleEF	HHD	0.34	0.22
tblVehicleEF	HHD	0.34	0.22
tblVehicleEF	HHD	0.03	47.15
tblVehicleEF	HHD	0.03	48.72
tblVehicleEF	HHD	5.52	38.47
tblVehicleEF	HHD	2.46	1.50
tblVehicleEF	HHD	3.67	2.94
tblVehicleEF	HHD	2.0510e-003	0.01
tblVehicleEF	HHD	0.06	0.09
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.02	0.02
tblVehicleEF	HHD	3.0000e-006	0.00
tblVehicleEF	HHD	3.7000e-005	1.1430e-003
tblVehicleEF	HHD	0.50	3.44
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	3.7000e-005	1.1430e-003
tblVehicleEF	HHD	0.57	4.00
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	5.0000e-006	0.00
tblVehicleEF	HHD	6.15	42.77
tblVehicleEF	HHD	2.57	1.58
tblVehicleEF	HHD	3.67	2.94
tblVehicleEF	HHD	2.7040e-003	0.02
tblVehicleEF	HHD	0.06	0.09
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.02	0.02

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	HHD	3.0000e-006	0.00
tblVehicleEF	HHD	6.0000e-006	8.9900e-004
tblVehicleEF	HHD	0.43	2.99
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	5.0000e-006	0.00
tblVehicleEF	HHD	6.0000e-006	8.9900e-004
tblVehicleEF	HHD	0.49	3.48
tblVehicleEF	HHD	0.03	0.02
tblVehicleEF	HHD	5.0000e-006	0.00
tblVehicleEF	LDA	6.5900e-004	1.0900e-003
tblVehicleEF	LDA	6.5900e-004	1.1860e-003
tblVehicleEF	LDA	0.02	0.04
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.00	0.53
tblVehicleEF	LDA	0.38	0.04
tblVehicleEF	LDA	1.51	0.00
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.11	0.18
tblVehicleEF	LDA	0.04	8.3440e-003
tblVehicleEF	LDA	5.7200e-004	5.8100e-004
tblVehicleEF	LDA	7.4500e-004	9.5600e-004
tblVehicleEF	LDA	0.02	0.97
tblVehicleEF	LDA	1.9520e-003	3.3410e-003
tblVehicleEF	LDA	0.08	0.15
tblVehicleEF	LDA	0.02	0.97
tblVehicleEF	LDA	2.8300e-003	4.8730e-003
tblVehicleEF	LDA	0.08	0.17
tblVehicleEF	LDA	7.6200e-004	1.0480e-003
tblVehicleEF	LDA	0.02	0.04

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDA	0.00	0.72
tblVehicleEF	LDA	0.00	0.49
tblVehicleEF	LDA	0.46	0.04
tblVehicleEF	LDA	0.46	0.04
tblVehicleEF	LDA	1.17	0.00
tblVehicleEF	LDA	1.17	0.00
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.10	0.16
tblVehicleEF	LDA	0.04	8.3440e-003
tblVehicleEF	LDA	5.7200e-004	5.8100e-004
tblVehicleEF	LDA	7.4500e-004	9.5600e-004
tblVehicleEF	LDA	0.05	1.16
tblVehicleEF	LDA	2.2040e-003	3.5550e-003
tblVehicleEF	LDA	0.06	0.12
tblVehicleEF	LDA	0.05	1.16
tblVehicleEF	LDA	3.1970e-003	5.1850e-003
tblVehicleEF	LDA	0.07	0.13
tblVehicleEF	LDA	0.02	0.02
tblVehicleEF	LDA	0.13	0.19
tblVehicleEF	LDA	0.04	8.3440e-003
tblVehicleEF	LDA	5.7200e-004	5.8100e-004
tblVehicleEF	LDA	7.4500e-004	9.5600e-004
tblVehicleEF	LDA	5.0840e-003	0.92
tblVehicleEF	LDA	1.8750e-003	3.2580e-003
tblVehicleEF	LDA	0.09	0.17
tblVehicleEF	LDA	5.0840e-003	0.92
tblVehicleEF	LDA	2.7180e-003	4.7520e-003
tblVehicleEF	LDA	0.10	0.19
tblVehicleEF	LDT1	7.9700e-004	1.4860e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDT1	7.9700e-004	1.6200e-003
tblVehicleEF	LDT1	0.03	0.05
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.00	0.64
tblVehicleEF	LDT1	0.41	0.04
tblVehicleEF	LDT1	1.70	0.00
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.14	0.25
tblVehicleEF	LDT1	0.04	0.01
tblVehicleEF	LDT1	6.6000e-004	7.6500e-004
tblVehicleEF	LDT1	9.3400e-004	1.4050e-003
tblVehicleEF	LDT1	0.04	2.61
tblVehicleEF	LDT1	2.4650e-003	5.2090e-003
tblVehicleEF	LDT1	0.10	0.25
tblVehicleEF	LDT1	0.04	2.61
tblVehicleEF	LDT1	3.5960e-003	7.6000e-003
tblVehicleEF	LDT1	0.11	0.28
tblVehicleEF	LDT1	9.2500e-004	1.4290e-003
tblVehicleEF	LDT1	0.02	0.06
tblVehicleEF	LDT1	0.00	0.87
tblVehicleEF	LDT1	0.00	0.59
tblVehicleEF	LDT1	0.50	0.04
tblVehicleEF	LDT1	0.50	0.04
tblVehicleEF	LDT1	1.31	0.00
tblVehicleEF	LDT1	1.31	0.00
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.13	0.22
tblVehicleEF	LDT1	0.04	0.01
tblVehicleEF	LDT1	6.6000e-004	7.6500e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDT1	9.3400e-004	1.4050e-003
tblVehicleEF	LDT1	0.10	3.05
tblVehicleEF	LDT1	2.7970e-003	5.5440e-003
tblVehicleEF	LDT1	0.08	0.20
tblVehicleEF	LDT1	0.10	3.05
tblVehicleEF	LDT1	4.0810e-003	8.0900e-003
tblVehicleEF	LDT1	0.09	0.22
tblVehicleEF	LDT1	0.02	0.03
tblVehicleEF	LDT1	0.16	0.27
tblVehicleEF	LDT1	0.04	0.01
tblVehicleEF	LDT1	6.6000e-004	7.6500e-004
tblVehicleEF	LDT1	9.3400e-004	1.4050e-003
tblVehicleEF	LDT1	0.01	2.51
tblVehicleEF	LDT1	2.3640e-003	5.0780e-003
tblVehicleEF	LDT1	0.12	0.29
tblVehicleEF	LDT1	0.01	2.51
tblVehicleEF	LDT1	3.4490e-003	7.4100e-003
tblVehicleEF	LDT1	0.13	0.31
tblVehicleEF	LDT2	1.0740e-003	1.5050e-003
tblVehicleEF	LDT2	1.0740e-003	1.6410e-003
tblVehicleEF	LDT2	0.03	0.05
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.00	0.64
tblVehicleEF	LDT2	0.48	0.04
tblVehicleEF	LDT2	2.18	0.00
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.16	0.25
tblVehicleEF	LDT2	0.04	0.01
tblVehicleEF	LDT2	6.9600e-004	6.8700e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDT2	9.1000e-004	1.1500e-003
tblVehicleEF	LDT2	0.05	1.79
tblVehicleEF	LDT2	3.6310e-003	4.9600e-003
tblVehicleEF	LDT2	0.14	0.23
tblVehicleEF	LDT2	0.05	1.79
tblVehicleEF	LDT2	5.2520e-003	7.2200e-003
tblVehicleEF	LDT2	0.16	0.26
tblVehicleEF	LDT2	1.2430e-003	1.4470e-003
tblVehicleEF	LDT2	0.03	0.06
tblVehicleEF	LDT2	0.00	0.88
tblVehicleEF	LDT2	0.00	0.59
tblVehicleEF	LDT2	0.58	0.04
tblVehicleEF	LDT2	0.58	0.04
tblVehicleEF	LDT2	1.68	0.00
tblVehicleEF	LDT2	1.68	0.00
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.14	0.22
tblVehicleEF	LDT2	0.04	0.01
tblVehicleEF	LDT2	6.9600e-004	6.8700e-004
tblVehicleEF	LDT2	9.1000e-004	1.1500e-003
tblVehicleEF	LDT2	0.15	2.07
tblVehicleEF	LDT2	4.0880e-003	5.2790e-003
tblVehicleEF	LDT2	0.11	0.19
tblVehicleEF	LDT2	0.15	2.07
tblVehicleEF	LDT2	5.9180e-003	7.6840e-003
tblVehicleEF	LDT2	0.12	0.20
tblVehicleEF	LDT2	0.02	0.03
tblVehicleEF	LDT2	0.17	0.28
tblVehicleEF	LDT2	0.04	0.01

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LDT2	6.9600e-004	6.8700e-004
tblVehicleEF	LDT2	9.1000e-004	1.1500e-003
tblVehicleEF	LDT2	0.02	1.72
tblVehicleEF	LDT2	3.4920e-003	4.8370e-003
tblVehicleEF	LDT2	0.16	0.27
tblVehicleEF	LDT2	0.02	1.72
tblVehicleEF	LDT2	5.0480e-003	7.0400e-003
tblVehicleEF	LDT2	0.18	0.29
tblVehicleEF	LHD1	4.0890e-003	0.06
tblVehicleEF	LHD1	4.0890e-003	0.06
tblVehicleEF	LHD1	3.9710e-003	3.4820e-003
tblVehicleEF	LHD1	3.9710e-003	3.5310e-003
tblVehicleEF	LHD1	9.6930e-003	0.02
tblVehicleEF	LHD1	9.6930e-003	0.02
tblVehicleEF	LHD1	0.19	0.52
tblVehicleEF	LHD1	0.38	0.10
tblVehicleEF	LHD1	0.92	2.78
tblVehicleEF	LHD1	0.04	0.61
tblVehicleEF	LHD1	0.31	0.41
tblVehicleEF	LHD1	0.23	0.34
tblVehicleEF	LHD1	8.0400e-004	9.4420e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	9.6500e-003	9.3980e-003
tblVehicleEF	LHD1	6.9290e-003	0.01
tblVehicleEF	LHD1	2.1400e-004	1.1700e-004
tblVehicleEF	LHD1	1.6870e-003	2.00
tblVehicleEF	LHD1	0.02	0.26
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.05	0.08

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD1	1.6870e-003	2.00
tblVehicleEF	LHD1	0.02	0.36
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.05	0.09
tblVehicleEF	LHD1	4.1070e-003	0.06
tblVehicleEF	LHD1	4.0280e-003	3.4480e-003
tblVehicleEF	LHD1	9.0160e-003	0.02
tblVehicleEF	LHD1	0.19	0.54
tblVehicleEF	LHD1	0.19	0.51
tblVehicleEF	LHD1	0.38	0.10
tblVehicleEF	LHD1	0.38	0.10
tblVehicleEF	LHD1	0.83	2.78
tblVehicleEF	LHD1	0.83	2.78
tblVehicleEF	LHD1	0.04	0.61
tblVehicleEF	LHD1	0.29	0.39
tblVehicleEF	LHD1	0.22	0.31
tblVehicleEF	LHD1	8.0400e-004	9.4420e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	9.6500e-003	9.3980e-003
tblVehicleEF	LHD1	6.9290e-003	0.01
tblVehicleEF	LHD1	2.1400e-004	1.1700e-004
tblVehicleEF	LHD1	4.7130e-003	2.32
tblVehicleEF	LHD1	0.02	0.26
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.04	0.08
tblVehicleEF	LHD1	4.7130e-003	2.32
tblVehicleEF	LHD1	0.02	0.36
tblVehicleEF	LHD1	0.07	0.07
tblVehicleEF	LHD1	0.05	0.09

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD1	0.04	0.61
tblVehicleEF	LHD1	0.31	0.42
tblVehicleEF	LHD1	0.25	0.36
tblVehicleEF	LHD1	8.0400e-004	9.4420e-003
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	9.6500e-003	9.3980e-003
tblVehicleEF	LHD1	6.9290e-003	0.01
tblVehicleEF	LHD1	2.1400e-004	1.1700e-004
tblVehicleEF	LHD1	6.5100e-004	1.91
tblVehicleEF	LHD1	0.02	0.26
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.05	0.09
tblVehicleEF	LHD1	6.5100e-004	1.91
tblVehicleEF	LHD1	0.02	0.36
tblVehicleEF	LHD1	0.07	0.06
tblVehicleEF	LHD1	0.05	0.10
tblVehicleEF	LHD2	1.7890e-003	0.02
tblVehicleEF	LHD2	1.7890e-003	0.02
tblVehicleEF	LHD2	5.4100e-003	5.8020e-003
tblVehicleEF	LHD2	5.4100e-003	5.8130e-003
tblVehicleEF	LHD2	2.6240e-003	4.1410e-003
tblVehicleEF	LHD2	2.6240e-003	3.8610e-003
tblVehicleEF	LHD2	0.12	0.47
tblVehicleEF	LHD2	0.55	0.16
tblVehicleEF	LHD2	0.36	1.49
tblVehicleEF	LHD2	0.09	1.35
tblVehicleEF	LHD2	0.53	0.86
tblVehicleEF	LHD2	0.08	0.09
tblVehicleEF	LHD2	1.6220e-003	0.02

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.0000e-005	2.2000e-005
tblVehicleEF	LHD2	4.2400e-004	0.50
tblVehicleEF	LHD2	0.01	0.15
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	4.2400e-004	0.50
tblVehicleEF	LHD2	0.01	0.18
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.7940e-003	0.02
tblVehicleEF	LHD2	5.4310e-003	5.7940e-003
tblVehicleEF	LHD2	2.4410e-003	4.3300e-003
tblVehicleEF	LHD2	0.12	0.47
tblVehicleEF	LHD2	0.12	0.46
tblVehicleEF	LHD2	0.55	0.16
tblVehicleEF	LHD2	0.55	0.16
tblVehicleEF	LHD2	0.32	1.49
tblVehicleEF	LHD2	0.32	1.49
tblVehicleEF	LHD2	0.09	1.35
tblVehicleEF	LHD2	0.51	0.82
tblVehicleEF	LHD2	0.07	0.08
tblVehicleEF	LHD2	1.6220e-003	0.02
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.0000e-005	2.2000e-005

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	LHD2	1.1800e-003	0.57
tblVehicleEF	LHD2	0.01	0.15
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.1800e-003	0.57
tblVehicleEF	LHD2	0.01	0.18
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	0.09	1.35
tblVehicleEF	LHD2	0.54	0.87
tblVehicleEF	LHD2	0.08	0.09
tblVehicleEF	LHD2	1.6220e-003	0.02
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	8.0000e-005	2.2000e-005
tblVehicleEF	LHD2	1.6400e-004	0.49
tblVehicleEF	LHD2	0.01	0.15
tblVehicleEF	LHD2	0.11	0.12
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	LHD2	1.6400e-004	0.49
tblVehicleEF	LHD2	0.01	0.18
tblVehicleEF	LHD2	0.12	0.14
tblVehicleEF	LHD2	0.01	0.02
tblVehicleEF	MCY	0.34	0.15
tblVehicleEF	MCY	0.34	0.16
tblVehicleEF	MCY	0.26	0.17
tblVehicleEF	MCY	0.26	0.14
tblVehicleEF	MCY	0.00	12.10

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MCY	18.37	9.0110e-003
tblVehicleEF	MCY	10.12	0.00
tblVehicleEF	MCY	1.18	0.55
tblVehicleEF	MCY	0.28	0.11
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.3000e-003	2.1240e-003
tblVehicleEF	MCY	2.7220e-003	3.2120e-003
tblVehicleEF	MCY	1.15	5.39
tblVehicleEF	MCY	2.30	0.99
tblVehicleEF	MCY	2.05	1.32
tblVehicleEF	MCY	1.15	5.39
tblVehicleEF	MCY	2.87	1.21
tblVehicleEF	MCY	2.24	1.43
tblVehicleEF	MCY	0.33	0.15
tblVehicleEF	MCY	0.21	0.20
tblVehicleEF	MCY	0.00	12.31
tblVehicleEF	MCY	0.00	12.11
tblVehicleEF	MCY	17.66	9.0110e-003
tblVehicleEF	MCY	17.66	9.0110e-003
tblVehicleEF	MCY	8.19	0.00
tblVehicleEF	MCY	8.19	0.00
tblVehicleEF	MCY	1.00	0.47
tblVehicleEF	MCY	0.25	0.10
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.3000e-003	2.1240e-003
tblVehicleEF	MCY	2.7220e-003	3.2120e-003
tblVehicleEF	MCY	3.88	8.19
tblVehicleEF	MCY	2.22	0.99
tblVehicleEF	MCY	1.62	1.05

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MCY	3.88	8.19
tblVehicleEF	MCY	2.77	1.22
tblVehicleEF	MCY	1.76	1.14
tblVehicleEF	MCY	1.25	0.58
tblVehicleEF	MCY	0.30	0.12
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.3000e-003	2.1240e-003
tblVehicleEF	MCY	2.7220e-003	3.2120e-003
tblVehicleEF	MCY	0.25	4.74
tblVehicleEF	MCY	2.38	0.99
tblVehicleEF	MCY	2.37	1.51
tblVehicleEF	MCY	0.25	4.74
tblVehicleEF	MCY	2.97	1.21
tblVehicleEF	MCY	2.58	1.65
tblVehicleEF	MDV	1.1320e-003	1.6610e-003
tblVehicleEF	MDV	1.1320e-003	1.8110e-003
tblVehicleEF	MDV	0.04	0.06
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.00	0.67
tblVehicleEF	MDV	0.49	0.04
tblVehicleEF	MDV	2.30	0.00
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.18	0.31
tblVehicleEF	MDV	0.04	0.01
tblVehicleEF	MDV	6.7700e-004	6.8700e-004
tblVehicleEF	MDV	9.3600e-004	1.2100e-003
tblVehicleEF	MDV	0.07	1.96
tblVehicleEF	MDV	4.0510e-003	5.8760e-003
tblVehicleEF	MDV	0.17	0.30

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MDV	0.07	1.96
tblVehicleEF	MDV	5.8470e-003	8.5430e-003
tblVehicleEF	MDV	0.19	0.32
tblVehicleEF	MDV	1.3090e-003	1.5970e-003
tblVehicleEF	MDV	0.03	0.07
tblVehicleEF	MDV	0.00	0.92
tblVehicleEF	MDV	0.00	0.62
tblVehicleEF	MDV	0.58	0.04
tblVehicleEF	MDV	0.58	0.04
tblVehicleEF	MDV	1.76	0.00
tblVehicleEF	MDV	1.76	0.00
tblVehicleEF	MDV	0.02	0.03
tblVehicleEF	MDV	0.16	0.28
tblVehicleEF	MDV	0.04	0.01
tblVehicleEF	MDV	6.7700e-004	6.8700e-004
tblVehicleEF	MDV	9.3600e-004	1.2100e-003
tblVehicleEF	MDV	0.21	2.29
tblVehicleEF	MDV	4.5500e-003	6.2490e-003
tblVehicleEF	MDV	0.14	0.23
tblVehicleEF	MDV	0.21	2.29
tblVehicleEF	MDV	6.5750e-003	9.0870e-003
tblVehicleEF	MDV	0.15	0.26
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.20	0.34
tblVehicleEF	MDV	0.04	0.01
tblVehicleEF	MDV	6.7700e-004	6.8700e-004
tblVehicleEF	MDV	9.3600e-004	1.2100e-003
tblVehicleEF	MDV	0.03	1.88
tblVehicleEF	MDV	3.8980e-003	5.7310e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MDV	0.20	0.33
tblVehicleEF	MDV	0.03	1.88
tblVehicleEF	MDV	5.6230e-003	8.3310e-003
tblVehicleEF	MDV	0.21	0.37
tblVehicleEF	MH	4.4750e-003	4.9190e-003
tblVehicleEF	MH	4.4750e-003	5.0080e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.00	0.29
tblVehicleEF	MH	0.26	0.10
tblVehicleEF	MH	1.31	0.00
tblVehicleEF	MH	1.40	1.65
tblVehicleEF	MH	0.24	0.35
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.6600e-004	1.8400e-004
tblVehicleEF	MH	0.31	2.34
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.31	2.34
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	4.5670e-003	4.8540e-003
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.00	0.29
tblVehicleEF	MH	0.00	0.28
tblVehicleEF	MH	0.27	0.10
tblVehicleEF	MH	0.27	0.10

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MH	1.15	0.00
tblVehicleEF	MH	1.15	0.00
tblVehicleEF	MH	1.32	1.56
tblVehicleEF	MH	0.22	0.32
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.6600e-004	1.8400e-004
tblVehicleEF	MH	0.84	2.68
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.84	2.68
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	1.41	1.67
tblVehicleEF	MH	0.26	0.37
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.03	0.04
tblVehicleEF	MH	1.6600e-004	1.8400e-004
tblVehicleEF	MH	0.13	2.27
tblVehicleEF	MH	0.05	0.06
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.13	2.27
tblVehicleEF	MH	0.06	0.07
tblVehicleEF	MH	0.07	0.09
tblVehicleEF	MHD	5.2540e-003	0.03
tblVehicleEF	MHD	5.2540e-003	0.03
tblVehicleEF	MHD	8.8600e-004	6.5200e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MHD	8.8600e-004	6.6800e-004
tblVehicleEF	MHD	0.01	3.7110e-003
tblVehicleEF	MHD	0.01	3.4530e-003
tblVehicleEF	MHD	0.77	0.07
tblVehicleEF	MHD	0.14	0.20
tblVehicleEF	MHD	1.06	8.51
tblVehicleEF	MHD	0.72	10.13
tblVehicleEF	MHD	1.39	0.38
tblVehicleEF	MHD	1.62	1.24
tblVehicleEF	MHD	2.0000e-004	3.0680e-003
tblVehicleEF	MHD	0.13	0.05
tblVehicleEF	MHD	6.6630e-003	3.5480e-003
tblVehicleEF	MHD	1.5100e-004	4.8000e-005
tblVehicleEF	MHD	4.9300e-004	0.25
tblVehicleEF	MHD	0.03	0.27
tblVehicleEF	MHD	0.01	8.2880e-003
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	4.9300e-004	0.25
tblVehicleEF	MHD	0.04	0.34
tblVehicleEF	MHD	0.01	9.8750e-003
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	4.9940e-003	0.03
tblVehicleEF	MHD	9.0800e-004	6.4000e-004
tblVehicleEF	MHD	0.01	3.8920e-003
tblVehicleEF	MHD	0.68	0.07
tblVehicleEF	MHD	0.68	0.07
tblVehicleEF	MHD	0.14	0.20
tblVehicleEF	MHD	0.14	0.20
tblVehicleEF	MHD	0.95	7.95

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MHD	0.95	9.11
tblVehicleEF	MHD	0.69	9.65
tblVehicleEF	MHD	1.32	0.36
tblVehicleEF	MHD	1.61	1.24
tblVehicleEF	MHD	1.7700e-004	2.6960e-003
tblVehicleEF	MHD	0.13	0.05
tblVehicleEF	MHD	6.6630e-003	3.5480e-003
tblVehicleEF	MHD	1.5100e-004	4.8000e-005
tblVehicleEF	MHD	1.3670e-003	0.30
tblVehicleEF	MHD	0.03	0.27
tblVehicleEF	MHD	0.01	8.3430e-003
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	1.3670e-003	0.30
tblVehicleEF	MHD	0.04	0.34
tblVehicleEF	MHD	0.01	9.9560e-003
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	0.77	10.78
tblVehicleEF	MHD	1.40	0.39
tblVehicleEF	MHD	1.63	1.24
tblVehicleEF	MHD	2.3300e-004	3.5820e-003
tblVehicleEF	MHD	0.13	0.05
tblVehicleEF	MHD	6.6630e-003	3.5480e-003
tblVehicleEF	MHD	1.5100e-004	4.8000e-005
tblVehicleEF	MHD	1.9500e-004	0.24
tblVehicleEF	MHD	0.03	0.26
tblVehicleEF	MHD	0.01	8.2480e-003
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	MHD	1.9500e-004	0.24
tblVehicleEF	MHD	0.04	0.33

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	MHD	0.01	9.8160e-003
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	OBUS	7.4230e-003	0.10
tblVehicleEF	OBUS	7.4230e-003	0.10
tblVehicleEF	OBUS	1.9710e-003	0.02
tblVehicleEF	OBUS	1.9710e-003	0.02
tblVehicleEF	OBUS	0.02	3.8000e-003
tblVehicleEF	OBUS	0.02	3.5110e-003
tblVehicleEF	OBUS	0.73	0.28
tblVehicleEF	OBUS	0.24	0.21
tblVehicleEF	OBUS	1.81	8.80
tblVehicleEF	OBUS	0.49	4.27
tblVehicleEF	OBUS	1.44	1.09
tblVehicleEF	OBUS	1.09	0.99
tblVehicleEF	OBUS	1.6500e-004	4.2280e-003
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	8.8800e-003	0.02
tblVehicleEF	OBUS	1.8200e-004	3.5000e-005
tblVehicleEF	OBUS	1.3060e-003	0.46
tblVehicleEF	OBUS	0.06	0.56
tblVehicleEF	OBUS	0.02	0.04
tblVehicleEF	OBUS	0.09	0.02
tblVehicleEF	OBUS	1.3060e-003	0.46
tblVehicleEF	OBUS	0.07	0.72
tblVehicleEF	OBUS	0.02	0.06
tblVehicleEF	OBUS	0.09	0.02
tblVehicleEF	OBUS	7.5540e-003	0.10
tblVehicleEF	OBUS	2.0390e-003	0.02
tblVehicleEF	OBUS	0.01	3.9900e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	OBUS	0.72	0.29
tblVehicleEF	OBUS	0.72	0.28
tblVehicleEF	OBUS	0.25	0.21
tblVehicleEF	OBUS	0.25	0.21
tblVehicleEF	OBUS	1.59	8.68
tblVehicleEF	OBUS	1.59	8.97
tblVehicleEF	OBUS	0.46	4.09
tblVehicleEF	OBUS	1.36	1.04
tblVehicleEF	OBUS	1.07	0.99
tblVehicleEF	OBUS	1.4600e-004	3.6880e-003
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	8.8800e-003	0.02
tblVehicleEF	OBUS	1.8200e-004	3.5000e-005
tblVehicleEF	OBUS	3.5810e-003	0.56
tblVehicleEF	OBUS	0.06	0.59
tblVehicleEF	OBUS	0.02	0.04
tblVehicleEF	OBUS	0.08	0.02
tblVehicleEF	OBUS	3.5810e-003	0.56
tblVehicleEF	OBUS	0.07	0.75
tblVehicleEF	OBUS	0.02	0.06
tblVehicleEF	OBUS	0.09	0.02
tblVehicleEF	OBUS	0.52	4.53
tblVehicleEF	OBUS	1.45	1.10
tblVehicleEF	OBUS	1.10	0.99
tblVehicleEF	OBUS	1.9000e-004	4.9730e-003
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	8.8800e-003	0.02
tblVehicleEF	OBUS	1.8200e-004	3.5000e-005
tblVehicleEF	OBUS	5.3600e-004	0.44

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	OBUS	0.05	0.52
tblVehicleEF	OBUS	0.02	0.04
tblVehicleEF	OBUS	0.09	0.02
tblVehicleEF	OBUS	5.3600e-004	0.44
tblVehicleEF	OBUS	0.07	0.68
tblVehicleEF	OBUS	0.02	0.06
tblVehicleEF	OBUS	0.10	0.02
tblVehicleEF	SBUS	0.05	0.46
tblVehicleEF	SBUS	0.05	0.46
tblVehicleEF	SBUS	1.1720e-003	8.3300e-004
tblVehicleEF	SBUS	1.1720e-003	8.4800e-004
tblVehicleEF	SBUS	4.3740e-003	0.01
tblVehicleEF	SBUS	4.3740e-003	0.01
tblVehicleEF	SBUS	2.47	0.09
tblVehicleEF	SBUS	0.13	0.18
tblVehicleEF	SBUS	0.62	20.81
tblVehicleEF	SBUS	1.37	8.77
tblVehicleEF	SBUS	1.32	0.59
tblVehicleEF	SBUS	1.93	0.72
tblVehicleEF	SBUS	4.1200e-004	2.6010e-003
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	8.1380e-003	4.2820e-003
tblVehicleEF	SBUS	5.5000e-005	1.3600e-004
tblVehicleEF	SBUS	7.4000e-004	0.78
tblVehicleEF	SBUS	0.23	2.11
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.02	0.07
tblVehicleEF	SBUS	7.4000e-004	0.78

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	SBUS	0.33	3.04
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.03	0.08
tblVehicleEF	SBUS	0.05	0.46
tblVehicleEF	SBUS	1.1980e-003	8.2300e-004
tblVehicleEF	SBUS	3.4260e-003	0.01
tblVehicleEF	SBUS	2.46	0.09
tblVehicleEF	SBUS	2.46	0.09
tblVehicleEF	SBUS	0.14	0.18
tblVehicleEF	SBUS	0.14	0.18
tblVehicleEF	SBUS	0.40	20.72
tblVehicleEF	SBUS	0.40	20.93
tblVehicleEF	SBUS	1.32	8.42
tblVehicleEF	SBUS	1.25	0.56
tblVehicleEF	SBUS	1.93	0.71
tblVehicleEF	SBUS	3.6200e-004	2.2800e-003
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	8.1380e-003	4.2820e-003
tblVehicleEF	SBUS	5.5000e-005	1.3600e-004
tblVehicleEF	SBUS	2.0380e-003	0.96
tblVehicleEF	SBUS	0.23	2.12
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	2.0380e-003	0.96
tblVehicleEF	SBUS	0.33	3.05
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.02	0.06
tblVehicleEF	SBUS	1.45	9.24

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	SBUS	1.34	0.60
tblVehicleEF	SBUS	1.93	0.73
tblVehicleEF	SBUS	4.8300e-004	3.0440e-003
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	8.1380e-003	4.2820e-003
tblVehicleEF	SBUS	5.5000e-005	1.3600e-004
tblVehicleEF	SBUS	3.0600e-004	0.75
tblVehicleEF	SBUS	0.23	2.10
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.03	0.08
tblVehicleEF	SBUS	3.0600e-004	0.75
tblVehicleEF	SBUS	0.32	3.03
tblVehicleEF	SBUS	0.02	0.01
tblVehicleEF	SBUS	0.03	0.09
tblVehicleEF	UBUS	0.04	2.8350e-003
tblVehicleEF	UBUS	0.04	2.8350e-003
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	0.00	0.07
tblVehicleEF	UBUS	0.21	0.22
tblVehicleEF	UBUS	2.97	0.00
tblVehicleEF	UBUS	0.46	0.33
tblVehicleEF	UBUS	0.28	0.00
tblVehicleEF	UBUS	0.10	0.11
tblVehicleEF	UBUS	0.02	0.03
tblVehicleEF	UBUS	4.6360e-003	6.2200e-003
tblVehicleEF	UBUS	3.4200e-004	0.00
tblVehicleEF	UBUS	1.4600e-003	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	0.16	0.00
tblVehicleEF	UBUS	1.4600e-003	0.00
tblVehicleEF	UBUS	0.05	0.07
tblVehicleEF	UBUS	0.17	0.00
tblVehicleEF	UBUS	0.04	2.8350e-003
tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.00	0.07
tblVehicleEF	UBUS	0.00	0.07
tblVehicleEF	UBUS	0.22	0.22
tblVehicleEF	UBUS	0.22	0.22
tblVehicleEF	UBUS	2.25	0.00
tblVehicleEF	UBUS	2.25	0.00
tblVehicleEF	UBUS	0.45	0.33
tblVehicleEF	UBUS	0.26	0.00
tblVehicleEF	UBUS	0.10	0.11
tblVehicleEF	UBUS	0.02	0.03
tblVehicleEF	UBUS	4.6360e-003	6.2200e-003
tblVehicleEF	UBUS	3.4200e-004	0.00
tblVehicleEF	UBUS	4.3320e-003	0.00
tblVehicleEF	UBUS	0.02	0.06
tblVehicleEF	UBUS	0.13	0.00
tblVehicleEF	UBUS	4.3320e-003	0.00
tblVehicleEF	UBUS	0.06	0.07
tblVehicleEF	UBUS	0.15	0.00
tblVehicleEF	UBUS	0.47	0.33
tblVehicleEF	UBUS	0.30	0.00
tblVehicleEF	UBUS	0.10	0.11
tblVehicleEF	UBUS	0.02	0.03

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleEF	UBUS	4.6360e-003	6.2200e-003
tblVehicleEF	UBUS	3.4200e-004	0.00
tblVehicleEF	UBUS	5.0200e-004	0.00
tblVehicleEF	UBUS	0.01	0.06
tblVehicleEF	UBUS	0.17	0.00
tblVehicleEF	UBUS	5.0200e-004	0.00
tblVehicleEF	UBUS	0.05	0.07
tblVehicleEF	UBUS	0.19	0.00
tblVehicleTrips	CC_TL	6.60	4.28
tblVehicleTrips	CC_TL	6.60	2.60
tblVehicleTrips	CC_TL	6.60	2.60
tblVehicleTrips	CC_TL	6.60	47.40
tblVehicleTrips	CNW_TL	6.60	4.28
tblVehicleTrips	CNW_TL	6.60	2.60
tblVehicleTrips	CNW_TL	6.60	2.60
tblVehicleTrips	CNW_TL	6.60	47.40
tblVehicleTrips	CW_TL	14.70	4.28
tblVehicleTrips	CW_TL	14.70	2.60
tblVehicleTrips	CW_TL	14.70	2.60
tblVehicleTrips	CW_TL	14.70	47.40
tblVehicleTrips	ST_TR	10.71	2.37
tblVehicleTrips	ST_TR	1.96	136.12
tblVehicleTrips	ST_TR	0.00	8.98
tblVehicleTrips	ST_TR	3.35	0.00
tblVehicleTrips	SU_TR	10.71	2.37
tblVehicleTrips	SU_TR	2.19	136.12
tblVehicleTrips	SU_TR	0.00	8.98
tblVehicleTrips	SU_TR	3.35	0.00
tblVehicleTrips	WD_TR	10.71	2.37

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

tblVehicleTrips	WD_TR	0.78	136.12
tblVehicleTrips	WD_TR	33.98	8.98
tblVehicleTrips	WD_TR	3.35	0.00

2.0 Emissions Summary

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	2.9916	27.9895	27.0932	0.0689	19.8869	1.1321	20.9748	10.1634	1.0416	11.1643	0.0000	6,874.9528	6,874.9528	1.9480	0.3321	6,990.4380
2026	2.4378	17.5846	25.2396	0.0679	3.4173	0.5651	3.9824	0.9184	0.5317	1.4502	0.0000	6,768.3229	6,768.3229	0.6553	0.3229	6,880.9148
2027	45.2353	17.3913	24.7301	0.0669	3.4173	0.5632	3.9806	0.9185	0.5300	1.4484	0.0000	6,665.2654	6,665.2654	0.7166	0.3138	6,775.0367
2028	45.2244	1.2236	3.2265	7.4200e-003	0.5748	0.0538	0.6286	0.1524	0.0536	0.2061	0.0000	731.2010	731.2010	0.0234	9.2500e-003	734.5410
Maximum	**45.2353**	**27.9895**	**27.0932**	**0.0689**	**19.8869**	**1.1321**	**20.9748**	**10.1634**	**1.0416**	**11.1643**	**0.0000**	**6,874.9528**	**6,874.9528**	**1.9480**	**0.3321**	**6,990.4380**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.1 Overall Construction (Maximum Daily Emission)

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2025	2.9916	27.9895	27.0932	0.0689	19.8869	1.1321	20.9748	10.1634	1.0416	11.1643	0.0000	6,874.9528	6,874.9528	1.9480	0.3321	6,990.4380
2026	2.4378	17.5846	25.2396	0.0679	3.4173	0.5651	3.9824	0.9184	0.5317	1.4502	0.0000	6,768.3229	6,768.3229	0.6553	0.3229	6,880.9148
2027	45.2353	17.3913	24.7301	0.0669	3.4173	0.5632	3.9806	0.9185	0.5300	1.4484	0.0000	6,665.2654	6,665.2654	0.7166	0.3138	6,775.0367
2028	45.2244	1.2236	3.2265	7.4200e-003	0.5748	0.0538	0.6286	0.1524	0.0536	0.2061	0.0000	731.2010	731.2010	0.0234	9.2500e-003	734.5410
Maximum	**45.2353**	**27.9895**	**27.0932**	**0.0689**	**19.8869**	**1.1321**	**20.9748**	**10.1634**	**1.0416**	**11.1643**	**0.0000**	**6,874.9528**	**6,874.9528**	**1.9480**	**0.3321**	**6,990.4380**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.3377	6.9000e-004	0.0767	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1654	0.1654	4.3000e-004		0.1761
Energy	0.0431	0.3915	0.3289	2.3500e-003		0.0298	0.0298		0.0298	0.0298		469.7826	469.7826	9.0000e-003	8.6100e-003	472.5743
Mobile	4.7915	1.3331	23.9816	0.0116	1.3444	9.1400e-003	1.3536	0.3885	6.3100e-003	0.3948		1,179.7186	1,179.7186	0.1399	0.0742	1,205.3348
Total	**9.1722**	**1.7253**	**24.3871**	**0.0140**	**1.3444**	**0.0392**	**1.3836**	**0.3885**	**0.0363**	**0.4248**		**1,649.6667**	**1,649.6667**	**0.1493**	**0.0828**	**1,678.0852**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	4.3377	6.9000e-004	0.0767	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1654	0.1654	4.3000e-004		0.1761
Energy	0.0431	0.3915	0.3289	2.3500e-003		0.0298	0.0298		0.0298	0.0298		469.7826	469.7826	9.0000e-003	8.6100e-003	472.5743
Mobile	4.7915	1.3331	23.9816	0.0116	1.3444	9.1400e-003	1.3536	0.3885	6.3100e-003	0.3948		1,179.7186	1,179.7186	0.1399	0.0742	1,205.3348
Total	**9.1722**	**1.7253**	**24.3871**	**0.0140**	**1.3444**	**0.0392**	**1.3836**	**0.3885**	**0.0363**	**0.4248**		**1,649.6667**	**1,649.6667**	**0.1493**	**0.0828**	**1,678.0852**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Site Preparation	Site Preparation	1/1/2025	1/9/2025	5	7	
2	Grading	Grading	1/10/2025	1/29/2025	5	14	
3	Building Construction	Building Construction	1/30/2025	10/6/2027	5	700	
4	Paving	Paving	10/7/2027	11/24/2027	5	35	
5	Architectural Coating	Architectural Coating	11/25/2027	1/12/2028	5	35	

Acres of Grading (Site Preparation Phase): 10.5

Acres of Grading (Grading Phase): 42

Acres of Paving: 5.55

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 226,430; Non-Residential Outdoor: 75,477; Striped Parking Area: 14,808 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37
Grading	Excavators	2	8.00	158	0.38
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Scrapers	2	8.00	367	0.48

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37
Building Construction	Cranes	1	7.00	231	0.29
Building Construction	Forklifts	3	8.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37
Building Construction	Welders	1	8.00	46	0.45
Paving	Pavers	2	8.00	130	0.42
Paving	Paving Equipment	2	8.00	132	0.36
Paving	Rollers	2	8.00	80	0.38
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Site Preparation	7	18.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	8	20.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	9	225.00	89.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	6	15.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	45.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999		3,689.1037	3,689.1037	1.1931		3,718.9320
Total	**2.4727**	**25.2339**	**17.9118**	**0.0381**	**19.6570**	**1.0868**	**20.7438**	**10.1025**	**0.9999**	**11.1023**		**3,689.1037**	**3,689.1037**	**1.1931**		**3,718.9320**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0813	0.0420	0.6859	1.9400e-003	0.2299	1.1000e-003	0.2310	0.0610	1.0200e-003	0.0620		196.3522	196.3522	4.2700e-003	4.4100e-003	197.7737
Total	**0.0813**	**0.0420**	**0.6859**	**1.9400e-003**	**0.2299**	**1.1000e-003**	**0.2310**	**0.0610**	**1.0200e-003**	**0.0620**		**196.3522**	**196.3522**	**4.2700e-003**	**4.4100e-003**	**197.7737**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.2 Site Preparation - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					19.6570	0.0000	19.6570	10.1025	0.0000	10.1025			0.0000			0.0000
Off-Road	2.4727	25.2339	17.9118	0.0381		1.0868	1.0868		0.9999	0.9999	0.0000	3,689.1037	3,689.1037	1.1931		3,718.9320
Total	**2.4727**	**25.2339**	**17.9118**	**0.0381**	**19.6570**	**1.0868**	**20.7438**	**10.1025**	**0.9999**	**11.1023**	**0.0000**	**3,689.1037**	**3,689.1037**	**1.1931**		**3,718.9320**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0813	0.0420	0.6859	1.9400e-003	0.2299	1.1000e-003	0.2310	0.0610	1.0200e-003	0.0620		196.3522	196.3522	4.2700e-003	4.4100e-003	197.7737
Total	**0.0813**	**0.0420**	**0.6859**	**1.9400e-003**	**0.2299**	**1.1000e-003**	**0.2310**	**0.0610**	**1.0200e-003**	**0.0620**		**196.3522**	**196.3522**	**4.2700e-003**	**4.4100e-003**	**197.7737**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404		6,008.2814	6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**9.2036**	**1.1309**	**10.3345**	**3.6538**	**1.0404**	**4.6942**		**6,008.2814**	**6,008.2814**	**1.9432**		**6,056.8614**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0903	0.0466	0.7621	2.1600e-003	0.2555	1.2300e-003	0.2567	0.0678	1.1300e-003	0.0689		218.1691	218.1691	4.7500e-003	4.9000e-003	219.7485
Total	**0.0903**	**0.0466**	**0.7621**	**2.1600e-003**	**0.2555**	**1.2300e-003**	**0.2567**	**0.0678**	**1.1300e-003**	**0.0689**		**218.1691**	**218.1691**	**4.7500e-003**	**4.9000e-003**	**219.7485**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.3 Grading - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					9.2036	0.0000	9.2036	3.6538	0.0000	3.6538			0.0000			0.0000
Off-Road	2.9012	27.9429	26.3311	0.0621		1.1309	1.1309		1.0404	1.0404	0.0000	6,008.2814	6,008.2814	1.9432		6,056.8614
Total	**2.9012**	**27.9429**	**26.3311**	**0.0621**	**9.2036**	**1.1309**	**10.3345**	**3.6538**	**1.0404**	**4.6942**	**0.0000**	**6,008.2814**	**6,008.2814**	**1.9432**		**6,056.8614**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0903	0.0466	0.7621	2.1600e-003	0.2555	1.2300e-003	0.2567	0.0678	1.1300e-003	0.0689		218.1691	218.1691	4.7500e-003	4.9000e-003	219.7485
Total	**0.0903**	**0.0466**	**0.7621**	**2.1600e-003**	**0.2555**	**1.2300e-003**	**0.2567**	**0.0678**	**1.1300e-003**	**0.0689**		**218.1691**	**218.1691**	**4.7500e-003**	**4.9000e-003**	**219.7485**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2025

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1144	4.8025	1.1632	0.0177	0.5433	0.0257	0.5690	0.1563	0.0246	0.1809		1,864.0766	1,864.0766	6.0600e-003	0.2770	1,946.7693
Worker	1.0160	0.5246	8.5733	0.0243	2.8739	0.0138	2.8877	0.7621	0.0127	0.7749		2,454.4018	2,454.4018	0.0534	0.0551	2,472.1707
Total	**1.1304**	**5.3271**	**9.7365**	**0.0419**	**3.4172**	**0.0395**	**3.4567**	**0.9184**	**0.0373**	**0.9557**		**4,318.4784**	**4,318.4784**	**0.0595**	**0.3321**	**4,418.9399**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2025

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1144	4.8025	1.1632	0.0177	0.5433	0.0257	0.5690	0.1563	0.0246	0.1809		1,864.0766	1,864.0766	6.0600e-003	0.2770	1,946.7693
Worker	1.0160	0.5246	8.5733	0.0243	2.8739	0.0138	2.8877	0.7621	0.0127	0.7749		2,454.4018	2,454.4018	0.0534	0.0551	2,472.1707
Total	**1.1304**	**5.3271**	**9.7365**	**0.0419**	**3.4172**	**0.0395**	**3.4567**	**0.9184**	**0.0373**	**0.9557**		**4,318.4784**	**4,318.4784**	**0.0595**	**0.3321**	**4,418.9399**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2026

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1112	4.6419	1.1489	0.0174	0.5433	0.0245	0.5678	0.1563	0.0234	0.1797		1,832.2220	1,832.2220	5.8800e-003	0.2712	1,913.1728
Worker	0.9592	0.4731	8.0060	0.0235	2.8739	0.0131	2.8870	0.7621	0.0120	0.7742		2,379.6265	2,379.6265	0.0484	0.0517	2,396.2440
Total	**1.0704**	**5.1149**	**9.1550**	**0.0409**	**3.4173**	**0.0375**	**3.4548**	**0.9184**	**0.0355**	**0.9539**		**4,211.8485**	**4,211.8485**	**0.0543**	**0.3229**	**4,309.4168**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2026

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1112	4.6419	1.1489	0.0174	0.5433	0.0245	0.5678	0.1563	0.0234	0.1797		1,832.2220	1,832.2220	5.8800e-003	0.2712	1,913.1728
Worker	0.9592	0.4731	8.0060	0.0235	2.8739	0.0131	2.8870	0.7621	0.0120	0.7742		2,379.6265	2,379.6265	0.0484	0.0517	2,396.2440
Total	**1.0704**	**5.1149**	**9.1550**	**0.0409**	**3.4173**	**0.0375**	**3.4548**	**0.9184**	**0.0355**	**0.9539**		**4,211.8485**	**4,211.8485**	**0.0543**	**0.3229**	**4,309.4168**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963		2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**		**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1084	4.4930	1.1372	0.0170	0.5434	0.0234	0.5668	0.1563	0.0224	0.1787		1,797.8005	1,797.8005	5.7100e-003	0.2650	1,876.9215
Worker	0.9042	0.4286	7.5082	0.0229	2.8739	0.0123	2.8862	0.7621	0.0113	0.7734		2,310.9905	2,310.9905	0.0440	0.0488	2,326.6171
Total	**1.0125**	**4.9216**	**8.6454**	**0.0399**	**3.4173**	**0.0357**	**3.4530**	**0.9185**	**0.0337**	**0.9522**		**4,108.7910**	**4,108.7910**	**0.0497**	**0.3138**	**4,203.5386**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.4 Building Construction - 2027

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.3674	12.4697	16.0847	0.0270		0.5276	0.5276		0.4963	0.4963	0.0000	2,556.4744	2,556.4744	0.6010		2,571.4981
Total	**1.3674**	**12.4697**	**16.0847**	**0.0270**		**0.5276**	**0.5276**		**0.4963**	**0.4963**	**0.0000**	**2,556.4744**	**2,556.4744**	**0.6010**		**2,571.4981**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.1084	4.4930	1.1372	0.0170	0.5434	0.0234	0.5668	0.1563	0.0224	0.1787		1,797.8005	1,797.8005	5.7100e-003	0.2650	1,876.9215
Worker	0.9042	0.4286	7.5082	0.0229	2.8739	0.0123	2.8862	0.7621	0.0113	0.7734		2,310.9905	2,310.9905	0.0440	0.0488	2,326.6171
Total	**1.0125**	**4.9216**	**8.6454**	**0.0399**	**3.4173**	**0.0357**	**3.4530**	**0.9185**	**0.0337**	**0.9522**		**4,108.7910**	**4,108.7910**	**0.0497**	**0.3138**	**4,203.5386**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850		2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.4155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3306**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**		**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0603	0.0286	0.5006	1.5200e-003	0.1916	8.2000e-004	0.1924	0.0508	7.5000e-004	0.0516		154.0660	154.0660	2.9300e-003	3.2500e-003	155.1078
Total	**0.0603**	**0.0286**	**0.5006**	**1.5200e-003**	**0.1916**	**8.2000e-004**	**0.1924**	**0.0508**	**7.5000e-004**	**0.0516**		**154.0660**	**154.0660**	**2.9300e-003**	**3.2500e-003**	**155.1078**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.5 Paving - 2027

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.9152	8.5816	14.5780	0.0228		0.4185	0.4185		0.3850	0.3850	0.0000	2,206.7452	2,206.7452	0.7137		2,224.5878
Paving	0.4155					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**1.3306**	**8.5816**	**14.5780**	**0.0228**		**0.4185**	**0.4185**		**0.3850**	**0.3850**	**0.0000**	**2,206.7452**	**2,206.7452**	**0.7137**		**2,224.5878**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0603	0.0286	0.5006	1.5200e-003	0.1916	8.2000e-004	0.1924	0.0508	7.5000e-004	0.0516		154.0660	154.0660	2.9300e-003	3.2500e-003	155.1078
Total	**0.0603**	**0.0286**	**0.5006**	**1.5200e-003**	**0.1916**	**8.2000e-004**	**0.1924**	**0.0508**	**7.5000e-004**	**0.0516**		**154.0660**	**154.0660**	**2.9300e-003**	**3.2500e-003**	**155.1078**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2027

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.8836					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**45.0545**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1808	0.0857	1.5017	4.5700e-003	0.5748	2.4500e-003	0.5772	0.1524	2.2600e-003	0.1547		462.1981	462.1981	8.8000e-003	9.7500e-003	465.3234
Total	**0.1808**	**0.0857**	**1.5017**	**4.5700e-003**	**0.5748**	**2.4500e-003**	**0.5772**	**0.1524**	**2.2600e-003**	**0.1547**		**462.1981**	**462.1981**	**8.8000e-003**	**9.7500e-003**	**465.3234**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2027

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.8836					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**45.0545**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1808	0.0857	1.5017	4.5700e-003	0.5748	2.4500e-003	0.5772	0.1524	2.2600e-003	0.1547		462.1981	462.1981	8.8000e-003	9.7500e-003	465.3234
Total	**0.1808**	**0.0857**	**1.5017**	**4.5700e-003**	**0.5748**	**2.4500e-003**	**0.5772**	**0.1524**	**2.2600e-003**	**0.1547**		**462.1981**	**462.1981**	**8.8000e-003**	**9.7500e-003**	**465.3234**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2028

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.8836					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515		281.4481	281.4481	0.0154		281.8319
Total	**45.0545**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**		**281.4481**	**281.4481**	**0.0154**		**281.8319**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1699	0.0781	1.4174	4.4500e-003	0.5748	2.2900e-003	0.5771	0.1524	2.1100e-003	0.1545		449.7530	449.7530	8.0300e-003	9.2500e-003	452.7092
Total	**0.1699**	**0.0781**	**1.4174**	**4.4500e-003**	**0.5748**	**2.2900e-003**	**0.5771**	**0.1524**	**2.1100e-003**	**0.1545**		**449.7530**	**449.7530**	**8.0300e-003**	**9.2500e-003**	**452.7092**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

3.6 Architectural Coating - 2028

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	44.8836					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1709	1.1455	1.8091	2.9700e-003		0.0515	0.0515		0.0515	0.0515	0.0000	281.4481	281.4481	0.0154		281.8319
Total	**45.0545**	**1.1455**	**1.8091**	**2.9700e-003**		**0.0515**	**0.0515**		**0.0515**	**0.0515**	**0.0000**	**281.4481**	**281.4481**	**0.0154**		**281.8319**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.1699	0.0781	1.4174	4.4500e-003	0.5748	2.2900e-003	0.5771	0.1524	2.1100e-003	0.1545		449.7530	449.7530	8.0300e-003	9.2500e-003	452.7092
Total	**0.1699**	**0.0781**	**1.4174**	**4.4500e-003**	**0.5748**	**2.2900e-003**	**0.5771**	**0.1524**	**2.1100e-003**	**0.1545**		**449.7530**	**449.7530**	**8.0300e-003**	**9.2500e-003**	**452.7092**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.7915	1.3331	23.9816	0.0116	1.3444	9.1400e-003	1.3536	0.3885	6.3100e-003	0.3948		1,179.7186	1,179.7186	0.1399	0.0742	1,205.3348
Unmitigated	4.7915	1.3331	23.9816	0.0116	1.3444	9.1400e-003	1.3536	0.3885	6.3100e-003	0.3948		1,179.7186	1,179.7186	0.1399	0.0742	1,205.3348

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Arena	58.28	58.28	58.28	66,406	66,406
Arena	165.90	165.90	165.90	189,037	189,037
City Park	449.20	449.20	449.20	311,318	311,318
Government (Civic Center)	224.50	224.50	224.50	125,601	125,601
Motel	0.00	0.00	0.00		
Parking Lot	0.00	0.00	0.00		
Total	897.87	897.87	897.87	692,362	692,362

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	4.28	4.28	4.28	0.00	81.00	19.00	66	28	6

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Arena	4.28	4.28	4.28	0.00	81.00	19.00	66	28	6
City Park	2.60	2.60	2.60	33.00	48.00	19.00	66	28	6
Government (Civic Center)	2.60	2.60	2.60	75.00	20.00	5.00	50	34	16
Motel	47.40	47.40	47.40	19.00	62.00	19.00	58	38	4
Parking Lot	14.70	6.60	6.60	0.00	0.00	0.00	0	0	0

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Arena	0.493892	0.059218	0.219804	0.141013	0.027602	0.005981	0.012190	0.004071	0.000638	0.000674	0.030860	0.000950	0.003108
City Park	0.493892	0.059218	0.219804	0.141013	0.027602	0.005981	0.012190	0.004071	0.000638	0.000674	0.030860	0.000950	0.003108
Government (Civic Center)	0.493892	0.059218	0.219804	0.141013	0.027602	0.005981	0.012190	0.004071	0.000638	0.000674	0.030860	0.000950	0.003108
Motel	0.493892	0.059218	0.219804	0.141013	0.027602	0.005981	0.012190	0.004071	0.000638	0.000674	0.030860	0.000950	0.003108
Parking Lot	0.493892	0.059218	0.219804	0.141013	0.027602	0.005981	0.012190	0.004071	0.000638	0.000674	0.030860	0.000950	0.003108

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	0.0431	0.3915	0.3289	2.3500e-003		0.0298	0.0298		0.0298	0.0298		469.7826	469.7826	9.0000e-003	8.6100e-003	472.5743
NaturalGas Unmitigated	0.0431	0.3915	0.3289	2.3500e-003		0.0298	0.0298		0.0298	0.0298		469.7826	469.7826	9.0000e-003	8.6100e-003	472.5743

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	234.447	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003		27.5820	27.5820	5.3000e-004	5.1000e-004	27.7459
Arena	667.397	7.2000e-003	0.0654	0.0550	3.9000e-004		4.9700e-003	4.9700e-003		4.9700e-003	4.9700e-003		78.5173	78.5173	1.5000e-003	1.4400e-003	78.9839
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	1324.66	0.0143	0.1299	0.1091	7.8000e-004		9.8700e-003	9.8700e-003		9.8700e-003	9.8700e-003		155.8421	155.8421	2.9900e-003	2.8600e-003	156.7682
Motel	1766.65	0.0191	0.1732	0.1455	1.0400e-003		0.0132	0.0132		0.0132	0.0132		207.8412	207.8412	3.9800e-003	3.8100e-003	209.0763
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0431**	**0.3915**	**0.3289**	**2.3500e-003**		**0.0298**	**0.0298**		**0.0298**	**0.0298**		**469.7826**	**469.7826**	**9.0000e-003**	**8.6200e-003**	**472.5743**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

5.2 Energy by Land Use - NaturalGas

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Arena	0.234447	2.5300e-003	0.0230	0.0193	1.4000e-004		1.7500e-003	1.7500e-003		1.7500e-003	1.7500e-003		27.5820	27.5820	5.3000e-004	5.1000e-004	27.7459
Arena	0.667397	7.2000e-003	0.0654	0.0550	3.9000e-004		4.9700e-003	4.9700e-003		4.9700e-003	4.9700e-003		78.5173	78.5173	1.5000e-003	1.4400e-003	78.9839
City Park	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Government (Civic Center)	1.32466	0.0143	0.1299	0.1091	7.8000e-004		9.8700e-003	9.8700e-003		9.8700e-003	9.8700e-003		155.8421	155.8421	2.9900e-003	2.8600e-003	156.7682
Motel	1.76665	0.0191	0.1732	0.1455	1.0400e-003		0.0132	0.0132		0.0132	0.0132		207.8412	207.8412	3.9800e-003	3.8100e-003	209.0763
Parking Lot	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**0.0431**	**0.3915**	**0.3289**	**2.3500e-003**		**0.0298**	**0.0298**		**0.0298**	**0.0298**		**469.7826**	**469.7826**	**9.0000e-003**	**8.6200e-003**	**472.5743**

6.0 Area Detail

6.1 Mitigation Measures Area

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	4.3377	6.9000e-004	0.0767	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1654	0.1654	4.3000e-004		0.1761
Unmitigated	4.3377	6.9000e-004	0.0767	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1654	0.1654	4.3000e-004		0.1761

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0055					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3252					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0200e-003	6.9000e-004	0.0767	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1654	0.1654	4.3000e-004		0.1761
Total	**4.3377**	**6.9000e-004**	**0.0767**	**1.0000e-005**		**2.7000e-004**	**2.7000e-004**		**2.7000e-004**	**2.7000e-004**		**0.1654**	**0.1654**	**4.3000e-004**		**0.1761**

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	1.0055					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	3.3252					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	7.0200e-003	6.9000e-004	0.0767	1.0000e-005		2.7000e-004	2.7000e-004		2.7000e-004	2.7000e-004		0.1654	0.1654	4.3000e-004		0.1761
Total	**4.3377**	**6.9000e-004**	**0.0767**	**1.0000e-005**		**2.7000e-004**	**2.7000e-004**		**2.7000e-004**	**2.7000e-004**		**0.1654**	**0.1654**	**4.3000e-004**		**0.1761**

7.0 Water Detail

7.1 Mitigation Measures Water

56 Acre Master Plan - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Not Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

56 Acre Master Plan - Multigenerational Center

El Dorado-Lake Tahoe County, Annual

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Health Club	61.72	1000sqft	1.42	61,722.00	0
Recreational Swimming Pool	2.50	1000sqft	0.06	2,500.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2024
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	535.7	**CH4 Intensity (lb/MWhr)**	0.026	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - The GHG EFs are scaled using Liberty Utility's natural gas mix and internsity factor (published by TRPA) for the year 2018.

Land Use - Gross floor area of the Recreation center - 64.222 ksf (Including Aquatics facilities - 2.5 ksf)

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Demolition -

Grading -

Architectural Coating - SMAQMD recommends using paint with new VOC contents for archetectural coating. For the modeling, Nonflat Coating's VOC limit of 100 g/l is assumed.

Vehicle Trips - Daily VMT data provided by the traffic study

Vehicle Emission Factors - Using 2021 EMFAC EF

Vehicle Emission Factors - Using 2021 EMFAC EF

Vehicle Emission Factors - Using 2021 EMFAC EF

Consumer Products -

Area Coating -

Water And Wastewater -

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.026
tblProjectCharacteristics	CO2IntensityFactor	0	535.7
tblProjectCharacteristics	N2OIntensityFactor	0	0.003
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleEF	HHD	0.02	0.25
tblVehicleEF	HHD	2.6220e-003	5.2630e-003
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.76	0.18
tblVehicleEF	HHD	0.43	0.20
tblVehicleEF	HHD	0.03	39.17
tblVehicleEF	HHD	1,023.57	1,534.53

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	1,625.74	1,404.88
tblVehicleEF	HHD	0.39	0.02
tblVehicleEF	HHD	0.16	0.24
tblVehicleEF	HHD	0.25	0.22
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.98	41.71
tblVehicleEF	HHD	4.29	3.07
tblVehicleEF	HHD	3.06	2.99
tblVehicleEF	HHD	5.6820e-003	0.05
tblVehicleEF	HHD	0.06	0.09
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.4360e-003	5.6530e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.5850e-003	8.9570e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	1.2000e-005	3.0400e-003
tblVehicleEF	HHD	4.9100e-004	4.0000e-006
tblVehicleEF	HHD	0.41	2.84
tblVehicleEF	HHD	6.0000e-006	0.00
tblVehicleEF	HHD	0.05	0.03
tblVehicleEF	HHD	2.8000e-004	1.0000e-006
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	9.6700e-003	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	1.2000e-005	3.0400e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	4.9100e-004	4.0000e-006
tblVehicleEF	HHD	0.47	3.36
tblVehicleEF	HHD	6.0000e-006	0.00
tblVehicleEF	HHD	0.06	0.04
tblVehicleEF	HHD	2.8000e-004	1.0000e-006
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	0.02	0.26
tblVehicleEF	HHD	2.6320e-003	5.2700e-003
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.66	0.18
tblVehicleEF	HHD	0.44	0.20
tblVehicleEF	HHD	0.03	38.40
tblVehicleEF	HHD	1,017.67	1,519.17
tblVehicleEF	HHD	1,625.75	1,404.88
tblVehicleEF	HHD	0.38	0.02
tblVehicleEF	HHD	0.16	0.24
tblVehicleEF	HHD	0.25	0.22
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.81	40.59
tblVehicleEF	HHD	4.13	2.94
tblVehicleEF	HHD	3.06	2.99
tblVehicleEF	HHD	4.8660e-003	0.04
tblVehicleEF	HHD	0.06	0.09
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	4.6560e-003	4.8810e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.5850e-003	8.9570e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	3.4000e-005	4.0700e-003
tblVehicleEF	HHD	5.4300e-004	4.0000e-006
tblVehicleEF	HHD	0.43	2.98
tblVehicleEF	HHD	1.4000e-005	0.00
tblVehicleEF	HHD	0.05	0.03
tblVehicleEF	HHD	2.7500e-004	1.0000e-006
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	9.6140e-003	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	3.4000e-005	4.0700e-003
tblVehicleEF	HHD	5.4300e-004	4.0000e-006
tblVehicleEF	HHD	0.49	3.51
tblVehicleEF	HHD	1.4000e-005	0.00
tblVehicleEF	HHD	0.06	0.04
tblVehicleEF	HHD	2.7500e-004	1.0000e-006
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	0.02	0.24
tblVehicleEF	HHD	2.6140e-003	5.2580e-003
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.91	0.18
tblVehicleEF	HHD	0.43	0.20
tblVehicleEF	HHD	0.04	40.24
tblVehicleEF	HHD	1,031.73	1,555.74
tblVehicleEF	HHD	1,625.73	1,404.88
tblVehicleEF	HHD	0.39	0.02
tblVehicleEF	HHD	0.16	0.24

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.25	0.22
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	6.22	43.24
tblVehicleEF	HHD	4.34	3.10
tblVehicleEF	HHD	3.06	2.99
tblVehicleEF	HHD	6.8090e-003	0.05
tblVehicleEF	HHD	0.06	0.09
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	6.5140e-003	6.7180e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.5850e-003	8.9570e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.0000e-006	2.8940e-003
tblVehicleEF	HHD	4.9200e-004	4.0000e-006
tblVehicleEF	HHD	0.38	2.65
tblVehicleEF	HHD	3.0000e-006	0.00
tblVehicleEF	HHD	0.05	0.03
tblVehicleEF	HHD	3.1500e-004	1.0000e-006
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	9.7470e-003	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	5.0000e-006	2.8940e-003
tblVehicleEF	HHD	4.9200e-004	4.0000e-006
tblVehicleEF	HHD	0.44	3.14
tblVehicleEF	HHD	3.0000e-006	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.06	0.04
tblVehicleEF	HHD	3.1500e-004	1.0000e-006
tblVehicleEF	HHD	5.0000e-006	0.00
tblVehicleEF	LDA	2.0210e-003	2.6200e-003
tblVehicleEF	LDA	0.05	0.08
tblVehicleEF	LDA	0.00	0.82
tblVehicleEF	LDA	0.60	0.04
tblVehicleEF	LDA	2.27	0.00
tblVehicleEF	LDA	247.75	244.91
tblVehicleEF	LDA	51.41	52.50
tblVehicleEF	LDA	4.4630e-003	6.0800e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.18	0.28
tblVehicleEF	LDA	0.04	8.0800e-003
tblVehicleEF	LDA	1.4900e-003	1.4340e-003
tblVehicleEF	LDA	1.7910e-003	2.1330e-003
tblVehicleEF	LDA	1.3730e-003	1.7560e-003
tblVehicleEF	LDA	1.6470e-003	1.8370e-003
tblVehicleEF	LDA	0.04	1.60
tblVehicleEF	LDA	0.09	0.12
tblVehicleEF	LDA	0.03	0.01
tblVehicleEF	LDA	7.7970e-003	0.01
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.22	0.37
tblVehicleEF	LDA	2.4010e-003	2.4220e-003
tblVehicleEF	LDA	4.9800e-004	5.2000e-004
tblVehicleEF	LDA	0.04	1.60
tblVehicleEF	LDA	0.09	0.12

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.03	0.01
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.24	0.41
tblVehicleEF	LDA	2.3190e-003	2.8440e-003
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.00	1.12
tblVehicleEF	LDA	0.72	0.04
tblVehicleEF	LDA	1.74	0.00
tblVehicleEF	LDA	269.38	244.17
tblVehicleEF	LDA	50.39	51.42
tblVehicleEF	LDA	4.1150e-003	5.5460e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.16	0.24
tblVehicleEF	LDA	0.04	8.0800e-003
tblVehicleEF	LDA	1.4900e-003	1.4340e-003
tblVehicleEF	LDA	1.7910e-003	2.1330e-003
tblVehicleEF	LDA	1.3730e-003	1.7560e-003
tblVehicleEF	LDA	1.6470e-003	1.8370e-003
tblVehicleEF	LDA	0.12	2.26
tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	0.07	0.03
tblVehicleEF	LDA	8.7420e-003	0.01
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.17	0.29
tblVehicleEF	LDA	2.6110e-003	2.4150e-003
tblVehicleEF	LDA	4.8900e-004	5.0900e-004
tblVehicleEF	LDA	0.12	2.26

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	0.07	0.03
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.19	0.32
tblVehicleEF	LDA	1.9200e-003	2.5250e-003
tblVehicleEF	LDA	0.06	0.09
tblVehicleEF	LDA	0.00	0.76
tblVehicleEF	LDA	0.58	0.04
tblVehicleEF	LDA	2.67	0.00
tblVehicleEF	LDA	242.38	244.18
tblVehicleEF	LDA	52.15	53.25
tblVehicleEF	LDA	4.6770e-003	6.4250e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.19	0.30
tblVehicleEF	LDA	0.04	8.0800e-003
tblVehicleEF	LDA	1.4900e-003	1.4340e-003
tblVehicleEF	LDA	1.7910e-003	2.1330e-003
tblVehicleEF	LDA	1.3730e-003	1.7560e-003
tblVehicleEF	LDA	1.6470e-003	1.8370e-003
tblVehicleEF	LDA	0.01	1.43
tblVehicleEF	LDA	0.09	0.12
tblVehicleEF	LDA	8.8240e-003	1.4510e-003
tblVehicleEF	LDA	7.5100e-003	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.25	0.42
tblVehicleEF	LDA	2.3490e-003	2.4150e-003
tblVehicleEF	LDA	5.0600e-004	5.2700e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.01	1.43
tblVehicleEF	LDA	0.09	0.12
tblVehicleEF	LDA	8.8240e-003	1.4510e-003
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.27	0.46
tblVehicleEF	LDT1	5.3240e-003	8.1190e-003
tblVehicleEF	LDT1	0.09	0.15
tblVehicleEF	LDT1	0.00	1.87
tblVehicleEF	LDT1	1.18	0.04
tblVehicleEF	LDT1	2.66	0.00
tblVehicleEF	LDT1	306.97	310.60
tblVehicleEF	LDT1	66.37	68.35
tblVehicleEF	LDT1	7.7090e-003	0.01
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.10	0.17
tblVehicleEF	LDT1	0.31	0.54
tblVehicleEF	LDT1	0.04	0.01
tblVehicleEF	LDT1	1.9650e-003	2.2410e-003
tblVehicleEF	LDT1	2.6990e-003	3.8680e-003
tblVehicleEF	LDT1	1.8090e-003	2.2650e-003
tblVehicleEF	LDT1	2.4820e-003	2.7540e-003
tblVehicleEF	LDT1	0.15	4.11
tblVehicleEF	LDT1	0.27	0.31
tblVehicleEF	LDT1	0.09	0.04
tblVehicleEF	LDT1	0.02	0.04
tblVehicleEF	LDT1	0.14	0.16
tblVehicleEF	LDT1	0.48	0.87
tblVehicleEF	LDT1	2.9760e-003	3.0740e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	6.4300e-004	6.7600e-004
tblVehicleEF	LDT1	0.15	4.11
tblVehicleEF	LDT1	0.27	0.31
tblVehicleEF	LDT1	0.09	0.04
tblVehicleEF	LDT1	0.03	0.05
tblVehicleEF	LDT1	0.14	0.16
tblVehicleEF	LDT1	0.52	0.95
tblVehicleEF	LDT1	6.0510e-003	8.7930e-003
tblVehicleEF	LDT1	0.07	0.12
tblVehicleEF	LDT1	0.00	2.47
tblVehicleEF	LDT1	1.39	0.04
tblVehicleEF	LDT1	2.03	0.00
tblVehicleEF	LDT1	329.22	309.77
tblVehicleEF	LDT1	65.00	66.90
tblVehicleEF	LDT1	7.0170e-003	9.4050e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.09	0.14
tblVehicleEF	LDT1	0.28	0.48
tblVehicleEF	LDT1	0.04	0.01
tblVehicleEF	LDT1	1.9650e-003	2.2410e-003
tblVehicleEF	LDT1	2.6990e-003	3.8680e-003
tblVehicleEF	LDT1	1.8090e-003	2.2650e-003
tblVehicleEF	LDT1	2.4820e-003	2.7540e-003
tblVehicleEF	LDT1	0.46	5.93
tblVehicleEF	LDT1	0.34	0.32
tblVehicleEF	LDT1	0.22	0.07
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.37	0.68

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	3.1920e-003	3.0650e-003
tblVehicleEF	LDT1	6.3000e-004	6.6200e-004
tblVehicleEF	LDT1	0.46	5.93
tblVehicleEF	LDT1	0.34	0.32
tblVehicleEF	LDT1	0.22	0.07
tblVehicleEF	LDT1	0.04	0.06
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.41	0.75
tblVehicleEF	LDT1	5.0800e-003	7.8400e-003
tblVehicleEF	LDT1	0.10	0.17
tblVehicleEF	LDT1	0.00	1.74
tblVehicleEF	LDT1	1.15	0.04
tblVehicleEF	LDT1	3.13	0.00
tblVehicleEF	LDT1	301.43	309.85
tblVehicleEF	LDT1	67.36	69.33
tblVehicleEF	LDT1	8.1300e-003	0.01
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.11	0.19
tblVehicleEF	LDT1	0.34	0.59
tblVehicleEF	LDT1	0.04	0.01
tblVehicleEF	LDT1	1.9650e-003	2.2410e-003
tblVehicleEF	LDT1	2.6990e-003	3.8680e-003
tblVehicleEF	LDT1	1.8090e-003	2.2650e-003
tblVehicleEF	LDT1	2.4820e-003	2.7540e-003
tblVehicleEF	LDT1	0.04	3.60
tblVehicleEF	LDT1	0.28	0.33
tblVehicleEF	LDT1	0.03	3.9370e-003
tblVehicleEF	LDT1	0.02	0.04
tblVehicleEF	LDT1	0.17	0.20

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.54	0.99
tblVehicleEF	LDT1	2.9220e-003	3.0660e-003
tblVehicleEF	LDT1	6.5300e-004	6.8600e-004
tblVehicleEF	LDT1	0.04	3.60
tblVehicleEF	LDT1	0.28	0.33
tblVehicleEF	LDT1	0.03	3.9370e-003
tblVehicleEF	LDT1	0.03	0.05
tblVehicleEF	LDT1	0.17	0.20
tblVehicleEF	LDT1	0.60	1.09
tblVehicleEF	LDT2	4.1340e-003	3.1630e-003
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.00	0.97
tblVehicleEF	LDT2	0.97	0.04
tblVehicleEF	LDT2	3.15	0.00
tblVehicleEF	LDT2	332.07	345.49
tblVehicleEF	LDT2	72.07	76.14
tblVehicleEF	LDT2	7.3900e-003	0.01
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.09	0.08
tblVehicleEF	LDT2	0.35	0.41
tblVehicleEF	LDT2	0.04	9.7250e-003
tblVehicleEF	LDT2	1.5570e-003	1.4450e-003
tblVehicleEF	LDT2	1.9590e-003	2.2230e-003
tblVehicleEF	LDT2	1.4330e-003	1.7190e-003
tblVehicleEF	LDT2	1.8010e-003	1.9390e-003
tblVehicleEF	LDT2	0.09	1.73
tblVehicleEF	LDT2	0.18	0.23
tblVehicleEF	LDT2	0.06	0.03
tblVehicleEF	LDT2	0.02	0.01

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.08	0.11
tblVehicleEF	LDT2	0.42	0.49
tblVehicleEF	LDT2	3.2190e-003	3.4180e-003
tblVehicleEF	LDT2	6.9900e-004	7.5300e-004
tblVehicleEF	LDT2	0.09	1.73
tblVehicleEF	LDT2	0.18	0.23
tblVehicleEF	LDT2	0.06	0.03
tblVehicleEF	LDT2	0.03	0.02
tblVehicleEF	LDT2	0.08	0.11
tblVehicleEF	LDT2	0.46	0.53
tblVehicleEF	LDT2	4.6930e-003	3.4320e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.00	1.28
tblVehicleEF	LDT2	1.14	0.04
tblVehicleEF	LDT2	2.41	0.00
tblVehicleEF	LDT2	353.44	344.68
tblVehicleEF	LDT2	70.57	74.53
tblVehicleEF	LDT2	6.7620e-003	9.5910e-003
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.08	0.07
tblVehicleEF	LDT2	0.31	0.36
tblVehicleEF	LDT2	0.04	9.7250e-003
tblVehicleEF	LDT2	1.5570e-003	1.4450e-003
tblVehicleEF	LDT2	1.9590e-003	2.2230e-003
tblVehicleEF	LDT2	1.4330e-003	1.7190e-003
tblVehicleEF	LDT2	1.8010e-003	1.9390e-003
tblVehicleEF	LDT2	0.27	2.35
tblVehicleEF	LDT2	0.21	0.23
tblVehicleEF	LDT2	0.15	0.06

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.33	0.38
tblVehicleEF	LDT2	3.4260e-003	3.4100e-003
tblVehicleEF	LDT2	6.8400e-004	7.3800e-004
tblVehicleEF	LDT2	0.27	2.35
tblVehicleEF	LDT2	0.21	0.23
tblVehicleEF	LDT2	0.15	0.06
tblVehicleEF	LDT2	0.03	0.02
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.36	0.42
tblVehicleEF	LDT2	3.9400e-003	3.0480e-003
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.00	0.90
tblVehicleEF	LDT2	0.94	0.04
tblVehicleEF	LDT2	3.70	0.00
tblVehicleEF	LDT2	326.74	344.73
tblVehicleEF	LDT2	73.15	77.25
tblVehicleEF	LDT2	7.7750e-003	0.01
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.38	0.45
tblVehicleEF	LDT2	0.04	9.7250e-003
tblVehicleEF	LDT2	1.5570e-003	1.4450e-003
tblVehicleEF	LDT2	1.9590e-003	2.2230e-003
tblVehicleEF	LDT2	1.4330e-003	1.7190e-003
tblVehicleEF	LDT2	1.8010e-003	1.9390e-003
tblVehicleEF	LDT2	0.03	1.57
tblVehicleEF	LDT2	0.19	0.24

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.02	3.0500e-003
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.48	0.55
tblVehicleEF	LDT2	3.1670e-003	3.4100e-003
tblVehicleEF	LDT2	7.0900e-004	7.6400e-004
tblVehicleEF	LDT2	0.03	1.57
tblVehicleEF	LDT2	0.19	0.24
tblVehicleEF	LDT2	0.02	3.0500e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.53	0.60
tblVehicleEF	LHD1	3.8970e-003	0.05
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.16	1.34
tblVehicleEF	LHD1	1.42	0.09
tblVehicleEF	LHD1	1.01	2.18
tblVehicleEF	LHD1	9.69	9.48
tblVehicleEF	LHD1	762.97	799.85
tblVehicleEF	LHD1	9.19	11.50
tblVehicleEF	LHD1	1.0100e-003	8.6900e-004
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.10	1.32
tblVehicleEF	LHD1	2.08	1.82
tblVehicleEF	LHD1	0.26	0.31
tblVehicleEF	LHD1	1.1550e-003	0.02
tblVehicleEF	LHD1	0.08	0.08

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.04
tblVehicleEF	LHD1	2.6000e-004	2.2800e-004
tblVehicleEF	LHD1	1.1050e-003	9.1200e-004
tblVehicleEF	LHD1	2.5610e-003	2.4990e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3900e-004	3.4700e-004
tblVehicleEF	LHD1	2.3960e-003	1.83
tblVehicleEF	LHD1	0.09	0.13
tblVehicleEF	LHD1	0.02	0.26
tblVehicleEF	LHD1	9.3000e-004	6.7800e-004
tblVehicleEF	LHD1	0.16	0.19
tblVehicleEF	LHD1	0.37	0.59
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	9.3000e-005	9.2000e-005
tblVehicleEF	LHD1	7.4080e-003	7.7890e-003
tblVehicleEF	LHD1	9.1000e-005	1.1400e-004
tblVehicleEF	LHD1	2.3960e-003	1.83
tblVehicleEF	LHD1	0.09	0.13
tblVehicleEF	LHD1	0.03	0.36
tblVehicleEF	LHD1	9.3000e-004	6.7800e-004
tblVehicleEF	LHD1	0.19	0.23
tblVehicleEF	LHD1	0.37	0.59
tblVehicleEF	LHD1	0.08	0.10
tblVehicleEF	LHD1	3.9130e-003	0.05
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.16	1.38
tblVehicleEF	LHD1	1.46	0.09

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.90	2.18
tblVehicleEF	LHD1	9.69	9.48
tblVehicleEF	LHD1	763.03	800.00
tblVehicleEF	LHD1	9.00	11.12
tblVehicleEF	LHD1	1.0130e-003	8.7200e-004
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.10	1.32
tblVehicleEF	LHD1	1.96	1.72
tblVehicleEF	LHD1	0.24	0.29
tblVehicleEF	LHD1	1.1550e-003	0.02
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.04
tblVehicleEF	LHD1	2.6000e-004	2.2800e-004
tblVehicleEF	LHD1	1.1050e-003	9.1200e-004
tblVehicleEF	LHD1	2.5610e-003	2.4990e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3900e-004	3.4700e-004
tblVehicleEF	LHD1	7.0290e-003	2.50
tblVehicleEF	LHD1	0.11	0.13
tblVehicleEF	LHD1	0.02	0.26
tblVehicleEF	LHD1	2.2240e-003	1.2230e-003
tblVehicleEF	LHD1	0.16	0.19
tblVehicleEF	LHD1	0.36	0.55
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	9.3000e-005	9.2000e-005
tblVehicleEF	LHD1	7.4090e-003	7.7900e-003
tblVehicleEF	LHD1	8.9000e-005	1.1000e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	7.0290e-003	2.50
tblVehicleEF	LHD1	0.11	0.13
tblVehicleEF	LHD1	0.03	0.36
tblVehicleEF	LHD1	2.2240e-003	1.2230e-003
tblVehicleEF	LHD1	0.20	0.23
tblVehicleEF	LHD1	0.36	0.55
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	3.8870e-003	0.05
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.16	1.32
tblVehicleEF	LHD1	1.40	0.09
tblVehicleEF	LHD1	1.08	2.18
tblVehicleEF	LHD1	9.69	9.48
tblVehicleEF	LHD1	762.92	799.74
tblVehicleEF	LHD1	9.32	11.70
tblVehicleEF	LHD1	1.0080e-003	8.6700e-004
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.10	1.32
tblVehicleEF	LHD1	2.10	1.84
tblVehicleEF	LHD1	0.28	0.33
tblVehicleEF	LHD1	1.1550e-003	0.02
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.04
tblVehicleEF	LHD1	2.6000e-004	2.2800e-004
tblVehicleEF	LHD1	1.1050e-003	9.1200e-004
tblVehicleEF	LHD1	2.5610e-003	2.4990e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3900e-004	3.4700e-004
tblVehicleEF	LHD1	7.1000e-004	1.64
tblVehicleEF	LHD1	0.10	0.15
tblVehicleEF	LHD1	0.02	0.26
tblVehicleEF	LHD1	3.1700e-004	8.0000e-005
tblVehicleEF	LHD1	0.16	0.19
tblVehicleEF	LHD1	0.41	0.65
tblVehicleEF	LHD1	0.08	0.10
tblVehicleEF	LHD1	9.3000e-005	9.2000e-005
tblVehicleEF	LHD1	7.4080e-003	7.7880e-003
tblVehicleEF	LHD1	9.2000e-005	1.1600e-004
tblVehicleEF	LHD1	7.1000e-004	1.64
tblVehicleEF	LHD1	0.10	0.15
tblVehicleEF	LHD1	0.03	0.36
tblVehicleEF	LHD1	3.1700e-004	8.0000e-005
tblVehicleEF	LHD1	0.19	0.22
tblVehicleEF	LHD1	0.41	0.65
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD2	1.8220e-003	0.02
tblVehicleEF	LHD2	8.2350e-003	9.0000e-003
tblVehicleEF	LHD2	4.7120e-003	5.1890e-003
tblVehicleEF	LHD2	0.11	0.63
tblVehicleEF	LHD2	0.86	0.15
tblVehicleEF	LHD2	0.34	1.34
tblVehicleEF	LHD2	16.04	15.20
tblVehicleEF	LHD2	721.68	769.54
tblVehicleEF	LHD2	4.06	6.64
tblVehicleEF	LHD2	2.2840e-003	2.0090e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	7.6360e-003	0.01
tblVehicleEF	LHD2	0.15	1.89
tblVehicleEF	LHD2	1.86	1.54
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.7450e-003	0.02
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	7.0000e-005	4.3000e-005
tblVehicleEF	LHD2	1.6690e-003	1.4780e-003
tblVehicleEF	LHD2	2.8250e-003	2.7500e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4000e-005	1.2300e-004
tblVehicleEF	LHD2	5.4400e-004	0.42
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.16
tblVehicleEF	LHD2	2.3400e-004	2.6200e-004
tblVehicleEF	LHD2	0.15	0.18
tblVehicleEF	LHD2	0.07	0.15
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.5200e-004	1.4500e-004
tblVehicleEF	LHD2	6.9100e-003	7.4040e-003
tblVehicleEF	LHD2	4.0000e-005	6.6000e-005
tblVehicleEF	LHD2	5.4400e-004	0.42
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.02	0.20
tblVehicleEF	LHD2	2.3400e-004	2.6200e-004
tblVehicleEF	LHD2	0.18	0.20

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	0.07	0.15
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	1.8280e-003	0.02
tblVehicleEF	LHD2	8.2950e-003	9.0440e-003
tblVehicleEF	LHD2	4.3730e-003	4.8250e-003
tblVehicleEF	LHD2	0.11	0.64
tblVehicleEF	LHD2	0.86	0.15
tblVehicleEF	LHD2	0.30	1.34
tblVehicleEF	LHD2	16.04	15.20
tblVehicleEF	LHD2	721.69	769.57
tblVehicleEF	LHD2	4.00	6.48
tblVehicleEF	LHD2	2.2850e-003	2.0110e-003
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	7.2480e-003	0.01
tblVehicleEF	LHD2	0.15	1.89
tblVehicleEF	LHD2	1.77	1.46
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	1.7450e-003	0.02
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	7.0000e-005	4.3000e-005
tblVehicleEF	LHD2	1.6690e-003	1.4780e-003
tblVehicleEF	LHD2	2.8250e-003	2.7500e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4000e-005	1.2300e-004
tblVehicleEF	LHD2	1.5620e-003	0.56
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.16

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	5.4600e-004	4.5700e-004
tblVehicleEF	LHD2	0.15	0.18
tblVehicleEF	LHD2	0.07	0.14
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.5200e-004	1.4500e-004
tblVehicleEF	LHD2	6.9100e-003	7.4040e-003
tblVehicleEF	LHD2	4.0000e-005	6.4000e-005
tblVehicleEF	LHD2	1.5620e-003	0.56
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.20
tblVehicleEF	LHD2	5.4600e-004	4.5700e-004
tblVehicleEF	LHD2	0.18	0.20
tblVehicleEF	LHD2	0.07	0.14
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.8180e-003	0.02
tblVehicleEF	LHD2	8.1930e-003	8.9700e-003
tblVehicleEF	LHD2	4.9400e-003	5.4330e-003
tblVehicleEF	LHD2	0.11	0.63
tblVehicleEF	LHD2	0.85	0.15
tblVehicleEF	LHD2	0.36	1.34
tblVehicleEF	LHD2	16.04	15.20
tblVehicleEF	LHD2	721.67	769.51
tblVehicleEF	LHD2	4.10	6.72
tblVehicleEF	LHD2	2.2830e-003	2.0080e-003
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	7.9540e-003	0.01
tblVehicleEF	LHD2	0.15	1.89
tblVehicleEF	LHD2	1.88	1.56
tblVehicleEF	LHD2	0.11	0.10

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	1.7450e-003	0.02
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	7.0000e-005	4.3000e-005
tblVehicleEF	LHD2	1.6690e-003	1.4780e-003
tblVehicleEF	LHD2	2.8250e-003	2.7500e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4000e-005	1.2300e-004
tblVehicleEF	LHD2	1.7500e-004	0.38
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.16
tblVehicleEF	LHD2	8.2000e-005	3.4000e-005
tblVehicleEF	LHD2	0.15	0.18
tblVehicleEF	LHD2	0.08	0.17
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.5200e-004	1.4500e-004
tblVehicleEF	LHD2	6.9100e-003	7.4040e-003
tblVehicleEF	LHD2	4.1000e-005	6.7000e-005
tblVehicleEF	LHD2	1.7500e-004	0.38
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.02	0.20
tblVehicleEF	LHD2	8.2000e-005	3.4000e-005
tblVehicleEF	LHD2	0.18	0.20
tblVehicleEF	LHD2	0.08	0.17
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	MCY	0.36	0.22
tblVehicleEF	MCY	0.28	0.24
tblVehicleEF	MCY	0.00	17.20

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	21.89	8.4200e-003
tblVehicleEF	MCY	9.74	0.00
tblVehicleEF	MCY	216.40	223.35
tblVehicleEF	MCY	65.63	73.13
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.21	0.74
tblVehicleEF	MCY	0.28	0.19
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.0160e-003	1.9560e-003
tblVehicleEF	MCY	3.1380e-003	3.5930e-003
tblVehicleEF	MCY	1.8900e-003	2.0980e-003
tblVehicleEF	MCY	2.9630e-003	3.3090e-003
tblVehicleEF	MCY	1.16	5.50
tblVehicleEF	MCY	0.95	0.81
tblVehicleEF	MCY	0.54	0.19
tblVehicleEF	MCY	2.54	1.53
tblVehicleEF	MCY	1.03	0.83
tblVehicleEF	MCY	2.24	1.88
tblVehicleEF	MCY	2.1410e-003	2.2100e-003
tblVehicleEF	MCY	6.4900e-004	7.2400e-004
tblVehicleEF	MCY	1.16	5.50
tblVehicleEF	MCY	0.95	0.81
tblVehicleEF	MCY	0.54	0.19
tblVehicleEF	MCY	3.09	1.80
tblVehicleEF	MCY	1.03	0.83
tblVehicleEF	MCY	2.43	2.05
tblVehicleEF	MCY	0.34	0.21
tblVehicleEF	MCY	0.22	0.19

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.00	16.75
tblVehicleEF	MCY	20.77	8.4200e-003
tblVehicleEF	MCY	8.10	0.00
tblVehicleEF	MCY	214.12	217.02
tblVehicleEF	MCY	61.31	65.04
tblVehicleEF	MCY	0.06	0.07
tblVehicleEF	MCY	0.01	0.02
tblVehicleEF	MCY	1.02	0.62
tblVehicleEF	MCY	0.25	0.17
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.0160e-003	1.9560e-003
tblVehicleEF	MCY	3.1380e-003	3.5930e-003
tblVehicleEF	MCY	1.8900e-003	2.0980e-003
tblVehicleEF	MCY	2.9630e-003	3.3090e-003
tblVehicleEF	MCY	3.88	9.23
tblVehicleEF	MCY	1.46	0.83
tblVehicleEF	MCY	1.61	0.33
tblVehicleEF	MCY	2.40	1.46
tblVehicleEF	MCY	0.99	0.76
tblVehicleEF	MCY	1.72	1.44
tblVehicleEF	MCY	2.1190e-003	2.1480e-003
tblVehicleEF	MCY	6.0700e-004	6.4400e-004
tblVehicleEF	MCY	3.88	9.23
tblVehicleEF	MCY	1.46	0.83
tblVehicleEF	MCY	1.61	0.33
tblVehicleEF	MCY	2.92	1.72
tblVehicleEF	MCY	0.99	0.76
tblVehicleEF	MCY	1.87	1.57
tblVehicleEF	MCY	0.37	0.22

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.33	0.28
tblVehicleEF	MCY	0.00	18.05
tblVehicleEF	MCY	23.58	8.4200e-003
tblVehicleEF	MCY	11.09	0.00
tblVehicleEF	MCY	219.53	227.17
tblVehicleEF	MCY	69.05	77.44
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.29	0.78
tblVehicleEF	MCY	0.30	0.20
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.0160e-003	1.9560e-003
tblVehicleEF	MCY	3.1380e-003	3.5930e-003
tblVehicleEF	MCY	1.8900e-003	2.0980e-003
tblVehicleEF	MCY	2.9630e-003	3.3090e-003
tblVehicleEF	MCY	0.25	4.51
tblVehicleEF	MCY	1.04	0.92
tblVehicleEF	MCY	0.13	0.01
tblVehicleEF	MCY	2.67	1.60
tblVehicleEF	MCY	1.19	0.97
tblVehicleEF	MCY	2.62	2.21
tblVehicleEF	MCY	2.1720e-003	2.2480e-003
tblVehicleEF	MCY	6.8300e-004	7.6600e-004
tblVehicleEF	MCY	0.25	4.51
tblVehicleEF	MCY	1.04	0.92
tblVehicleEF	MCY	0.13	0.01
tblVehicleEF	MCY	3.24	1.88
tblVehicleEF	MCY	1.19	0.97
tblVehicleEF	MCY	2.85	2.40

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	4.3610e-003	4.3240e-003
tblVehicleEF	MDV	0.09	0.13
tblVehicleEF	MDV	0.00	1.13
tblVehicleEF	MDV	0.97	0.03
tblVehicleEF	MDV	3.52	0.00
tblVehicleEF	MDV	400.27	409.93
tblVehicleEF	MDV	86.32	90.72
tblVehicleEF	MDV	9.2270e-003	0.01
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.39	0.55
tblVehicleEF	MDV	0.04	9.8980e-003
tblVehicleEF	MDV	1.6690e-003	1.5930e-003
tblVehicleEF	MDV	2.0180e-003	2.4250e-003
tblVehicleEF	MDV	1.5420e-003	1.9070e-003
tblVehicleEF	MDV	1.8560e-003	2.1470e-003
tblVehicleEF	MDV	0.10	2.25
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.07	0.04
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.11
tblVehicleEF	MDV	0.49	0.69
tblVehicleEF	MDV	3.8780e-003	4.0510e-003
tblVehicleEF	MDV	8.3700e-004	8.9800e-004
tblVehicleEF	MDV	0.10	2.25
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.07	0.04
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.11

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.54	0.75
tblVehicleEF	MDV	4.9620e-003	4.6910e-003
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.00	1.50
tblVehicleEF	MDV	1.14	0.03
tblVehicleEF	MDV	2.68	0.00
tblVehicleEF	MDV	422.16	409.07
tblVehicleEF	MDV	84.61	88.79
tblVehicleEF	MDV	8.5790e-003	0.01
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.35	0.49
tblVehicleEF	MDV	0.04	9.8980e-003
tblVehicleEF	MDV	1.6690e-003	1.5930e-003
tblVehicleEF	MDV	2.0180e-003	2.4250e-003
tblVehicleEF	MDV	1.5420e-003	1.9070e-003
tblVehicleEF	MDV	1.8560e-003	2.1470e-003
tblVehicleEF	MDV	0.29	3.03
tblVehicleEF	MDV	0.22	0.25
tblVehicleEF	MDV	0.17	0.06
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.39	0.54
tblVehicleEF	MDV	4.0900e-003	4.0420e-003
tblVehicleEF	MDV	8.2000e-004	8.7900e-004
tblVehicleEF	MDV	0.29	3.03
tblVehicleEF	MDV	0.22	0.25
tblVehicleEF	MDV	0.17	0.06
tblVehicleEF	MDV	0.03	0.03

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.43	0.59
tblVehicleEF	MDV	4.1590e-003	4.1690e-003
tblVehicleEF	MDV	0.11	0.14
tblVehicleEF	MDV	0.00	1.05
tblVehicleEF	MDV	0.94	0.03
tblVehicleEF	MDV	4.14	0.00
tblVehicleEF	MDV	394.82	409.15
tblVehicleEF	MDV	87.55	92.05
tblVehicleEF	MDV	9.6230e-003	0.01
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.10	0.13
tblVehicleEF	MDV	0.43	0.60
tblVehicleEF	MDV	0.04	9.8980e-003
tblVehicleEF	MDV	1.6690e-003	1.5930e-003
tblVehicleEF	MDV	2.0180e-003	2.4250e-003
tblVehicleEF	MDV	1.5420e-003	1.9070e-003
tblVehicleEF	MDV	1.8560e-003	2.1470e-003
tblVehicleEF	MDV	0.03	2.05
tblVehicleEF	MDV	0.20	0.25
tblVehicleEF	MDV	0.02	3.4740e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.14
tblVehicleEF	MDV	0.56	0.78
tblVehicleEF	MDV	3.8250e-003	4.0430e-003
tblVehicleEF	MDV	8.4900e-004	9.1100e-004
tblVehicleEF	MDV	0.03	2.05
tblVehicleEF	MDV	0.20	0.25
tblVehicleEF	MDV	0.02	3.4740e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.11	0.14
tblVehicleEF	MDV	0.62	0.85
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.00	1.12
tblVehicleEF	MH	1.32	0.08
tblVehicleEF	MH	2.03	0.00
tblVehicleEF	MH	1,556.51	1,571.75
tblVehicleEF	MH	17.47	19.72
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.17	2.05
tblVehicleEF	MH	0.24	0.29
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	2.2800e-004	2.5000e-004
tblVehicleEF	MH	3.3390e-003	3.3180e-003
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	2.1000e-004	2.9300e-004
tblVehicleEF	MH	0.75	3.05
tblVehicleEF	MH	0.06	0.08
tblVehicleEF	MH	0.22	0.17
tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.09	0.10
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.7300e-004	1.9500e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.75	3.05
tblVehicleEF	MH	0.06	0.08
tblVehicleEF	MH	0.22	0.17
tblVehicleEF	MH	0.12	0.11
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.00	1.17
tblVehicleEF	MH	1.38	0.08
tblVehicleEF	MH	1.78	0.00
tblVehicleEF	MH	1,556.60	1,572.02
tblVehicleEF	MH	17.04	18.99
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.03	1.92
tblVehicleEF	MH	0.22	0.27
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	2.2800e-004	2.5000e-004
tblVehicleEF	MH	3.3390e-003	3.3180e-003
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	2.1000e-004	2.9300e-004
tblVehicleEF	MH	2.19	4.24
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.49	0.31
tblVehicleEF	MH	0.10	0.09
tblVehicleEF	MH	0.02	0.03

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.6900e-004	1.8800e-004
tblVehicleEF	MH	2.19	4.24
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.49	0.31
tblVehicleEF	MH	0.12	0.12
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.09	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.00	1.09
tblVehicleEF	MH	1.29	0.08
tblVehicleEF	MH	2.20	0.00
tblVehicleEF	MH	1,556.44	1,571.55
tblVehicleEF	MH	17.75	20.12
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.21	2.08
tblVehicleEF	MH	0.26	0.31
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	2.2800e-004	2.5000e-004
tblVehicleEF	MH	3.3390e-003	3.3180e-003
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	2.1000e-004	2.9300e-004
tblVehicleEF	MH	0.24	2.73
tblVehicleEF	MH	0.07	0.09

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.09	0.02
tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.7600e-004	1.9900e-004
tblVehicleEF	MH	0.24	2.73
tblVehicleEF	MH	0.07	0.09
tblVehicleEF	MH	0.09	0.02
tblVehicleEF	MH	0.12	0.11
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.11	0.12
tblVehicleEF	MHD	3.3600e-003	0.03
tblVehicleEF	MHD	2.1250e-003	2.5480e-003
tblVehicleEF	MHD	8.8450e-003	3.7150e-003
tblVehicleEF	MHD	0.58	0.25
tblVehicleEF	MHD	0.27	0.20
tblVehicleEF	MHD	1.16	8.14
tblVehicleEF	MHD	139.17	142.79
tblVehicleEF	MHD	1,082.52	1,113.05
tblVehicleEF	MHD	8.62	11.86
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.15	0.15
tblVehicleEF	MHD	6.2130e-003	7.9990e-003
tblVehicleEF	MHD	0.89	13.26
tblVehicleEF	MHD	1.79	1.09
tblVehicleEF	MHD	1.74	1.62
tblVehicleEF	MHD	7.3100e-004	0.02
tblVehicleEF	MHD	0.13	0.05

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	9.5570e-003	0.01
tblVehicleEF	MHD	1.1700e-004	5.0000e-005
tblVehicleEF	MHD	6.9900e-004	8.4100e-004
tblVehicleEF	MHD	9.1380e-003	8.0590e-003
tblVehicleEF	MHD	1.0700e-004	1.4300e-004
tblVehicleEF	MHD	4.3100e-004	0.25
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.02	0.30
tblVehicleEF	MHD	1.7600e-004	1.5400e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	1.3170e-003	1.3520e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	8.5000e-005	1.1700e-004
tblVehicleEF	MHD	4.3100e-004	0.25
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.03	0.37
tblVehicleEF	MHD	1.7600e-004	1.5400e-004
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	3.1990e-003	0.03
tblVehicleEF	MHD	2.1860e-003	2.6160e-003
tblVehicleEF	MHD	8.1930e-003	3.4390e-003
tblVehicleEF	MHD	0.51	0.26
tblVehicleEF	MHD	0.28	0.20
tblVehicleEF	MHD	1.03	7.55
tblVehicleEF	MHD	139.17	143.24

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	1,082.53	1,113.08
tblVehicleEF	MHD	8.39	11.35
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.15	0.15
tblVehicleEF	MHD	5.9090e-003	7.4930e-003
tblVehicleEF	MHD	0.88	12.96
tblVehicleEF	MHD	1.70	1.04
tblVehicleEF	MHD	1.73	1.61
tblVehicleEF	MHD	6.2300e-004	0.02
tblVehicleEF	MHD	0.13	0.05
tblVehicleEF	MHD	9.5570e-003	0.01
tblVehicleEF	MHD	1.1700e-004	5.0000e-005
tblVehicleEF	MHD	5.9600e-004	7.1500e-004
tblVehicleEF	MHD	9.1380e-003	8.0590e-003
tblVehicleEF	MHD	1.0700e-004	1.4300e-004
tblVehicleEF	MHD	1.2790e-003	0.39
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.02	0.30
tblVehicleEF	MHD	4.3400e-004	2.6700e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	1.3180e-003	1.3570e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	8.3000e-005	1.1200e-004
tblVehicleEF	MHD	1.2790e-003	0.39
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.03	0.36
tblVehicleEF	MHD	4.3400e-004	2.6700e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	3.5160e-003	0.03
tblVehicleEF	MHD	2.0810e-003	2.4990e-003
tblVehicleEF	MHD	9.2990e-003	3.9060e-003
tblVehicleEF	MHD	0.64	0.25
tblVehicleEF	MHD	0.27	0.20
tblVehicleEF	MHD	1.26	8.82
tblVehicleEF	MHD	139.27	142.32
tblVehicleEF	MHD	1,082.51	1,113.03
tblVehicleEF	MHD	8.77	12.14
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.15	0.15
tblVehicleEF	MHD	6.4780e-003	8.3090e-003
tblVehicleEF	MHD	0.91	13.67
tblVehicleEF	MHD	1.81	1.11
tblVehicleEF	MHD	1.74	1.62
tblVehicleEF	MHD	8.8000e-004	0.03
tblVehicleEF	MHD	0.13	0.05
tblVehicleEF	MHD	9.5570e-003	0.01
tblVehicleEF	MHD	1.1700e-004	5.0000e-005
tblVehicleEF	MHD	8.4200e-004	1.0150e-003
tblVehicleEF	MHD	9.1380e-003	8.0590e-003
tblVehicleEF	MHD	1.0700e-004	1.4300e-004
tblVehicleEF	MHD	1.2800e-004	0.22
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.02	0.30
tblVehicleEF	MHD	5.8000e-005	2.0000e-005

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	1.3180e-003	1.3480e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	8.7000e-005	1.2000e-004
tblVehicleEF	MHD	1.2800e-004	0.22
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.03	0.36
tblVehicleEF	MHD	5.8000e-005	2.0000e-005
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	OBUS	7.4360e-003	0.09
tblVehicleEF	OBUS	6.8750e-003	0.01
tblVehicleEF	OBUS	0.02	9.6100e-003
tblVehicleEF	OBUS	0.65	0.70
tblVehicleEF	OBUS	0.86	0.17
tblVehicleEF	OBUS	2.78	8.47
tblVehicleEF	OBUS	101.76	183.31
tblVehicleEF	OBUS	1,372.58	1,475.89
tblVehicleEF	OBUS	18.07	16.49
tblVehicleEF	OBUS	0.01	0.03
tblVehicleEF	OBUS	0.14	0.16
tblVehicleEF	OBUS	0.02	0.01
tblVehicleEF	OBUS	0.41	6.86
tblVehicleEF	OBUS	1.60	1.68
tblVehicleEF	OBUS	1.00	1.29
tblVehicleEF	OBUS	1.3800e-004	0.01

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	9.0190e-003	0.04
tblVehicleEF	OBUS	2.0400e-004	7.8000e-005
tblVehicleEF	OBUS	1.3200e-004	2.6200e-004
tblVehicleEF	OBUS	8.6140e-003	0.01
tblVehicleEF	OBUS	1.8800e-004	1.5500e-004
tblVehicleEF	OBUS	1.5930e-003	0.89
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.05	0.63
tblVehicleEF	OBUS	5.4800e-004	3.6800e-004
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.07	0.08
tblVehicleEF	OBUS	0.12	0.05
tblVehicleEF	OBUS	9.6700e-004	1.7370e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.7900e-004	1.6300e-004
tblVehicleEF	OBUS	1.5930e-003	0.89
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.07	0.80
tblVehicleEF	OBUS	5.4800e-004	3.6800e-004
tblVehicleEF	OBUS	0.06	0.13
tblVehicleEF	OBUS	0.07	0.08
tblVehicleEF	OBUS	0.13	0.06
tblVehicleEF	OBUS	7.5440e-003	0.09
tblVehicleEF	OBUS	7.1540e-003	0.01
tblVehicleEF	OBUS	0.02	8.8650e-003
tblVehicleEF	OBUS	0.65	0.72
tblVehicleEF	OBUS	0.90	0.17
tblVehicleEF	OBUS	2.43	8.31

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	100.55	181.01
tblVehicleEF	OBUS	1,372.64	1,475.96
tblVehicleEF	OBUS	17.48	15.82
tblVehicleEF	OBUS	0.01	0.03
tblVehicleEF	OBUS	0.14	0.16
tblVehicleEF	OBUS	0.02	0.01
tblVehicleEF	OBUS	0.39	6.59
tblVehicleEF	OBUS	1.51	1.60
tblVehicleEF	OBUS	0.98	1.28
tblVehicleEF	OBUS	1.2200e-004	0.01
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	9.0190e-003	0.04
tblVehicleEF	OBUS	2.0400e-004	7.8000e-005
tblVehicleEF	OBUS	1.1700e-004	2.3200e-004
tblVehicleEF	OBUS	8.6140e-003	0.01
tblVehicleEF	OBUS	1.8800e-004	1.5500e-004
tblVehicleEF	OBUS	4.4540e-003	1.34
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.05	0.65
tblVehicleEF	OBUS	1.1940e-003	6.5300e-004
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.07	0.08
tblVehicleEF	OBUS	0.11	0.05
tblVehicleEF	OBUS	9.5500e-004	1.7150e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.7300e-004	1.5700e-004
tblVehicleEF	OBUS	4.4540e-003	1.34
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.07	0.82

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	1.1940e-003	6.5300e-004
tblVehicleEF	OBUS	0.06	0.13
tblVehicleEF	OBUS	0.07	0.08
tblVehicleEF	OBUS	0.12	0.05
tblVehicleEF	OBUS	7.3080e-003	0.09
tblVehicleEF	OBUS	6.6770e-003	0.01
tblVehicleEF	OBUS	0.02	0.01
tblVehicleEF	OBUS	0.66	0.69
tblVehicleEF	OBUS	0.84	0.17
tblVehicleEF	OBUS	3.01	8.69
tblVehicleEF	OBUS	103.44	186.48
tblVehicleEF	OBUS	1,372.54	1,475.84
tblVehicleEF	OBUS	18.46	16.86
tblVehicleEF	OBUS	0.01	0.03
tblVehicleEF	OBUS	0.14	0.16
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.44	7.24
tblVehicleEF	OBUS	1.62	1.70
tblVehicleEF	OBUS	1.01	1.30
tblVehicleEF	OBUS	1.5900e-004	0.02
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	9.0190e-003	0.04
tblVehicleEF	OBUS	2.0400e-004	7.8000e-005
tblVehicleEF	OBUS	1.5200e-004	3.0200e-004
tblVehicleEF	OBUS	8.6140e-003	0.01
tblVehicleEF	OBUS	1.8800e-004	1.5500e-004
tblVehicleEF	OBUS	5.6800e-004	0.81
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.05	0.60

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	2.2000e-004	5.6000e-005
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.08	0.09
tblVehicleEF	OBUS	0.13	0.06
tblVehicleEF	OBUS	9.8300e-004	1.7670e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.8300e-004	1.6700e-004
tblVehicleEF	OBUS	5.6800e-004	0.81
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.07	0.76
tblVehicleEF	OBUS	2.2000e-004	5.6000e-005
tblVehicleEF	OBUS	0.06	0.13
tblVehicleEF	OBUS	0.08	0.09
tblVehicleEF	OBUS	0.14	0.06
tblVehicleEF	SBUS	0.02	0.42
tblVehicleEF	SBUS	0.01	9.4050e-003
tblVehicleEF	SBUS	3.4210e-003	0.02
tblVehicleEF	SBUS	1.31	0.98
tblVehicleEF	SBUS	0.85	0.12
tblVehicleEF	SBUS	0.63	17.91
tblVehicleEF	SBUS	329.50	320.63
tblVehicleEF	SBUS	1,098.41	1,108.97
tblVehicleEF	SBUS	2.45	1.16
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.16	0.16
tblVehicleEF	SBUS	1.8320e-003	1.1770e-003
tblVehicleEF	SBUS	3.86	20.97
tblVehicleEF	SBUS	7.11	4.61
tblVehicleEF	SBUS	0.76	0.48

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	5.0480e-003	0.03
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.04	0.02
tblVehicleEF	SBUS	3.5000e-005	1.7400e-004
tblVehicleEF	SBUS	4.8290e-003	5.3920e-003
tblVehicleEF	SBUS	2.8640e-003	2.9050e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.2000e-005	1.3000e-005
tblVehicleEF	SBUS	9.6000e-004	0.83
tblVehicleEF	SBUS	8.7890e-003	7.3000e-004
tblVehicleEF	SBUS	0.13	2.00
tblVehicleEF	SBUS	2.4600e-004	1.7000e-005
tblVehicleEF	SBUS	0.13	0.09
tblVehicleEF	SBUS	0.02	1.8370e-003
tblVehicleEF	SBUS	0.02	0.12
tblVehicleEF	SBUS	3.1250e-003	3.0350e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	2.4000e-005	1.1000e-005
tblVehicleEF	SBUS	9.6000e-004	0.83
tblVehicleEF	SBUS	8.7890e-003	7.3000e-004
tblVehicleEF	SBUS	0.18	2.88
tblVehicleEF	SBUS	2.4600e-004	1.7000e-005
tblVehicleEF	SBUS	0.15	0.11
tblVehicleEF	SBUS	0.02	1.8370e-003
tblVehicleEF	SBUS	0.02	0.13
tblVehicleEF	SBUS	0.02	0.42
tblVehicleEF	SBUS	0.01	9.6850e-003
tblVehicleEF	SBUS	2.6630e-003	0.01

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	1.27	1.02
tblVehicleEF	SBUS	0.87	0.12
tblVehicleEF	SBUS	0.40	17.68
tblVehicleEF	SBUS	339.85	331.74
tblVehicleEF	SBUS	1,098.45	1,108.98
tblVehicleEF	SBUS	2.07	1.01
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.16	0.16
tblVehicleEF	SBUS	1.7190e-003	1.1050e-003
tblVehicleEF	SBUS	3.96	21.39
tblVehicleEF	SBUS	6.74	4.36
tblVehicleEF	SBUS	0.76	0.47
tblVehicleEF	SBUS	4.2620e-003	0.02
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.04	0.02
tblVehicleEF	SBUS	3.5000e-005	1.7400e-004
tblVehicleEF	SBUS	4.0780e-003	4.5510e-003
tblVehicleEF	SBUS	2.8640e-003	2.9050e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.2000e-005	1.3000e-005
tblVehicleEF	SBUS	2.9390e-003	1.46
tblVehicleEF	SBUS	0.01	7.3600e-004
tblVehicleEF	SBUS	0.13	2.00
tblVehicleEF	SBUS	6.0100e-004	2.8000e-005
tblVehicleEF	SBUS	0.13	0.09
tblVehicleEF	SBUS	0.02	1.5350e-003
tblVehicleEF	SBUS	0.02	0.09
tblVehicleEF	SBUS	3.2230e-003	3.1400e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	2.0000e-005	1.0000e-005
tblVehicleEF	SBUS	2.9390e-003	1.46
tblVehicleEF	SBUS	0.01	7.3600e-004
tblVehicleEF	SBUS	0.18	2.88
tblVehicleEF	SBUS	6.0100e-004	2.8000e-005
tblVehicleEF	SBUS	0.15	0.12
tblVehicleEF	SBUS	0.02	1.5350e-003
tblVehicleEF	SBUS	0.02	0.10
tblVehicleEF	SBUS	0.02	0.42
tblVehicleEF	SBUS	9.9210e-003	9.2250e-003
tblVehicleEF	SBUS	3.8640e-003	0.02
tblVehicleEF	SBUS	1.37	0.96
tblVehicleEF	SBUS	0.83	0.12
tblVehicleEF	SBUS	0.77	18.22
tblVehicleEF	SBUS	315.21	305.28
tblVehicleEF	SBUS	1,098.38	1,108.97
tblVehicleEF	SBUS	2.68	1.24
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.16	0.16
tblVehicleEF	SBUS	1.9210e-003	1.2290e-003
tblVehicleEF	SBUS	3.73	20.39
tblVehicleEF	SBUS	7.19	4.66
tblVehicleEF	SBUS	0.76	0.49
tblVehicleEF	SBUS	6.1330e-003	0.03
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.04	0.02
tblVehicleEF	SBUS	3.5000e-005	1.7400e-004

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	5.8680e-003	6.5530e-003
tblVehicleEF	SBUS	2.8640e-003	2.9050e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.2000e-005	1.3000e-005
tblVehicleEF	SBUS	2.9000e-004	0.69
tblVehicleEF	SBUS	8.9230e-003	7.3600e-004
tblVehicleEF	SBUS	0.13	2.00
tblVehicleEF	SBUS	1.0200e-004	3.0000e-006
tblVehicleEF	SBUS	0.13	0.09
tblVehicleEF	SBUS	0.03	2.4220e-003
tblVehicleEF	SBUS	0.02	0.13
tblVehicleEF	SBUS	2.9900e-003	2.8900e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	2.7000e-005	1.2000e-005
tblVehicleEF	SBUS	2.9000e-004	0.69
tblVehicleEF	SBUS	8.9230e-003	7.3600e-004
tblVehicleEF	SBUS	0.18	2.88
tblVehicleEF	SBUS	1.0200e-004	3.0000e-006
tblVehicleEF	SBUS	0.15	0.11
tblVehicleEF	SBUS	0.03	2.4220e-003
tblVehicleEF	SBUS	0.03	0.14
tblVehicleEF	UBUS	0.83	2.9490e-003
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.00	0.12
tblVehicleEF	UBUS	6.45	0.14
tblVehicleEF	UBUS	3.01	0.00
tblVehicleEF	UBUS	1,562.30	0.00
tblVehicleEF	UBUS	30.90	0.00
tblVehicleEF	UBUS	0.15	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.43	0.29
tblVehicleEF	UBUS	0.29	0.27
tblVehicleEF	UBUS	0.10	0.11
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.0130e-003	4.5220e-003
tblVehicleEF	UBUS	3.1700e-004	2.7200e-004
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	5.0200e-003	0.00
tblVehicleEF	UBUS	3.8030e-003	0.00
tblVehicleEF	UBUS	2.9200e-004	0.00
tblVehicleEF	UBUS	1.1700e-003	0.13
tblVehicleEF	UBUS	0.01	0.00
tblVehicleEF	UBUS	5.1700e-004	0.00
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	3.0160e-003	0.00
tblVehicleEF	UBUS	0.16	0.17
tblVehicleEF	UBUS	0.01	0.00
tblVehicleEF	UBUS	3.0600e-004	0.00
tblVehicleEF	UBUS	1.1700e-003	0.13
tblVehicleEF	UBUS	0.01	0.00
tblVehicleEF	UBUS	5.1700e-004	0.00
tblVehicleEF	UBUS	0.86	0.05
tblVehicleEF	UBUS	3.0160e-003	0.00
tblVehicleEF	UBUS	0.17	0.18
tblVehicleEF	UBUS	0.83	3.0010e-003
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	0.00	0.13
tblVehicleEF	UBUS	6.45	0.14

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	2.28	0.00
tblVehicleEF	UBUS	1,562.31	0.00
tblVehicleEF	UBUS	29.67	0.00
tblVehicleEF	UBUS	0.14	0.00
tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.41	0.28
tblVehicleEF	UBUS	0.26	0.25
tblVehicleEF	UBUS	0.10	0.11
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.0130e-003	4.5220e-003
tblVehicleEF	UBUS	3.1700e-004	2.7200e-004
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	5.0200e-003	0.00
tblVehicleEF	UBUS	3.8030e-003	0.00
tblVehicleEF	UBUS	2.9200e-004	0.00
tblVehicleEF	UBUS	3.5480e-003	0.25
tblVehicleEF	UBUS	0.02	0.00
tblVehicleEF	UBUS	1.3380e-003	0.00
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	2.8260e-003	0.00
tblVehicleEF	UBUS	0.13	0.14
tblVehicleEF	UBUS	0.01	0.00
tblVehicleEF	UBUS	2.9400e-004	0.00
tblVehicleEF	UBUS	3.5480e-003	0.25
tblVehicleEF	UBUS	0.02	0.00
tblVehicleEF	UBUS	1.3380e-003	0.00
tblVehicleEF	UBUS	0.86	0.05
tblVehicleEF	UBUS	2.8260e-003	0.00
tblVehicleEF	UBUS	0.15	0.16

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	0.83	2.9140e-003
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.00	0.12
tblVehicleEF	UBUS	6.45	0.14
tblVehicleEF	UBUS	3.52	0.00
tblVehicleEF	UBUS	1,562.29	0.00
tblVehicleEF	UBUS	31.76	0.00
tblVehicleEF	UBUS	0.15	0.00
tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.43	0.29
tblVehicleEF	UBUS	0.30	0.29
tblVehicleEF	UBUS	0.10	0.11
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.0130e-003	4.5220e-003
tblVehicleEF	UBUS	3.1700e-004	2.7200e-004
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	5.0200e-003	0.00
tblVehicleEF	UBUS	3.8030e-003	0.00
tblVehicleEF	UBUS	2.9200e-004	0.00
tblVehicleEF	UBUS	3.7300e-004	0.11
tblVehicleEF	UBUS	0.01	0.00
tblVehicleEF	UBUS	1.8800e-004	0.00
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	3.7740e-003	0.00
tblVehicleEF	UBUS	0.17	0.19
tblVehicleEF	UBUS	0.01	0.00
tblVehicleEF	UBUS	3.1400e-004	0.00
tblVehicleEF	UBUS	3.7300e-004	0.11
tblVehicleEF	UBUS	0.01	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	1.8800e-004	0.00
tblVehicleEF	UBUS	0.86	0.05
tblVehicleEF	UBUS	3.7740e-003	0.00
tblVehicleEF	UBUS	0.19	0.20
tblVehicleTrips	CC_TL	6.60	2.60
tblVehicleTrips	CC_TL	6.60	2.60
tblVehicleTrips	CNW_TL	6.60	2.60
tblVehicleTrips	CNW_TL	6.60	2.60
tblVehicleTrips	CW_TL	14.70	2.60
tblVehicleTrips	CW_TL	14.70	2.60
tblVehicleTrips	ST_TR	20.87	3.63
tblVehicleTrips	ST_TR	9.10	0.15
tblVehicleTrips	SU_TR	26.73	3.63
tblVehicleTrips	SU_TR	13.60	0.15
tblVehicleTrips	WD_TR	32.93	3.63
tblVehicleTrips	WD_TR	28.82	0.15

2.0 Emissions Summary

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0226	0.2378	0.1753	3.8000e-004	0.0433	0.0107	0.0540	0.0137	9.9400e-003	0.0237	0.0000	34.1044	34.1044	7.1000e-003	1.0300e-003	34.5898
2023	0.4573	1.2836	1.4410	2.8100e-003	0.0406	0.0539	0.0945	0.0110	0.0520	0.0629	0.0000	238.0646	238.0646	0.0336	4.0200e-003	240.1020
Maximum	**0.4573**	**1.2836**	**1.4410**	**2.8100e-003**	**0.0433**	**0.0539**	**0.0945**	**0.0137**	**0.0520**	**0.0629**	**0.0000**	**238.0646**	**238.0646**	**0.0336**	**4.0200e-003**	**240.1020**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	tons/yr										MT/yr					
2022	0.0226	0.2378	0.1753	3.8000e-004	0.0433	0.0107	0.0540	0.0137	9.9400e-003	0.0237	0.0000	34.1044	34.1044	7.1000e-003	1.0300e-003	34.5898
2023	0.4573	1.2836	1.4410	2.8100e-003	0.0406	0.0539	0.0945	0.0110	0.0520	0.0629	0.0000	238.0644	238.0644	0.0336	4.0200e-003	240.1018
Maximum	**0.4573**	**1.2836**	**1.4410**	**2.8100e-003**	**0.0433**	**0.0539**	**0.0945**	**0.0137**	**0.0520**	**0.0629**	**0.0000**	**238.0644**	**238.0644**	**0.0336**	**4.0200e-003**	**240.1018**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

Quarter	Start Date	End Date	Maximum Unmitigated ROG + NOX (tons/quarter)	Maximum Mitigated ROG + NOX (tons/quarter)
1	**1-1-2022**	**3-31-2022**	0.2702	0.2702
5	**1-1-2023**	**3-31-2023**	0.4548	0.4548
6	**4-1-2023**	**6-30-2023**	0.4582	0.4582
7	**7-1-2023**	**9-30-2023**	0.4632	0.4632
		Highest	0.4632	0.4632

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3126	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1500e-003	1.1500e-003	0.0000	0.0000	1.2200e-003
Energy	1.1600e-003	0.0105	8.8400e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	74.7528	74.7528	3.2900e-003	5.6000e-004	75.0034
Mobile	0.2755	0.1111	0.1873	5.7000e-004	0.0448	9.3000e-004	0.0457	0.0130	6.8000e-004	0.0137	0.0000	52.6813	52.6813	9.9300e-003	5.1000e-003	54.4500
Waste						0.0000	0.0000		0.0000	0.0000	74.3048	0.0000	74.3048	4.3913	0.0000	184.0871
Water						0.0000	0.0000		0.0000	0.0000	1.2050	6.9737	8.1787	0.1241	2.9600e-003	12.1637
Total	**0.5893**	**0.1216**	**0.1967**	**6.3000e-004**	**0.0448**	**1.7300e-003**	**0.0465**	**0.0130**	**1.4800e-003**	**0.0145**	**75.5098**	**134.4089**	**209.9188**	**4.5286**	**8.6200e-003**	**325.7054**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Area	0.3126	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1500e-003	1.1500e-003	0.0000	0.0000	1.2200e-003
Energy	1.1600e-003	0.0105	8.8400e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	74.7528	74.7528	3.2900e-003	5.6000e-004	75.0034
Mobile	0.2755	0.1111	0.1873	5.7000e-004	0.0448	9.3000e-004	0.0457	0.0130	6.8000e-004	0.0137	0.0000	52.6813	52.6813	9.9300e-003	5.1000e-003	54.4500
Waste						0.0000	0.0000		0.0000	0.0000	74.3048	0.0000	74.3048	4.3913	0.0000	184.0871
Water						0.0000	0.0000		0.0000	0.0000	1.2050	6.9737	8.1787	0.1241	2.9600e-003	12.1637
Total	**0.5893**	**0.1216**	**0.1967**	**6.3000e-004**	**0.0448**	**1.7300e-003**	**0.0465**	**0.0130**	**1.4800e-003**	**0.0145**	**75.5098**	**134.4089**	**209.9188**	**4.5286**	**8.6200e-003**	**325.7054**

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2022	1/28/2022	5	20	
2	Site Preparation	Site Preparation	1/29/2022	2/1/2022	5	2	
3	Grading	Grading	2/2/2022	2/7/2022	5	4	

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4	Building Construction	Building Construction	1/1/2023	10/6/2023	5	200	
5	Paving	Paving	10/7/2023	10/20/2023	5	10	
6	Architectural Coating	Architectural Coating	10/21/2023	11/3/2023	5	10	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 92,583; Non-Residential Outdoor: 30,861; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40
Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	177.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	27.00	11.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0195	0.0000	0.0195	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2120
Total	**0.0169**	**0.1662**	**0.1396**	**2.4000e-004**	**0.0195**	**8.3800e-003**	**0.0279**	**2.9500e-003**	**7.8300e-003**	**0.0108**	**0.0000**	**21.0777**	**21.0777**	**5.3700e-003**	**0.0000**	**21.2120**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9000e-004	0.0224	3.2300e-003	7.0000e-005	1.4800e-003	1.7000e-004	1.6500e-003	4.1000e-004	1.6000e-004	5.6000e-004	0.0000	6.2848	6.2848	2.0000e-005	9.8000e-004	6.5788
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.9000e-004	5.6700e-003	1.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3246	1.3246	4.0000e-005	4.0000e-005	1.3374
Total	**1.1500e-003**	**0.0229**	**8.9000e-003**	**8.0000e-005**	**3.0700e-003**	**1.8000e-004**	**3.2500e-003**	**8.3000e-004**	**1.7000e-004**	**9.9000e-004**	**0.0000**	**7.6094**	**7.6094**	**6.0000e-005**	**1.0200e-003**	**7.9162**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0195	0.0000	0.0195	2.9500e-003	0.0000	2.9500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	0.0169	0.1662	0.1396	2.4000e-004		8.3800e-003	8.3800e-003		7.8300e-003	7.8300e-003	0.0000	21.0777	21.0777	5.3700e-003	0.0000	21.2119
Total	**0.0169**	**0.1662**	**0.1396**	**2.4000e-004**	**0.0195**	**8.3800e-003**	**0.0279**	**2.9500e-003**	**7.8300e-003**	**0.0108**	**0.0000**	**21.0777**	**21.0777**	**5.3700e-003**	**0.0000**	**21.2119**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	4.9000e-004	0.0224	3.2300e-003	7.0000e-005	1.4800e-003	1.7000e-004	1.6500e-003	4.1000e-004	1.6000e-004	5.6000e-004	0.0000	6.2848	6.2848	2.0000e-005	9.8000e-004	6.5788
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	6.6000e-004	4.9000e-004	5.6700e-003	1.0000e-005	1.5900e-003	1.0000e-005	1.6000e-003	4.2000e-004	1.0000e-005	4.3000e-004	0.0000	1.3246	1.3246	4.0000e-005	4.0000e-005	1.3374
Total	**1.1500e-003**	**0.0229**	**8.9000e-003**	**8.0000e-005**	**3.0700e-003**	**1.8000e-004**	**3.2500e-003**	**8.3000e-004**	**1.7000e-004**	**9.9000e-004**	**0.0000**	**7.6094**	**7.6094**	**6.0000e-005**	**1.0200e-003**	**7.9162**

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0146	7.0900e-003	2.0000e-005		6.2000e-004	6.2000e-004		5.7000e-004	5.7000e-004	0.0000	1.5115	1.5115	4.9000e-004	0.0000	1.5238
Total	**1.3100e-003**	**0.0146**	**7.0900e-003**	**2.0000e-005**	**6.2700e-003**	**6.2000e-004**	**6.8900e-003**	**3.0000e-003**	**5.7000e-004**	**3.5700e-003**	**0.0000**	**1.5115**	**1.5115**	**4.9000e-004**	**0.0000**	**1.5238**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0815	0.0815	0.0000	0.0000	0.0823
Total	**4.0000e-005**	**3.0000e-005**	**3.5000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0815**	**0.0815**	**0.0000**	**0.0000**	**0.0823**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					6.2700e-003	0.0000	6.2700e-003	3.0000e-003	0.0000	3.0000e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	1.3100e-003	0.0146	7.0900e-003	2.0000e-005		6.2000e-004	6.2000e-004		5.7000e-004	5.7000e-004	0.0000	1.5115	1.5115	4.9000e-004	0.0000	1.5238
Total	**1.3100e-003**	**0.0146**	**7.0900e-003**	**2.0000e-005**	**6.2700e-003**	**6.2000e-004**	**6.8900e-003**	**3.0000e-003**	**5.7000e-004**	**3.5700e-003**	**0.0000**	**1.5115**	**1.5115**	**4.9000e-004**	**0.0000**	**1.5238**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	4.0000e-005	3.0000e-005	3.5000e-004	0.0000	1.0000e-004	0.0000	1.0000e-004	3.0000e-005	0.0000	3.0000e-005	0.0000	0.0815	0.0815	0.0000	0.0000	0.0823
Total	**4.0000e-005**	**3.0000e-005**	**3.5000e-004**	**0.0000**	**1.0000e-004**	**0.0000**	**1.0000e-004**	**3.0000e-005**	**0.0000**	**3.0000e-005**	**0.0000**	**0.0815**	**0.0815**	**0.0000**	**0.0000**	**0.0823**

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0142	0.0000	0.0142	6.8500e-003	0.0000	6.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0800e-003	0.0340	0.0184	4.0000e-005		1.4800e-003	1.4800e-003		1.3700e-003	1.3700e-003	0.0000	3.6205	3.6205	1.1700e-003	0.0000	3.6498
Total	**3.0800e-003**	**0.0340**	**0.0184**	**4.0000e-005**	**0.0142**	**1.4800e-003**	**0.0157**	**6.8500e-003**	**1.3700e-003**	**8.2200e-003**	**0.0000**	**3.6205**	**3.6205**	**1.1700e-003**	**0.0000**	**3.6498**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	8.0000e-005	8.7000e-004	0.0000	2.4000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2038	0.2038	1.0000e-005	1.0000e-005	0.2058
Total	**1.0000e-004**	**8.0000e-005**	**8.7000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.5000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2038**	**0.2038**	**1.0000e-005**	**1.0000e-005**	**0.2058**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Fugitive Dust					0.0142	0.0000	0.0142	6.8500e-003	0.0000	6.8500e-003	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	3.0800e-003	0.0340	0.0184	4.0000e-005		1.4800e-003	1.4800e-003		1.3700e-003	1.3700e-003	0.0000	3.6205	3.6205	1.1700e-003	0.0000	3.6498
Total	**3.0800e-003**	**0.0340**	**0.0184**	**4.0000e-005**	**0.0142**	**1.4800e-003**	**0.0157**	**6.8500e-003**	**1.3700e-003**	**8.2200e-003**	**0.0000**	**3.6205**	**3.6205**	**1.1700e-003**	**0.0000**	**3.6498**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.0000e-004	8.0000e-005	8.7000e-004	0.0000	2.4000e-004	0.0000	2.5000e-004	7.0000e-005	0.0000	7.0000e-005	0.0000	0.2038	0.2038	1.0000e-005	1.0000e-005	0.2058
Total	**1.0000e-004**	**8.0000e-005**	**8.7000e-004**	**0.0000**	**2.4000e-004**	**0.0000**	**2.5000e-004**	**7.0000e-005**	**0.0000**	**7.0000e-005**	**0.0000**	**0.2038**	**0.2038**	**1.0000e-005**	**1.0000e-005**	**0.2058**

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1523	1.1710	1.2611	2.2100e-003		0.0515	0.0515		0.0497	0.0497	0.0000	181.5991	181.5991	0.0308	0.0000	182.3701
Total	**0.1523**	**1.1710**	**1.2611**	**2.2100e-003**		**0.0515**	**0.0515**		**0.0497**	**0.0497**	**0.0000**	**181.5991**	**181.5991**	**0.0308**	**0.0000**	**182.3701**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4700e-003	0.0656	0.0151	2.3000e-004	6.4800e-003	3.4000e-004	6.8300e-003	1.8700e-003	3.3000e-004	2.2000e-003	0.0000	21.5666	21.5666	7.0000e-005	3.2300e-003	22.5314
Worker	0.0128	9.0200e-003	0.1081	2.9000e-004	0.0331	1.9000e-004	0.0332	8.7900e-003	1.7000e-004	8.9600e-003	0.0000	26.8413	26.8413	7.5000e-004	7.6000e-004	27.0863
Total	**0.0142**	**0.0746**	**0.1232**	**5.2000e-004**	**0.0395**	**5.3000e-004**	**0.0401**	**0.0107**	**5.0000e-004**	**0.0112**	**0.0000**	**48.4079**	**48.4079**	**8.2000e-004**	**3.9900e-003**	**49.6177**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	0.1523	1.1710	1.2611	2.2100e-003		0.0515	0.0515		0.0497	0.0497	0.0000	181.5989	181.5989	0.0308	0.0000	182.3698
Total	**0.1523**	**1.1710**	**1.2611**	**2.2100e-003**		**0.0515**	**0.0515**		**0.0497**	**0.0497**	**0.0000**	**181.5989**	**181.5989**	**0.0308**	**0.0000**	**182.3698**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	1.4700e-003	0.0656	0.0151	2.3000e-004	6.4800e-003	3.4000e-004	6.8300e-003	1.8700e-003	3.3000e-004	2.2000e-003	0.0000	21.5666	21.5666	7.0000e-005	3.2300e-003	22.5314
Worker	0.0128	9.0200e-003	0.1081	2.9000e-004	0.0331	1.9000e-004	0.0332	8.7900e-003	1.7000e-004	8.9600e-003	0.0000	26.8413	26.8413	7.5000e-004	7.6000e-004	27.0863
Total	**0.0142**	**0.0746**	**0.1232**	**5.2000e-004**	**0.0395**	**5.3000e-004**	**0.0401**	**0.0107**	**5.0000e-004**	**0.0112**	**0.0000**	**48.4079**	**48.4079**	**8.2000e-004**	**3.9900e-003**	**49.6177**

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.2200e-003**	**0.0312**	**0.0440**	**7.0000e-005**		**1.5400e-003**	**1.5400e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**5.8862**	**5.8862**	**1.8700e-003**	**0.0000**	**5.9329**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.2000e-004	2.6000e-003	1.0000e-005	8.0000e-004	0.0000	8.0000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6462	0.6462	2.0000e-005	2.0000e-005	0.6521
Total	**3.1000e-004**	**2.2000e-004**	**2.6000e-003**	**1.0000e-005**	**8.0000e-004**	**0.0000**	**8.0000e-004**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.6462**	**0.6462**	**2.0000e-005**	**2.0000e-005**	**0.6521**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Off-Road	3.2200e-003	0.0312	0.0440	7.0000e-005		1.5400e-003	1.5400e-003		1.4200e-003	1.4200e-003	0.0000	5.8862	5.8862	1.8700e-003	0.0000	5.9329
Paving	0.0000					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total	**3.2200e-003**	**0.0312**	**0.0440**	**7.0000e-005**		**1.5400e-003**	**1.5400e-003**		**1.4200e-003**	**1.4200e-003**	**0.0000**	**5.8862**	**5.8862**	**1.8700e-003**	**0.0000**	**5.9329**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	3.1000e-004	2.2000e-004	2.6000e-003	1.0000e-005	8.0000e-004	0.0000	8.0000e-004	2.1000e-004	0.0000	2.2000e-004	0.0000	0.6462	0.6462	2.0000e-005	2.0000e-005	0.6521
Total	**3.1000e-004**	**2.2000e-004**	**2.6000e-003**	**1.0000e-005**	**8.0000e-004**	**0.0000**	**8.0000e-004**	**2.1000e-004**	**0.0000**	**2.2000e-004**	**0.0000**	**0.6462**	**0.6462**	**2.0000e-005**	**2.0000e-005**	**0.6521**

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2861					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.2870**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	1.0000e-003	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2485	0.2485	1.0000e-005	1.0000e-005	0.2508
Total	**1.2000e-004**	**8.0000e-005**	**1.0000e-003**	**0.0000**	**3.1000e-004**	**0.0000**	**3.1000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2485**	**0.2485**	**1.0000e-005**	**1.0000e-005**	**0.2508**

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Archit. Coating	0.2861					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Off-Road	9.6000e-004	6.5100e-003	9.0600e-003	1.0000e-005		3.5000e-004	3.5000e-004		3.5000e-004	3.5000e-004	0.0000	1.2766	1.2766	8.0000e-005	0.0000	1.2785
Total	**0.2870**	**6.5100e-003**	**9.0600e-003**	**1.0000e-005**		**3.5000e-004**	**3.5000e-004**		**3.5000e-004**	**3.5000e-004**	**0.0000**	**1.2766**	**1.2766**	**8.0000e-005**	**0.0000**	**1.2785**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Worker	1.2000e-004	8.0000e-005	1.0000e-003	0.0000	3.1000e-004	0.0000	3.1000e-004	8.0000e-005	0.0000	8.0000e-005	0.0000	0.2485	0.2485	1.0000e-005	1.0000e-005	0.2508
Total	**1.2000e-004**	**8.0000e-005**	**1.0000e-003**	**0.0000**	**3.1000e-004**	**0.0000**	**3.1000e-004**	**8.0000e-005**	**0.0000**	**8.0000e-005**	**0.0000**	**0.2485**	**0.2485**	**1.0000e-005**	**1.0000e-005**	**0.2508**

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.2755	0.1111	0.1873	5.7000e-004	0.0448	9.3000e-004	0.0457	0.0130	6.8000e-004	0.0137	0.0000	52.6813	52.6813	9.9300e-003	5.1000e-003	54.4500
Unmitigated	0.2755	0.1111	0.1873	5.7000e-004	0.0448	9.3000e-004	0.0457	0.0130	6.8000e-004	0.0137	0.0000	52.6813	52.6813	9.9300e-003	5.1000e-003	54.4500

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	224.05	224.05	224.05	131,670	131,670
Recreational Swimming Pool	0.38	0.38	0.38	220	220
Total	224.43	224.43	224.43	131,890	131,890

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	2.60	2.60	2.60	16.90	64.10	19.00	52	39	9
Recreational Swimming Pool	2.60	2.60	2.60	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Health Club	0.432255	0.063343	0.225240	0.158296	0.047221	0.009429	0.011320	0.004341	0.000681	0.000465	0.038076	0.001344	0.007989
Recreational Swimming Pool	0.432255	0.063343	0.225240	0.158296	0.047221	0.009429	0.011320	0.004341	0.000681	0.000465	0.038076	0.001344	0.007989

5.0 Energy Detail

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Electricity Mitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63.2907	63.2907	3.0700e-003	3.5000e-004	63.4731
Electricity Unmitigated						0.0000	0.0000		0.0000	0.0000	0.0000	63.2907	63.2907	3.0700e-003	3.5000e-004	63.4731
NaturalGas Mitigated	1.1600e-003	0.0105	8.8400e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4622	11.4622	2.2000e-004	2.1000e-004	11.5303
NaturalGas Unmitigated	1.1600e-003	0.0105	8.8400e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4622	11.4622	2.2000e-004	2.1000e-004	11.5303

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Health Club	214793	1.1600e-003	0.0105	8.8400e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4622	11.4622	2.2000e-004	2.1000e-004	11.5303
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.1600e-003**	**0.0105**	**8.8400e-003**	**6.0000e-005**		**8.0000e-004**	**8.0000e-004**		**8.0000e-004**	**8.0000e-004**	**0.0000**	**11.4622**	**11.4622**	**2.2000e-004**	**2.1000e-004**	**11.5303**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	tons/yr										MT/yr					
Health Club	214793	1.1600e-003	0.0105	8.8400e-003	6.0000e-005		8.0000e-004	8.0000e-004		8.0000e-004	8.0000e-004	0.0000	11.4622	11.4622	2.2000e-004	2.1000e-004	11.5303
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Total		**1.1600e-003**	**0.0105**	**8.8400e-003**	**6.0000e-005**		**8.0000e-004**	**8.0000e-004**		**8.0000e-004**	**8.0000e-004**	**0.0000**	**11.4622**	**11.4622**	**2.2000e-004**	**2.1000e-004**	**11.5303**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.3 Energy by Land Use - Electricity

Unmitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Health Club	260467	63.2907	3.0700e-003	3.5000e-004	63.4731
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**63.2907**	**3.0700e-003**	**3.5000e-004**	**63.4731**

Mitigated

	Electricity Use	Total CO2	CH4	N2O	CO2e
Land Use	kWh/yr	MT/yr			
Health Club	260467	63.2907	3.0700e-003	3.5000e-004	63.4731
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000
Total		**63.2907**	**3.0700e-003**	**3.5000e-004**	**63.4731**

6.0 Area Detail

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	tons/yr										MT/yr					
Mitigated	0.3126	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1500e-003	1.1500e-003	0.0000	0.0000	1.2200e-003
Unmitigated	0.3126	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1500e-003	1.1500e-003	0.0000	0.0000	1.2200e-003

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2411					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1500e-003	1.1500e-003	0.0000	0.0000	1.2200e-003
Total	**0.3126**	**1.0000e-005**	**5.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.1500e-003**	**1.1500e-003**	**0.0000**	**0.0000**	**1.2200e-003**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	tons/yr										MT/yr					
Architectural Coating	0.0715					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Consumer Products	0.2411					0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000
Landscaping	5.0000e-005	1.0000e-005	5.9000e-004	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	1.1500e-003	1.1500e-003	0.0000	0.0000	1.2200e-003
Total	**0.3126**	**1.0000e-005**	**5.9000e-004**	**0.0000**		**0.0000**	**0.0000**		**0.0000**	**0.0000**	**0.0000**	**1.1500e-003**	**1.1500e-003**	**0.0000**	**0.0000**	**1.2200e-003**

7.0 Water Detail

7.1 Mitigation Measures Water

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Annual

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	Total CO2	CH4	N2O	CO2e
Category	MT/yr			
Mitigated	8.1787	0.1241	2.9600e-003	12.1637
Unmitigated	8.1787	0.1241	2.9600e-003	12.1637

7.2 Water by Land Use

Unmitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Health Club	3.65031 / 2.23729	7.8603	0.1193	2.8500e-003	11.6902
Recreational Swimming Pool	0.147858 / 0.0906226	0.3184	4.8300e-003	1.2000e-004	0.4735
Total		**8.1787**	**0.1241**	**2.9700e-003**	**12.1637**

7.2 Water by Land Use

Mitigated

	Indoor/Outdoor Use	Total CO2	CH4	N2O	CO2e
Land Use	Mgal	MT/yr			
Health Club	3.65031 / 2.23729	7.8603	0.1193	2.8500e-003	11.6902
Recreational Swimming Pool	0.147858 / 0.0906226	0.3184	4.8300e-003	1.2000e-004	0.4735
Total		**8.1787**	**0.1241**	**2.9700e-003**	**12.1637**

8.0 Waste Detail

8.1 Mitigation Measures Waste

Category/Year

	Total CO2	CH4	N2O	CO2e
	MT/yr			
Mitigated	74.3048	4.3913	0.0000	184.0871
Unmitigated	74.3048	4.3913	0.0000	184.0871

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.2 Waste by Land Use

Unmitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Health Club	351.8	71.4122	4.2203	0.0000	176.9208
Recreational Swimming Pool	14.25	2.8926	0.1710	0.0000	7.1664
Total		**74.3048**	**4.3913**	**0.0000**	**184.0871**

Mitigated

	Waste Disposed	Total CO2	CH4	N2O	CO2e
Land Use	tons	MT/yr			
Health Club	351.8	71.4122	4.2203	0.0000	176.9208
Recreational Swimming Pool	14.25	2.8926	0.1710	0.0000	7.1664
Total		**74.3048**	**4.3913**	**0.0000**	**184.0871**

9.0 Operational Offroad

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

56 Acre Master Plan - Multigenerational Center

El Dorado-Lake Tahoe County, Summer

1.0 Project Characteristics

1.1 Land Usage

Land Uses	Size	Metric	Lot Acreage	Floor Surface Area	Population
Health Club	61.72	1000sqft	1.42	61,722.00	0
Recreational Swimming Pool	2.50	1000sqft	0.06	2,500.00	0

1.2 Other Project Characteristics

Urbanization	Rural	**Wind Speed (m/s)**	2.7	**Precipitation Freq (Days)**	70
Climate Zone	14			**Operational Year**	2024
Utility Company	User Defined				
CO2 Intensity (lb/MWhr)	535.7	**CH4 Intensity (lb/MWhr)**	0.026	**N2O Intensity (lb/MWhr)**	0.003

1.3 User Entered Comments & Non-Default Data

Project Characteristics - The GHG EFs are scaled using Liberty Utility's natural gas mix and internsity factor (published by TRPA) for the year 2018.

Land Use - Gross floor area of the Recreation center - 64.222 ksf (Including Aquatics facilities - 2.5 ksf)

Construction Phase -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Off-road Equipment -

Trips and VMT -

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Demolition -

Grading -

Architectural Coating - SMAQMD recommends using paint with new VOC contents for archetectural coating. For the modeling, Nonflat Coating's VOC limit of 100 g/l is assumed.

Vehicle Trips - Daily VMT data provided by the traffic study

Vehicle Emission Factors - Using 2021 EMFAC EF

Vehicle Emission Factors - Using 2021 EMFAC EF

Vehicle Emission Factors - Using 2021 EMFAC EF

Consumer Products -

Area Coating -

Water And Wastewater -

Area Mitigation -

Fleet Mix -

Table Name	Column Name	Default Value	New Value
tblArchitecturalCoating	EF_Nonresidential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Nonresidential_Interior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Exterior	250.00	100.00
tblArchitecturalCoating	EF_Residential_Interior	250.00	100.00
tblProjectCharacteristics	CH4IntensityFactor	0	0.026
tblProjectCharacteristics	CO2IntensityFactor	0	535.7
tblProjectCharacteristics	N2OIntensityFactor	0	0.003
tblProjectCharacteristics	UrbanizationLevel	Urban	Rural
tblVehicleEF	HHD	0.02	0.25
tblVehicleEF	HHD	2.6220e-003	5.2630e-003
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.76	0.18
tblVehicleEF	HHD	0.43	0.20
tblVehicleEF	HHD	0.03	39.17
tblVehicleEF	HHD	1,023.57	1,534.53

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	1,625.74	1,404.88
tblVehicleEF	HHD	0.39	0.02
tblVehicleEF	HHD	0.16	0.24
tblVehicleEF	HHD	0.25	0.22
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.98	41.71
tblVehicleEF	HHD	4.29	3.07
tblVehicleEF	HHD	3.06	2.99
tblVehicleEF	HHD	5.6820e-003	0.05
tblVehicleEF	HHD	0.06	0.09
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.4360e-003	5.6530e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.5850e-003	8.9570e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	1.2000e-005	3.0400e-003
tblVehicleEF	HHD	4.9100e-004	4.0000e-006
tblVehicleEF	HHD	0.41	2.84
tblVehicleEF	HHD	6.0000e-006	0.00
tblVehicleEF	HHD	0.05	0.03
tblVehicleEF	HHD	2.8000e-004	1.0000e-006
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	9.6700e-003	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	1.2000e-005	3.0400e-003

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	4.9100e-004	4.0000e-006
tblVehicleEF	HHD	0.47	3.36
tblVehicleEF	HHD	6.0000e-006	0.00
tblVehicleEF	HHD	0.06	0.04
tblVehicleEF	HHD	2.8000e-004	1.0000e-006
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	0.02	0.26
tblVehicleEF	HHD	2.6320e-003	5.2700e-003
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.66	0.18
tblVehicleEF	HHD	0.44	0.20
tblVehicleEF	HHD	0.03	38.40
tblVehicleEF	HHD	1,017.67	1,519.17
tblVehicleEF	HHD	1,625.75	1,404.88
tblVehicleEF	HHD	0.38	0.02
tblVehicleEF	HHD	0.16	0.24
tblVehicleEF	HHD	0.25	0.22
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.81	40.59
tblVehicleEF	HHD	4.13	2.94
tblVehicleEF	HHD	3.06	2.99
tblVehicleEF	HHD	4.8660e-003	0.04
tblVehicleEF	HHD	0.06	0.09
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	4.6560e-003	4.8810e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.5850e-003	8.9570e-003

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	3.4000e-005	4.0700e-003
tblVehicleEF	HHD	5.4300e-004	4.0000e-006
tblVehicleEF	HHD	0.43	2.98
tblVehicleEF	HHD	1.4000e-005	0.00
tblVehicleEF	HHD	0.05	0.03
tblVehicleEF	HHD	2.7500e-004	1.0000e-006
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	9.6140e-003	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	3.4000e-005	4.0700e-003
tblVehicleEF	HHD	5.4300e-004	4.0000e-006
tblVehicleEF	HHD	0.49	3.51
tblVehicleEF	HHD	1.4000e-005	0.00
tblVehicleEF	HHD	0.06	0.04
tblVehicleEF	HHD	2.7500e-004	1.0000e-006
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	0.02	0.24
tblVehicleEF	HHD	2.6140e-003	5.2580e-003
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.91	0.18
tblVehicleEF	HHD	0.43	0.20
tblVehicleEF	HHD	0.04	40.24
tblVehicleEF	HHD	1,031.73	1,555.74
tblVehicleEF	HHD	1,625.73	1,404.88
tblVehicleEF	HHD	0.39	0.02
tblVehicleEF	HHD	0.16	0.24

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.25	0.22
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	6.22	43.24
tblVehicleEF	HHD	4.34	3.10
tblVehicleEF	HHD	3.06	2.99
tblVehicleEF	HHD	6.8090e-003	0.05
tblVehicleEF	HHD	0.06	0.09
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	6.5140e-003	6.7180e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	8.5850e-003	8.9570e-003
tblVehicleEF	HHD	0.03	0.03
tblVehicleEF	HHD	1.0000e-006	0.00
tblVehicleEF	HHD	5.0000e-006	2.8940e-003
tblVehicleEF	HHD	4.9200e-004	4.0000e-006
tblVehicleEF	HHD	0.38	2.65
tblVehicleEF	HHD	3.0000e-006	0.00
tblVehicleEF	HHD	0.05	0.03
tblVehicleEF	HHD	3.1500e-004	1.0000e-006
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	9.7470e-003	0.01
tblVehicleEF	HHD	0.02	0.01
tblVehicleEF	HHD	4.0000e-006	0.00
tblVehicleEF	HHD	5.0000e-006	2.8940e-003
tblVehicleEF	HHD	4.9200e-004	4.0000e-006
tblVehicleEF	HHD	0.44	3.14
tblVehicleEF	HHD	3.0000e-006	0.00

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	HHD	0.06	0.04
tblVehicleEF	HHD	3.1500e-004	1.0000e-006
tblVehicleEF	HHD	5.0000e-006	0.00
tblVehicleEF	LDA	2.0210e-003	2.6200e-003
tblVehicleEF	LDA	0.05	0.08
tblVehicleEF	LDA	0.00	0.82
tblVehicleEF	LDA	0.60	0.04
tblVehicleEF	LDA	2.27	0.00
tblVehicleEF	LDA	247.75	244.91
tblVehicleEF	LDA	51.41	52.50
tblVehicleEF	LDA	4.4630e-003	6.0800e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.03	0.05
tblVehicleEF	LDA	0.18	0.28
tblVehicleEF	LDA	0.04	8.0800e-003
tblVehicleEF	LDA	1.4900e-003	1.4340e-003
tblVehicleEF	LDA	1.7910e-003	2.1330e-003
tblVehicleEF	LDA	1.3730e-003	1.7560e-003
tblVehicleEF	LDA	1.6470e-003	1.8370e-003
tblVehicleEF	LDA	0.04	1.60
tblVehicleEF	LDA	0.09	0.12
tblVehicleEF	LDA	0.03	0.01
tblVehicleEF	LDA	7.7970e-003	0.01
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.22	0.37
tblVehicleEF	LDA	2.4010e-003	2.4220e-003
tblVehicleEF	LDA	4.9800e-004	5.2000e-004
tblVehicleEF	LDA	0.04	1.60
tblVehicleEF	LDA	0.09	0.12

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.03	0.01
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.24	0.41
tblVehicleEF	LDA	2.3190e-003	2.8440e-003
tblVehicleEF	LDA	0.04	0.06
tblVehicleEF	LDA	0.00	1.12
tblVehicleEF	LDA	0.72	0.04
tblVehicleEF	LDA	1.74	0.00
tblVehicleEF	LDA	269.38	244.17
tblVehicleEF	LDA	50.39	51.42
tblVehicleEF	LDA	4.1150e-003	5.5460e-003
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.03	0.04
tblVehicleEF	LDA	0.16	0.24
tblVehicleEF	LDA	0.04	8.0800e-003
tblVehicleEF	LDA	1.4900e-003	1.4340e-003
tblVehicleEF	LDA	1.7910e-003	2.1330e-003
tblVehicleEF	LDA	1.3730e-003	1.7560e-003
tblVehicleEF	LDA	1.6470e-003	1.8370e-003
tblVehicleEF	LDA	0.12	2.26
tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	0.07	0.03
tblVehicleEF	LDA	8.7420e-003	0.01
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.17	0.29
tblVehicleEF	LDA	2.6110e-003	2.4150e-003
tblVehicleEF	LDA	4.8900e-004	5.0900e-004
tblVehicleEF	LDA	0.12	2.26

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.11	0.12
tblVehicleEF	LDA	0.07	0.03
tblVehicleEF	LDA	0.01	0.02
tblVehicleEF	LDA	0.02	0.03
tblVehicleEF	LDA	0.19	0.32
tblVehicleEF	LDA	1.9200e-003	2.5250e-003
tblVehicleEF	LDA	0.06	0.09
tblVehicleEF	LDA	0.00	0.76
tblVehicleEF	LDA	0.58	0.04
tblVehicleEF	LDA	2.67	0.00
tblVehicleEF	LDA	242.38	244.18
tblVehicleEF	LDA	52.15	53.25
tblVehicleEF	LDA	4.6770e-003	6.4250e-003
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.04	0.05
tblVehicleEF	LDA	0.19	0.30
tblVehicleEF	LDA	0.04	8.0800e-003
tblVehicleEF	LDA	1.4900e-003	1.4340e-003
tblVehicleEF	LDA	1.7910e-003	2.1330e-003
tblVehicleEF	LDA	1.3730e-003	1.7560e-003
tblVehicleEF	LDA	1.6470e-003	1.8370e-003
tblVehicleEF	LDA	0.01	1.43
tblVehicleEF	LDA	0.09	0.12
tblVehicleEF	LDA	8.8240e-003	1.4510e-003
tblVehicleEF	LDA	7.5100e-003	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.25	0.42
tblVehicleEF	LDA	2.3490e-003	2.4150e-003
tblVehicleEF	LDA	5.0600e-004	5.2700e-004

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDA	0.01	1.43
tblVehicleEF	LDA	0.09	0.12
tblVehicleEF	LDA	8.8240e-003	1.4510e-003
tblVehicleEF	LDA	0.01	0.01
tblVehicleEF	LDA	0.03	0.03
tblVehicleEF	LDA	0.27	0.46
tblVehicleEF	LDT1	5.3240e-003	8.1190e-003
tblVehicleEF	LDT1	0.09	0.15
tblVehicleEF	LDT1	0.00	1.87
tblVehicleEF	LDT1	1.18	0.04
tblVehicleEF	LDT1	2.66	0.00
tblVehicleEF	LDT1	306.97	310.60
tblVehicleEF	LDT1	66.37	68.35
tblVehicleEF	LDT1	7.7090e-003	0.01
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.10	0.17
tblVehicleEF	LDT1	0.31	0.54
tblVehicleEF	LDT1	0.04	0.01
tblVehicleEF	LDT1	1.9650e-003	2.2410e-003
tblVehicleEF	LDT1	2.6990e-003	3.8680e-003
tblVehicleEF	LDT1	1.8090e-003	2.2650e-003
tblVehicleEF	LDT1	2.4820e-003	2.7540e-003
tblVehicleEF	LDT1	0.15	4.11
tblVehicleEF	LDT1	0.27	0.31
tblVehicleEF	LDT1	0.09	0.04
tblVehicleEF	LDT1	0.02	0.04
tblVehicleEF	LDT1	0.14	0.16
tblVehicleEF	LDT1	0.48	0.87
tblVehicleEF	LDT1	2.9760e-003	3.0740e-003

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	6.4300e-004	6.7600e-004
tblVehicleEF	LDT1	0.15	4.11
tblVehicleEF	LDT1	0.27	0.31
tblVehicleEF	LDT1	0.09	0.04
tblVehicleEF	LDT1	0.03	0.05
tblVehicleEF	LDT1	0.14	0.16
tblVehicleEF	LDT1	0.52	0.95
tblVehicleEF	LDT1	6.0510e-003	8.7930e-003
tblVehicleEF	LDT1	0.07	0.12
tblVehicleEF	LDT1	0.00	2.47
tblVehicleEF	LDT1	1.39	0.04
tblVehicleEF	LDT1	2.03	0.00
tblVehicleEF	LDT1	329.22	309.77
tblVehicleEF	LDT1	65.00	66.90
tblVehicleEF	LDT1	7.0170e-003	9.4050e-003
tblVehicleEF	LDT1	0.03	0.03
tblVehicleEF	LDT1	0.09	0.14
tblVehicleEF	LDT1	0.28	0.48
tblVehicleEF	LDT1	0.04	0.01
tblVehicleEF	LDT1	1.9650e-003	2.2410e-003
tblVehicleEF	LDT1	2.6990e-003	3.8680e-003
tblVehicleEF	LDT1	1.8090e-003	2.2650e-003
tblVehicleEF	LDT1	2.4820e-003	2.7540e-003
tblVehicleEF	LDT1	0.46	5.93
tblVehicleEF	LDT1	0.34	0.32
tblVehicleEF	LDT1	0.22	0.07
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.37	0.68

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	3.1920e-003	3.0650e-003
tblVehicleEF	LDT1	6.3000e-004	6.6200e-004
tblVehicleEF	LDT1	0.46	5.93
tblVehicleEF	LDT1	0.34	0.32
tblVehicleEF	LDT1	0.22	0.07
tblVehicleEF	LDT1	0.04	0.06
tblVehicleEF	LDT1	0.13	0.14
tblVehicleEF	LDT1	0.41	0.75
tblVehicleEF	LDT1	5.0800e-003	7.8400e-003
tblVehicleEF	LDT1	0.10	0.17
tblVehicleEF	LDT1	0.00	1.74
tblVehicleEF	LDT1	1.15	0.04
tblVehicleEF	LDT1	3.13	0.00
tblVehicleEF	LDT1	301.43	309.85
tblVehicleEF	LDT1	67.36	69.33
tblVehicleEF	LDT1	8.1300e-003	0.01
tblVehicleEF	LDT1	0.03	0.04
tblVehicleEF	LDT1	0.11	0.19
tblVehicleEF	LDT1	0.34	0.59
tblVehicleEF	LDT1	0.04	0.01
tblVehicleEF	LDT1	1.9650e-003	2.2410e-003
tblVehicleEF	LDT1	2.6990e-003	3.8680e-003
tblVehicleEF	LDT1	1.8090e-003	2.2650e-003
tblVehicleEF	LDT1	2.4820e-003	2.7540e-003
tblVehicleEF	LDT1	0.04	3.60
tblVehicleEF	LDT1	0.28	0.33
tblVehicleEF	LDT1	0.03	3.9370e-003
tblVehicleEF	LDT1	0.02	0.04
tblVehicleEF	LDT1	0.17	0.20

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT1	0.54	0.99
tblVehicleEF	LDT1	2.9220e-003	3.0660e-003
tblVehicleEF	LDT1	6.5300e-004	6.8600e-004
tblVehicleEF	LDT1	0.04	3.60
tblVehicleEF	LDT1	0.28	0.33
tblVehicleEF	LDT1	0.03	3.9370e-003
tblVehicleEF	LDT1	0.03	0.05
tblVehicleEF	LDT1	0.17	0.20
tblVehicleEF	LDT1	0.60	1.09
tblVehicleEF	LDT2	4.1340e-003	3.1630e-003
tblVehicleEF	LDT2	0.08	0.10
tblVehicleEF	LDT2	0.00	0.97
tblVehicleEF	LDT2	0.97	0.04
tblVehicleEF	LDT2	3.15	0.00
tblVehicleEF	LDT2	332.07	345.49
tblVehicleEF	LDT2	72.07	76.14
tblVehicleEF	LDT2	7.3900e-003	0.01
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.09	0.08
tblVehicleEF	LDT2	0.35	0.41
tblVehicleEF	LDT2	0.04	9.7250e-003
tblVehicleEF	LDT2	1.5570e-003	1.4450e-003
tblVehicleEF	LDT2	1.9590e-003	2.2230e-003
tblVehicleEF	LDT2	1.4330e-003	1.7190e-003
tblVehicleEF	LDT2	1.8010e-003	1.9390e-003
tblVehicleEF	LDT2	0.09	1.73
tblVehicleEF	LDT2	0.18	0.23
tblVehicleEF	LDT2	0.06	0.03
tblVehicleEF	LDT2	0.02	0.01

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.08	0.11
tblVehicleEF	LDT2	0.42	0.49
tblVehicleEF	LDT2	3.2190e-003	3.4180e-003
tblVehicleEF	LDT2	6.9900e-004	7.5300e-004
tblVehicleEF	LDT2	0.09	1.73
tblVehicleEF	LDT2	0.18	0.23
tblVehicleEF	LDT2	0.06	0.03
tblVehicleEF	LDT2	0.03	0.02
tblVehicleEF	LDT2	0.08	0.11
tblVehicleEF	LDT2	0.46	0.53
tblVehicleEF	LDT2	4.6930e-003	3.4320e-003
tblVehicleEF	LDT2	0.07	0.08
tblVehicleEF	LDT2	0.00	1.28
tblVehicleEF	LDT2	1.14	0.04
tblVehicleEF	LDT2	2.41	0.00
tblVehicleEF	LDT2	353.44	344.68
tblVehicleEF	LDT2	70.57	74.53
tblVehicleEF	LDT2	6.7620e-003	9.5910e-003
tblVehicleEF	LDT2	0.03	0.04
tblVehicleEF	LDT2	0.08	0.07
tblVehicleEF	LDT2	0.31	0.36
tblVehicleEF	LDT2	0.04	9.7250e-003
tblVehicleEF	LDT2	1.5570e-003	1.4450e-003
tblVehicleEF	LDT2	1.9590e-003	2.2230e-003
tblVehicleEF	LDT2	1.4330e-003	1.7190e-003
tblVehicleEF	LDT2	1.8010e-003	1.9390e-003
tblVehicleEF	LDT2	0.27	2.35
tblVehicleEF	LDT2	0.21	0.23
tblVehicleEF	LDT2	0.15	0.06

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.33	0.38
tblVehicleEF	LDT2	3.4260e-003	3.4100e-003
tblVehicleEF	LDT2	6.8400e-004	7.3800e-004
tblVehicleEF	LDT2	0.27	2.35
tblVehicleEF	LDT2	0.21	0.23
tblVehicleEF	LDT2	0.15	0.06
tblVehicleEF	LDT2	0.03	0.02
tblVehicleEF	LDT2	0.08	0.09
tblVehicleEF	LDT2	0.36	0.42
tblVehicleEF	LDT2	3.9400e-003	3.0480e-003
tblVehicleEF	LDT2	0.09	0.11
tblVehicleEF	LDT2	0.00	0.90
tblVehicleEF	LDT2	0.94	0.04
tblVehicleEF	LDT2	3.70	0.00
tblVehicleEF	LDT2	326.74	344.73
tblVehicleEF	LDT2	73.15	77.25
tblVehicleEF	LDT2	7.7750e-003	0.01
tblVehicleEF	LDT2	0.04	0.04
tblVehicleEF	LDT2	0.10	0.09
tblVehicleEF	LDT2	0.38	0.45
tblVehicleEF	LDT2	0.04	9.7250e-003
tblVehicleEF	LDT2	1.5570e-003	1.4450e-003
tblVehicleEF	LDT2	1.9590e-003	2.2230e-003
tblVehicleEF	LDT2	1.4330e-003	1.7190e-003
tblVehicleEF	LDT2	1.8010e-003	1.9390e-003
tblVehicleEF	LDT2	0.03	1.57
tblVehicleEF	LDT2	0.19	0.24

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LDT2	0.02	3.0500e-003
tblVehicleEF	LDT2	0.02	0.01
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.48	0.55
tblVehicleEF	LDT2	3.1670e-003	3.4100e-003
tblVehicleEF	LDT2	7.0900e-004	7.6400e-004
tblVehicleEF	LDT2	0.03	1.57
tblVehicleEF	LDT2	0.19	0.24
tblVehicleEF	LDT2	0.02	3.0500e-003
tblVehicleEF	LDT2	0.02	0.02
tblVehicleEF	LDT2	0.10	0.13
tblVehicleEF	LDT2	0.53	0.60
tblVehicleEF	LHD1	3.8970e-003	0.05
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.16	1.34
tblVehicleEF	LHD1	1.42	0.09
tblVehicleEF	LHD1	1.01	2.18
tblVehicleEF	LHD1	9.69	9.48
tblVehicleEF	LHD1	762.97	799.85
tblVehicleEF	LHD1	9.19	11.50
tblVehicleEF	LHD1	1.0100e-003	8.6900e-004
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.10	1.32
tblVehicleEF	LHD1	2.08	1.82
tblVehicleEF	LHD1	0.26	0.31
tblVehicleEF	LHD1	1.1550e-003	0.02
tblVehicleEF	LHD1	0.08	0.08

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.04
tblVehicleEF	LHD1	2.6000e-004	2.2800e-004
tblVehicleEF	LHD1	1.1050e-003	9.1200e-004
tblVehicleEF	LHD1	2.5610e-003	2.4990e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3900e-004	3.4700e-004
tblVehicleEF	LHD1	2.3960e-003	1.83
tblVehicleEF	LHD1	0.09	0.13
tblVehicleEF	LHD1	0.02	0.26
tblVehicleEF	LHD1	9.3000e-004	6.7800e-004
tblVehicleEF	LHD1	0.16	0.19
tblVehicleEF	LHD1	0.37	0.59
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	9.3000e-005	9.2000e-005
tblVehicleEF	LHD1	7.4080e-003	7.7890e-003
tblVehicleEF	LHD1	9.1000e-005	1.1400e-004
tblVehicleEF	LHD1	2.3960e-003	1.83
tblVehicleEF	LHD1	0.09	0.13
tblVehicleEF	LHD1	0.03	0.36
tblVehicleEF	LHD1	9.3000e-004	6.7800e-004
tblVehicleEF	LHD1	0.19	0.23
tblVehicleEF	LHD1	0.37	0.59
tblVehicleEF	LHD1	0.08	0.10
tblVehicleEF	LHD1	3.9130e-003	0.05
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.16	1.38
tblVehicleEF	LHD1	1.46	0.09

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.90	2.18
tblVehicleEF	LHD1	9.69	9.48
tblVehicleEF	LHD1	763.03	800.00
tblVehicleEF	LHD1	9.00	11.12
tblVehicleEF	LHD1	1.0130e-003	8.7200e-004
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.10	1.32
tblVehicleEF	LHD1	1.96	1.72
tblVehicleEF	LHD1	0.24	0.29
tblVehicleEF	LHD1	1.1550e-003	0.02
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.04
tblVehicleEF	LHD1	2.6000e-004	2.2800e-004
tblVehicleEF	LHD1	1.1050e-003	9.1200e-004
tblVehicleEF	LHD1	2.5610e-003	2.4990e-003
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3900e-004	3.4700e-004
tblVehicleEF	LHD1	7.0290e-003	2.50
tblVehicleEF	LHD1	0.11	0.13
tblVehicleEF	LHD1	0.02	0.26
tblVehicleEF	LHD1	2.2240e-003	1.2230e-003
tblVehicleEF	LHD1	0.16	0.19
tblVehicleEF	LHD1	0.36	0.55
tblVehicleEF	LHD1	0.07	0.08
tblVehicleEF	LHD1	9.3000e-005	9.2000e-005
tblVehicleEF	LHD1	7.4090e-003	7.7900e-003
tblVehicleEF	LHD1	8.9000e-005	1.1000e-004

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	7.0290e-003	2.50
tblVehicleEF	LHD1	0.11	0.13
tblVehicleEF	LHD1	0.03	0.36
tblVehicleEF	LHD1	2.2240e-003	1.2230e-003
tblVehicleEF	LHD1	0.20	0.23
tblVehicleEF	LHD1	0.36	0.55
tblVehicleEF	LHD1	0.08	0.09
tblVehicleEF	LHD1	3.8870e-003	0.05
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.01	0.02
tblVehicleEF	LHD1	0.16	1.32
tblVehicleEF	LHD1	1.40	0.09
tblVehicleEF	LHD1	1.08	2.18
tblVehicleEF	LHD1	9.69	9.48
tblVehicleEF	LHD1	762.92	799.74
tblVehicleEF	LHD1	9.32	11.70
tblVehicleEF	LHD1	1.0080e-003	8.6700e-004
tblVehicleEF	LHD1	0.06	0.06
tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	0.10	1.32
tblVehicleEF	LHD1	2.10	1.84
tblVehicleEF	LHD1	0.28	0.33
tblVehicleEF	LHD1	1.1550e-003	0.02
tblVehicleEF	LHD1	0.08	0.08
tblVehicleEF	LHD1	0.01	0.01
tblVehicleEF	LHD1	0.02	0.04
tblVehicleEF	LHD1	2.6000e-004	2.2800e-004
tblVehicleEF	LHD1	1.1050e-003	9.1200e-004
tblVehicleEF	LHD1	2.5610e-003	2.4990e-003

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD1	0.02	0.02
tblVehicleEF	LHD1	2.3900e-004	3.4700e-004
tblVehicleEF	LHD1	7.1000e-004	1.64
tblVehicleEF	LHD1	0.10	0.15
tblVehicleEF	LHD1	0.02	0.26
tblVehicleEF	LHD1	3.1700e-004	8.0000e-005
tblVehicleEF	LHD1	0.16	0.19
tblVehicleEF	LHD1	0.41	0.65
tblVehicleEF	LHD1	0.08	0.10
tblVehicleEF	LHD1	9.3000e-005	9.2000e-005
tblVehicleEF	LHD1	7.4080e-003	7.7880e-003
tblVehicleEF	LHD1	9.2000e-005	1.1600e-004
tblVehicleEF	LHD1	7.1000e-004	1.64
tblVehicleEF	LHD1	0.10	0.15
tblVehicleEF	LHD1	0.03	0.36
tblVehicleEF	LHD1	3.1700e-004	8.0000e-005
tblVehicleEF	LHD1	0.19	0.22
tblVehicleEF	LHD1	0.41	0.65
tblVehicleEF	LHD1	0.09	0.11
tblVehicleEF	LHD2	1.8220e-003	0.02
tblVehicleEF	LHD2	8.2350e-003	9.0000e-003
tblVehicleEF	LHD2	4.7120e-003	5.1890e-003
tblVehicleEF	LHD2	0.11	0.63
tblVehicleEF	LHD2	0.86	0.15
tblVehicleEF	LHD2	0.34	1.34
tblVehicleEF	LHD2	16.04	15.20
tblVehicleEF	LHD2	721.68	769.54
tblVehicleEF	LHD2	4.06	6.64
tblVehicleEF	LHD2	2.2840e-003	2.0090e-003

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	7.6360e-003	0.01
tblVehicleEF	LHD2	0.15	1.89
tblVehicleEF	LHD2	1.86	1.54
tblVehicleEF	LHD2	0.10	0.10
tblVehicleEF	LHD2	1.7450e-003	0.02
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	7.0000e-005	4.3000e-005
tblVehicleEF	LHD2	1.6690e-003	1.4780e-003
tblVehicleEF	LHD2	2.8250e-003	2.7500e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4000e-005	1.2300e-004
tblVehicleEF	LHD2	5.4400e-004	0.42
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.16
tblVehicleEF	LHD2	2.3400e-004	2.6200e-004
tblVehicleEF	LHD2	0.15	0.18
tblVehicleEF	LHD2	0.07	0.15
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.5200e-004	1.4500e-004
tblVehicleEF	LHD2	6.9100e-003	7.4040e-003
tblVehicleEF	LHD2	4.0000e-005	6.6000e-005
tblVehicleEF	LHD2	5.4400e-004	0.42
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.02	0.20
tblVehicleEF	LHD2	2.3400e-004	2.6200e-004
tblVehicleEF	LHD2	0.18	0.20

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	0.07	0.15
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	LHD2	1.8280e-003	0.02
tblVehicleEF	LHD2	8.2950e-003	9.0440e-003
tblVehicleEF	LHD2	4.3730e-003	4.8250e-003
tblVehicleEF	LHD2	0.11	0.64
tblVehicleEF	LHD2	0.86	0.15
tblVehicleEF	LHD2	0.30	1.34
tblVehicleEF	LHD2	16.04	15.20
tblVehicleEF	LHD2	721.69	769.57
tblVehicleEF	LHD2	4.00	6.48
tblVehicleEF	LHD2	2.2850e-003	2.0110e-003
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	7.2480e-003	0.01
tblVehicleEF	LHD2	0.15	1.89
tblVehicleEF	LHD2	1.77	1.46
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	1.7450e-003	0.02
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	7.0000e-005	4.3000e-005
tblVehicleEF	LHD2	1.6690e-003	1.4780e-003
tblVehicleEF	LHD2	2.8250e-003	2.7500e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4000e-005	1.2300e-004
tblVehicleEF	LHD2	1.5620e-003	0.56
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.01	0.16

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	5.4600e-004	4.5700e-004
tblVehicleEF	LHD2	0.15	0.18
tblVehicleEF	LHD2	0.07	0.14
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	1.5200e-004	1.4500e-004
tblVehicleEF	LHD2	6.9100e-003	7.4040e-003
tblVehicleEF	LHD2	4.0000e-005	6.4000e-005
tblVehicleEF	LHD2	1.5620e-003	0.56
tblVehicleEF	LHD2	0.03	0.05
tblVehicleEF	LHD2	0.02	0.20
tblVehicleEF	LHD2	5.4600e-004	4.5700e-004
tblVehicleEF	LHD2	0.18	0.20
tblVehicleEF	LHD2	0.07	0.14
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.8180e-003	0.02
tblVehicleEF	LHD2	8.1930e-003	8.9700e-003
tblVehicleEF	LHD2	4.9400e-003	5.4330e-003
tblVehicleEF	LHD2	0.11	0.63
tblVehicleEF	LHD2	0.85	0.15
tblVehicleEF	LHD2	0.36	1.34
tblVehicleEF	LHD2	16.04	15.20
tblVehicleEF	LHD2	721.67	769.51
tblVehicleEF	LHD2	4.10	6.72
tblVehicleEF	LHD2	2.2830e-003	2.0080e-003
tblVehicleEF	LHD2	0.08	0.08
tblVehicleEF	LHD2	7.9540e-003	0.01
tblVehicleEF	LHD2	0.15	1.89
tblVehicleEF	LHD2	1.88	1.56
tblVehicleEF	LHD2	0.11	0.10

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	LHD2	1.7450e-003	0.02
tblVehicleEF	LHD2	0.09	0.09
tblVehicleEF	LHD2	0.01	0.01
tblVehicleEF	LHD2	0.03	0.04
tblVehicleEF	LHD2	7.0000e-005	4.3000e-005
tblVehicleEF	LHD2	1.6690e-003	1.4780e-003
tblVehicleEF	LHD2	2.8250e-003	2.7500e-003
tblVehicleEF	LHD2	0.02	0.02
tblVehicleEF	LHD2	6.4000e-005	1.2300e-004
tblVehicleEF	LHD2	1.7500e-004	0.38
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.01	0.16
tblVehicleEF	LHD2	8.2000e-005	3.4000e-005
tblVehicleEF	LHD2	0.15	0.18
tblVehicleEF	LHD2	0.08	0.17
tblVehicleEF	LHD2	0.02	0.03
tblVehicleEF	LHD2	1.5200e-004	1.4500e-004
tblVehicleEF	LHD2	6.9100e-003	7.4040e-003
tblVehicleEF	LHD2	4.1000e-005	6.7000e-005
tblVehicleEF	LHD2	1.7500e-004	0.38
tblVehicleEF	LHD2	0.02	0.05
tblVehicleEF	LHD2	0.02	0.20
tblVehicleEF	LHD2	8.2000e-005	3.4000e-005
tblVehicleEF	LHD2	0.18	0.20
tblVehicleEF	LHD2	0.08	0.17
tblVehicleEF	LHD2	0.03	0.03
tblVehicleEF	MCY	0.36	0.22
tblVehicleEF	MCY	0.28	0.24
tblVehicleEF	MCY	0.00	17.20

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	21.89	8.4200e-003
tblVehicleEF	MCY	9.74	0.00
tblVehicleEF	MCY	216.40	223.35
tblVehicleEF	MCY	65.63	73.13
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.21	0.74
tblVehicleEF	MCY	0.28	0.19
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.0160e-003	1.9560e-003
tblVehicleEF	MCY	3.1380e-003	3.5930e-003
tblVehicleEF	MCY	1.8900e-003	2.0980e-003
tblVehicleEF	MCY	2.9630e-003	3.3090e-003
tblVehicleEF	MCY	1.16	5.50
tblVehicleEF	MCY	0.95	0.81
tblVehicleEF	MCY	0.54	0.19
tblVehicleEF	MCY	2.54	1.53
tblVehicleEF	MCY	1.03	0.83
tblVehicleEF	MCY	2.24	1.88
tblVehicleEF	MCY	2.1410e-003	2.2100e-003
tblVehicleEF	MCY	6.4900e-004	7.2400e-004
tblVehicleEF	MCY	1.16	5.50
tblVehicleEF	MCY	0.95	0.81
tblVehicleEF	MCY	0.54	0.19
tblVehicleEF	MCY	3.09	1.80
tblVehicleEF	MCY	1.03	0.83
tblVehicleEF	MCY	2.43	2.05
tblVehicleEF	MCY	0.34	0.21
tblVehicleEF	MCY	0.22	0.19

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.00	16.75
tblVehicleEF	MCY	20.77	8.4200e-003
tblVehicleEF	MCY	8.10	0.00
tblVehicleEF	MCY	214.12	217.02
tblVehicleEF	MCY	61.31	65.04
tblVehicleEF	MCY	0.06	0.07
tblVehicleEF	MCY	0.01	0.02
tblVehicleEF	MCY	1.02	0.62
tblVehicleEF	MCY	0.25	0.17
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.0160e-003	1.9560e-003
tblVehicleEF	MCY	3.1380e-003	3.5930e-003
tblVehicleEF	MCY	1.8900e-003	2.0980e-003
tblVehicleEF	MCY	2.9630e-003	3.3090e-003
tblVehicleEF	MCY	3.88	9.23
tblVehicleEF	MCY	1.46	0.83
tblVehicleEF	MCY	1.61	0.33
tblVehicleEF	MCY	2.40	1.46
tblVehicleEF	MCY	0.99	0.76
tblVehicleEF	MCY	1.72	1.44
tblVehicleEF	MCY	2.1190e-003	2.1480e-003
tblVehicleEF	MCY	6.0700e-004	6.4400e-004
tblVehicleEF	MCY	3.88	9.23
tblVehicleEF	MCY	1.46	0.83
tblVehicleEF	MCY	1.61	0.33
tblVehicleEF	MCY	2.92	1.72
tblVehicleEF	MCY	0.99	0.76
tblVehicleEF	MCY	1.87	1.57
tblVehicleEF	MCY	0.37	0.22

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MCY	0.33	0.28
tblVehicleEF	MCY	0.00	18.05
tblVehicleEF	MCY	23.58	8.4200e-003
tblVehicleEF	MCY	11.09	0.00
tblVehicleEF	MCY	219.53	227.17
tblVehicleEF	MCY	69.05	77.44
tblVehicleEF	MCY	0.07	0.07
tblVehicleEF	MCY	0.02	0.02
tblVehicleEF	MCY	1.29	0.78
tblVehicleEF	MCY	0.30	0.20
tblVehicleEF	MCY	0.01	0.01
tblVehicleEF	MCY	2.0160e-003	1.9560e-003
tblVehicleEF	MCY	3.1380e-003	3.5930e-003
tblVehicleEF	MCY	1.8900e-003	2.0980e-003
tblVehicleEF	MCY	2.9630e-003	3.3090e-003
tblVehicleEF	MCY	0.25	4.51
tblVehicleEF	MCY	1.04	0.92
tblVehicleEF	MCY	0.13	0.01
tblVehicleEF	MCY	2.67	1.60
tblVehicleEF	MCY	1.19	0.97
tblVehicleEF	MCY	2.62	2.21
tblVehicleEF	MCY	2.1720e-003	2.2480e-003
tblVehicleEF	MCY	6.8300e-004	7.6600e-004
tblVehicleEF	MCY	0.25	4.51
tblVehicleEF	MCY	1.04	0.92
tblVehicleEF	MCY	0.13	0.01
tblVehicleEF	MCY	3.24	1.88
tblVehicleEF	MCY	1.19	0.97
tblVehicleEF	MCY	2.85	2.40

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	4.3610e-003	4.3240e-003
tblVehicleEF	MDV	0.09	0.13
tblVehicleEF	MDV	0.00	1.13
tblVehicleEF	MDV	0.97	0.03
tblVehicleEF	MDV	3.52	0.00
tblVehicleEF	MDV	400.27	409.93
tblVehicleEF	MDV	86.32	90.72
tblVehicleEF	MDV	9.2270e-003	0.01
tblVehicleEF	MDV	0.04	0.04
tblVehicleEF	MDV	0.10	0.12
tblVehicleEF	MDV	0.39	0.55
tblVehicleEF	MDV	0.04	9.8980e-003
tblVehicleEF	MDV	1.6690e-003	1.5930e-003
tblVehicleEF	MDV	2.0180e-003	2.4250e-003
tblVehicleEF	MDV	1.5420e-003	1.9070e-003
tblVehicleEF	MDV	1.8560e-003	2.1470e-003
tblVehicleEF	MDV	0.10	2.25
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.07	0.04
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.11
tblVehicleEF	MDV	0.49	0.69
tblVehicleEF	MDV	3.8780e-003	4.0510e-003
tblVehicleEF	MDV	8.3700e-004	8.9800e-004
tblVehicleEF	MDV	0.10	2.25
tblVehicleEF	MDV	0.19	0.25
tblVehicleEF	MDV	0.07	0.04
tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.09	0.11

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.54	0.75
tblVehicleEF	MDV	4.9620e-003	4.6910e-003
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.00	1.50
tblVehicleEF	MDV	1.14	0.03
tblVehicleEF	MDV	2.68	0.00
tblVehicleEF	MDV	422.16	409.07
tblVehicleEF	MDV	84.61	88.79
tblVehicleEF	MDV	8.5790e-003	0.01
tblVehicleEF	MDV	0.03	0.04
tblVehicleEF	MDV	0.08	0.10
tblVehicleEF	MDV	0.35	0.49
tblVehicleEF	MDV	0.04	9.8980e-003
tblVehicleEF	MDV	1.6690e-003	1.5930e-003
tblVehicleEF	MDV	2.0180e-003	2.4250e-003
tblVehicleEF	MDV	1.5420e-003	1.9070e-003
tblVehicleEF	MDV	1.8560e-003	2.1470e-003
tblVehicleEF	MDV	0.29	3.03
tblVehicleEF	MDV	0.22	0.25
tblVehicleEF	MDV	0.17	0.06
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.39	0.54
tblVehicleEF	MDV	4.0900e-003	4.0420e-003
tblVehicleEF	MDV	8.2000e-004	8.7900e-004
tblVehicleEF	MDV	0.29	3.03
tblVehicleEF	MDV	0.22	0.25
tblVehicleEF	MDV	0.17	0.06
tblVehicleEF	MDV	0.03	0.03

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.09	0.10
tblVehicleEF	MDV	0.43	0.59
tblVehicleEF	MDV	4.1590e-003	4.1690e-003
tblVehicleEF	MDV	0.11	0.14
tblVehicleEF	MDV	0.00	1.05
tblVehicleEF	MDV	0.94	0.03
tblVehicleEF	MDV	4.14	0.00
tblVehicleEF	MDV	394.82	409.15
tblVehicleEF	MDV	87.55	92.05
tblVehicleEF	MDV	9.6230e-003	0.01
tblVehicleEF	MDV	0.04	0.05
tblVehicleEF	MDV	0.10	0.13
tblVehicleEF	MDV	0.43	0.60
tblVehicleEF	MDV	0.04	9.8980e-003
tblVehicleEF	MDV	1.6690e-003	1.5930e-003
tblVehicleEF	MDV	2.0180e-003	2.4250e-003
tblVehicleEF	MDV	1.5420e-003	1.9070e-003
tblVehicleEF	MDV	1.8560e-003	2.1470e-003
tblVehicleEF	MDV	0.03	2.05
tblVehicleEF	MDV	0.20	0.25
tblVehicleEF	MDV	0.02	3.4740e-003
tblVehicleEF	MDV	0.02	0.02
tblVehicleEF	MDV	0.11	0.14
tblVehicleEF	MDV	0.56	0.78
tblVehicleEF	MDV	3.8250e-003	4.0430e-003
tblVehicleEF	MDV	8.4900e-004	9.1100e-004
tblVehicleEF	MDV	0.03	2.05
tblVehicleEF	MDV	0.20	0.25
tblVehicleEF	MDV	0.02	3.4740e-003

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MDV	0.03	0.03
tblVehicleEF	MDV	0.11	0.14
tblVehicleEF	MDV	0.62	0.85
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.00	1.12
tblVehicleEF	MH	1.32	0.08
tblVehicleEF	MH	2.03	0.00
tblVehicleEF	MH	1,556.51	1,571.75
tblVehicleEF	MH	17.47	19.72
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.17	2.05
tblVehicleEF	MH	0.24	0.29
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	2.2800e-004	2.5000e-004
tblVehicleEF	MH	3.3390e-003	3.3180e-003
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	2.1000e-004	2.9300e-004
tblVehicleEF	MH	0.75	3.05
tblVehicleEF	MH	0.06	0.08
tblVehicleEF	MH	0.22	0.17
tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.09	0.10
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.7300e-004	1.9500e-004

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.75	3.05
tblVehicleEF	MH	0.06	0.08
tblVehicleEF	MH	0.22	0.17
tblVehicleEF	MH	0.12	0.11
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	0.00	1.17
tblVehicleEF	MH	1.38	0.08
tblVehicleEF	MH	1.78	0.00
tblVehicleEF	MH	1,556.60	1,572.02
tblVehicleEF	MH	17.04	18.99
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	2.03	1.92
tblVehicleEF	MH	0.22	0.27
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	2.2800e-004	2.5000e-004
tblVehicleEF	MH	3.3390e-003	3.3180e-003
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	2.1000e-004	2.9300e-004
tblVehicleEF	MH	2.19	4.24
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.49	0.31
tblVehicleEF	MH	0.10	0.09
tblVehicleEF	MH	0.02	0.03

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.6900e-004	1.8800e-004
tblVehicleEF	MH	2.19	4.24
tblVehicleEF	MH	0.07	0.08
tblVehicleEF	MH	0.49	0.31
tblVehicleEF	MH	0.12	0.12
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.09	0.10
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.00	1.09
tblVehicleEF	MH	1.29	0.08
tblVehicleEF	MH	2.20	0.00
tblVehicleEF	MH	1,556.44	1,571.55
tblVehicleEF	MH	17.75	20.12
tblVehicleEF	MH	0.08	0.08
tblVehicleEF	MH	0.03	0.02
tblVehicleEF	MH	2.21	2.08
tblVehicleEF	MH	0.26	0.31
tblVehicleEF	MH	0.13	0.04
tblVehicleEF	MH	0.01	0.01
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	2.2800e-004	2.5000e-004
tblVehicleEF	MH	3.3390e-003	3.3180e-003
tblVehicleEF	MH	0.05	0.05
tblVehicleEF	MH	2.1000e-004	2.9300e-004
tblVehicleEF	MH	0.24	2.73
tblVehicleEF	MH	0.07	0.09

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MH	0.09	0.02
tblVehicleEF	MH	0.09	0.09
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.10	0.11
tblVehicleEF	MH	0.02	0.02
tblVehicleEF	MH	1.7600e-004	1.9900e-004
tblVehicleEF	MH	0.24	2.73
tblVehicleEF	MH	0.07	0.09
tblVehicleEF	MH	0.09	0.02
tblVehicleEF	MH	0.12	0.11
tblVehicleEF	MH	0.02	0.03
tblVehicleEF	MH	0.11	0.12
tblVehicleEF	MHD	3.3600e-003	0.03
tblVehicleEF	MHD	2.1250e-003	2.5480e-003
tblVehicleEF	MHD	8.8450e-003	3.7150e-003
tblVehicleEF	MHD	0.58	0.25
tblVehicleEF	MHD	0.27	0.20
tblVehicleEF	MHD	1.16	8.14
tblVehicleEF	MHD	139.17	142.79
tblVehicleEF	MHD	1,082.52	1,113.05
tblVehicleEF	MHD	8.62	11.86
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.15	0.15
tblVehicleEF	MHD	6.2130e-003	7.9990e-003
tblVehicleEF	MHD	0.89	13.26
tblVehicleEF	MHD	1.79	1.09
tblVehicleEF	MHD	1.74	1.62
tblVehicleEF	MHD	7.3100e-004	0.02
tblVehicleEF	MHD	0.13	0.05

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	9.5570e-003	0.01
tblVehicleEF	MHD	1.1700e-004	5.0000e-005
tblVehicleEF	MHD	6.9900e-004	8.4100e-004
tblVehicleEF	MHD	9.1380e-003	8.0590e-003
tblVehicleEF	MHD	1.0700e-004	1.4300e-004
tblVehicleEF	MHD	4.3100e-004	0.25
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.02	0.30
tblVehicleEF	MHD	1.7600e-004	1.5400e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	1.3170e-003	1.3520e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	8.5000e-005	1.1700e-004
tblVehicleEF	MHD	4.3100e-004	0.25
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.03	0.37
tblVehicleEF	MHD	1.7600e-004	1.5400e-004
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	3.1990e-003	0.03
tblVehicleEF	MHD	2.1860e-003	2.6160e-003
tblVehicleEF	MHD	8.1930e-003	3.4390e-003
tblVehicleEF	MHD	0.51	0.26
tblVehicleEF	MHD	0.28	0.20
tblVehicleEF	MHD	1.03	7.55
tblVehicleEF	MHD	139.17	143.24

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	1,082.53	1,113.08
tblVehicleEF	MHD	8.39	11.35
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.15	0.15
tblVehicleEF	MHD	5.9090e-003	7.4930e-003
tblVehicleEF	MHD	0.88	12.96
tblVehicleEF	MHD	1.70	1.04
tblVehicleEF	MHD	1.73	1.61
tblVehicleEF	MHD	6.2300e-004	0.02
tblVehicleEF	MHD	0.13	0.05
tblVehicleEF	MHD	9.5570e-003	0.01
tblVehicleEF	MHD	1.1700e-004	5.0000e-005
tblVehicleEF	MHD	5.9600e-004	7.1500e-004
tblVehicleEF	MHD	9.1380e-003	8.0590e-003
tblVehicleEF	MHD	1.0700e-004	1.4300e-004
tblVehicleEF	MHD	1.2790e-003	0.39
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.02	0.30
tblVehicleEF	MHD	4.3400e-004	2.6700e-004
tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	1.3180e-003	1.3570e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	8.3000e-005	1.1200e-004
tblVehicleEF	MHD	1.2790e-003	0.39
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.03	0.36
tblVehicleEF	MHD	4.3400e-004	2.6700e-004

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	3.5160e-003	0.03
tblVehicleEF	MHD	2.0810e-003	2.4990e-003
tblVehicleEF	MHD	9.2990e-003	3.9060e-003
tblVehicleEF	MHD	0.64	0.25
tblVehicleEF	MHD	0.27	0.20
tblVehicleEF	MHD	1.26	8.82
tblVehicleEF	MHD	139.27	142.32
tblVehicleEF	MHD	1,082.51	1,113.03
tblVehicleEF	MHD	8.77	12.14
tblVehicleEF	MHD	0.02	0.02
tblVehicleEF	MHD	0.15	0.15
tblVehicleEF	MHD	6.4780e-003	8.3090e-003
tblVehicleEF	MHD	0.91	13.67
tblVehicleEF	MHD	1.81	1.11
tblVehicleEF	MHD	1.74	1.62
tblVehicleEF	MHD	8.8000e-004	0.03
tblVehicleEF	MHD	0.13	0.05
tblVehicleEF	MHD	9.5570e-003	0.01
tblVehicleEF	MHD	1.1700e-004	5.0000e-005
tblVehicleEF	MHD	8.4200e-004	1.0150e-003
tblVehicleEF	MHD	9.1380e-003	8.0590e-003
tblVehicleEF	MHD	1.0700e-004	1.4300e-004
tblVehicleEF	MHD	1.2800e-004	0.22
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.02	0.30
tblVehicleEF	MHD	5.8000e-005	2.0000e-005

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	MHD	0.02	0.03
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.05	0.02
tblVehicleEF	MHD	1.3180e-003	1.3480e-003
tblVehicleEF	MHD	0.01	0.01
tblVehicleEF	MHD	8.7000e-005	1.2000e-004
tblVehicleEF	MHD	1.2800e-004	0.22
tblVehicleEF	MHD	0.02	0.04
tblVehicleEF	MHD	0.03	0.36
tblVehicleEF	MHD	5.8000e-005	2.0000e-005
tblVehicleEF	MHD	0.03	0.04
tblVehicleEF	MHD	0.03	0.05
tblVehicleEF	MHD	0.06	0.02
tblVehicleEF	OBUS	7.4360e-003	0.09
tblVehicleEF	OBUS	6.8750e-003	0.01
tblVehicleEF	OBUS	0.02	9.6100e-003
tblVehicleEF	OBUS	0.65	0.70
tblVehicleEF	OBUS	0.86	0.17
tblVehicleEF	OBUS	2.78	8.47
tblVehicleEF	OBUS	101.76	183.31
tblVehicleEF	OBUS	1,372.58	1,475.89
tblVehicleEF	OBUS	18.07	16.49
tblVehicleEF	OBUS	0.01	0.03
tblVehicleEF	OBUS	0.14	0.16
tblVehicleEF	OBUS	0.02	0.01
tblVehicleEF	OBUS	0.41	6.86
tblVehicleEF	OBUS	1.60	1.68
tblVehicleEF	OBUS	1.00	1.29
tblVehicleEF	OBUS	1.3800e-004	0.01

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	9.0190e-003	0.04
tblVehicleEF	OBUS	2.0400e-004	7.8000e-005
tblVehicleEF	OBUS	1.3200e-004	2.6200e-004
tblVehicleEF	OBUS	8.6140e-003	0.01
tblVehicleEF	OBUS	1.8800e-004	1.5500e-004
tblVehicleEF	OBUS	1.5930e-003	0.89
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.05	0.63
tblVehicleEF	OBUS	5.4800e-004	3.6800e-004
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.07	0.08
tblVehicleEF	OBUS	0.12	0.05
tblVehicleEF	OBUS	9.6700e-004	1.7370e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.7900e-004	1.6300e-004
tblVehicleEF	OBUS	1.5930e-003	0.89
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.07	0.80
tblVehicleEF	OBUS	5.4800e-004	3.6800e-004
tblVehicleEF	OBUS	0.06	0.13
tblVehicleEF	OBUS	0.07	0.08
tblVehicleEF	OBUS	0.13	0.06
tblVehicleEF	OBUS	7.5440e-003	0.09
tblVehicleEF	OBUS	7.1540e-003	0.01
tblVehicleEF	OBUS	0.02	8.8650e-003
tblVehicleEF	OBUS	0.65	0.72
tblVehicleEF	OBUS	0.90	0.17
tblVehicleEF	OBUS	2.43	8.31

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	100.55	181.01
tblVehicleEF	OBUS	1,372.64	1,475.96
tblVehicleEF	OBUS	17.48	15.82
tblVehicleEF	OBUS	0.01	0.03
tblVehicleEF	OBUS	0.14	0.16
tblVehicleEF	OBUS	0.02	0.01
tblVehicleEF	OBUS	0.39	6.59
tblVehicleEF	OBUS	1.51	1.60
tblVehicleEF	OBUS	0.98	1.28
tblVehicleEF	OBUS	1.2200e-004	0.01
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	9.0190e-003	0.04
tblVehicleEF	OBUS	2.0400e-004	7.8000e-005
tblVehicleEF	OBUS	1.1700e-004	2.3200e-004
tblVehicleEF	OBUS	8.6140e-003	0.01
tblVehicleEF	OBUS	1.8800e-004	1.5500e-004
tblVehicleEF	OBUS	4.4540e-003	1.34
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.05	0.65
tblVehicleEF	OBUS	1.1940e-003	6.5300e-004
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.07	0.08
tblVehicleEF	OBUS	0.11	0.05
tblVehicleEF	OBUS	9.5500e-004	1.7150e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.7300e-004	1.5700e-004
tblVehicleEF	OBUS	4.4540e-003	1.34
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.07	0.82

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	1.1940e-003	6.5300e-004
tblVehicleEF	OBUS	0.06	0.13
tblVehicleEF	OBUS	0.07	0.08
tblVehicleEF	OBUS	0.12	0.05
tblVehicleEF	OBUS	7.3080e-003	0.09
tblVehicleEF	OBUS	6.6770e-003	0.01
tblVehicleEF	OBUS	0.02	0.01
tblVehicleEF	OBUS	0.66	0.69
tblVehicleEF	OBUS	0.84	0.17
tblVehicleEF	OBUS	3.01	8.69
tblVehicleEF	OBUS	103.44	186.48
tblVehicleEF	OBUS	1,372.54	1,475.84
tblVehicleEF	OBUS	18.46	16.86
tblVehicleEF	OBUS	0.01	0.03
tblVehicleEF	OBUS	0.14	0.16
tblVehicleEF	OBUS	0.02	0.02
tblVehicleEF	OBUS	0.44	7.24
tblVehicleEF	OBUS	1.62	1.70
tblVehicleEF	OBUS	1.01	1.30
tblVehicleEF	OBUS	1.5900e-004	0.02
tblVehicleEF	OBUS	0.13	0.05
tblVehicleEF	OBUS	9.0190e-003	0.04
tblVehicleEF	OBUS	2.0400e-004	7.8000e-005
tblVehicleEF	OBUS	1.5200e-004	3.0200e-004
tblVehicleEF	OBUS	8.6140e-003	0.01
tblVehicleEF	OBUS	1.8800e-004	1.5500e-004
tblVehicleEF	OBUS	5.6800e-004	0.81
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.05	0.60

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	OBUS	2.2000e-004	5.6000e-005
tblVehicleEF	OBUS	0.04	0.10
tblVehicleEF	OBUS	0.08	0.09
tblVehicleEF	OBUS	0.13	0.06
tblVehicleEF	OBUS	9.8300e-004	1.7670e-003
tblVehicleEF	OBUS	0.01	0.01
tblVehicleEF	OBUS	1.8300e-004	1.6700e-004
tblVehicleEF	OBUS	5.6800e-004	0.81
tblVehicleEF	OBUS	0.03	0.03
tblVehicleEF	OBUS	0.07	0.76
tblVehicleEF	OBUS	2.2000e-004	5.6000e-005
tblVehicleEF	OBUS	0.06	0.13
tblVehicleEF	OBUS	0.08	0.09
tblVehicleEF	OBUS	0.14	0.06
tblVehicleEF	SBUS	0.02	0.42
tblVehicleEF	SBUS	0.01	9.4050e-003
tblVehicleEF	SBUS	3.4210e-003	0.02
tblVehicleEF	SBUS	1.31	0.98
tblVehicleEF	SBUS	0.85	0.12
tblVehicleEF	SBUS	0.63	17.91
tblVehicleEF	SBUS	329.50	320.63
tblVehicleEF	SBUS	1,098.41	1,108.97
tblVehicleEF	SBUS	2.45	1.16
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.16	0.16
tblVehicleEF	SBUS	1.8320e-003	1.1770e-003
tblVehicleEF	SBUS	3.86	20.97
tblVehicleEF	SBUS	7.11	4.61
tblVehicleEF	SBUS	0.76	0.48

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	5.0480e-003	0.03
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.04	0.02
tblVehicleEF	SBUS	3.5000e-005	1.7400e-004
tblVehicleEF	SBUS	4.8290e-003	5.3920e-003
tblVehicleEF	SBUS	2.8640e-003	2.9050e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.2000e-005	1.3000e-005
tblVehicleEF	SBUS	9.6000e-004	0.83
tblVehicleEF	SBUS	8.7890e-003	7.3000e-004
tblVehicleEF	SBUS	0.13	2.00
tblVehicleEF	SBUS	2.4600e-004	1.7000e-005
tblVehicleEF	SBUS	0.13	0.09
tblVehicleEF	SBUS	0.02	1.8370e-003
tblVehicleEF	SBUS	0.02	0.12
tblVehicleEF	SBUS	3.1250e-003	3.0350e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	2.4000e-005	1.1000e-005
tblVehicleEF	SBUS	9.6000e-004	0.83
tblVehicleEF	SBUS	8.7890e-003	7.3000e-004
tblVehicleEF	SBUS	0.18	2.88
tblVehicleEF	SBUS	2.4600e-004	1.7000e-005
tblVehicleEF	SBUS	0.15	0.11
tblVehicleEF	SBUS	0.02	1.8370e-003
tblVehicleEF	SBUS	0.02	0.13
tblVehicleEF	SBUS	0.02	0.42
tblVehicleEF	SBUS	0.01	9.6850e-003
tblVehicleEF	SBUS	2.6630e-003	0.01

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	1.27	1.02
tblVehicleEF	SBUS	0.87	0.12
tblVehicleEF	SBUS	0.40	17.68
tblVehicleEF	SBUS	339.85	331.74
tblVehicleEF	SBUS	1,098.45	1,108.98
tblVehicleEF	SBUS	2.07	1.01
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.16	0.16
tblVehicleEF	SBUS	1.7190e-003	1.1050e-003
tblVehicleEF	SBUS	3.96	21.39
tblVehicleEF	SBUS	6.74	4.36
tblVehicleEF	SBUS	0.76	0.47
tblVehicleEF	SBUS	4.2620e-003	0.02
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.04	0.02
tblVehicleEF	SBUS	3.5000e-005	1.7400e-004
tblVehicleEF	SBUS	4.0780e-003	4.5510e-003
tblVehicleEF	SBUS	2.8640e-003	2.9050e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.2000e-005	1.3000e-005
tblVehicleEF	SBUS	2.9390e-003	1.46
tblVehicleEF	SBUS	0.01	7.3600e-004
tblVehicleEF	SBUS	0.13	2.00
tblVehicleEF	SBUS	6.0100e-004	2.8000e-005
tblVehicleEF	SBUS	0.13	0.09
tblVehicleEF	SBUS	0.02	1.5350e-003
tblVehicleEF	SBUS	0.02	0.09
tblVehicleEF	SBUS	3.2230e-003	3.1400e-003

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	2.0000e-005	1.0000e-005
tblVehicleEF	SBUS	2.9390e-003	1.46
tblVehicleEF	SBUS	0.01	7.3600e-004
tblVehicleEF	SBUS	0.18	2.88
tblVehicleEF	SBUS	6.0100e-004	2.8000e-005
tblVehicleEF	SBUS	0.15	0.12
tblVehicleEF	SBUS	0.02	1.5350e-003
tblVehicleEF	SBUS	0.02	0.10
tblVehicleEF	SBUS	0.02	0.42
tblVehicleEF	SBUS	9.9210e-003	9.2250e-003
tblVehicleEF	SBUS	3.8640e-003	0.02
tblVehicleEF	SBUS	1.37	0.96
tblVehicleEF	SBUS	0.83	0.12
tblVehicleEF	SBUS	0.77	18.22
tblVehicleEF	SBUS	315.21	305.28
tblVehicleEF	SBUS	1,098.38	1,108.97
tblVehicleEF	SBUS	2.68	1.24
tblVehicleEF	SBUS	0.05	0.05
tblVehicleEF	SBUS	0.16	0.16
tblVehicleEF	SBUS	1.9210e-003	1.2290e-003
tblVehicleEF	SBUS	3.73	20.39
tblVehicleEF	SBUS	7.19	4.66
tblVehicleEF	SBUS	0.76	0.49
tblVehicleEF	SBUS	6.1330e-003	0.03
tblVehicleEF	SBUS	0.74	0.04
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	0.04	0.02
tblVehicleEF	SBUS	3.5000e-005	1.7400e-004

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	SBUS	5.8680e-003	6.5530e-003
tblVehicleEF	SBUS	2.8640e-003	2.9050e-003
tblVehicleEF	SBUS	0.04	0.04
tblVehicleEF	SBUS	3.2000e-005	1.3000e-005
tblVehicleEF	SBUS	2.9000e-004	0.69
tblVehicleEF	SBUS	8.9230e-003	7.3600e-004
tblVehicleEF	SBUS	0.13	2.00
tblVehicleEF	SBUS	1.0200e-004	3.0000e-006
tblVehicleEF	SBUS	0.13	0.09
tblVehicleEF	SBUS	0.03	2.4220e-003
tblVehicleEF	SBUS	0.02	0.13
tblVehicleEF	SBUS	2.9900e-003	2.8900e-003
tblVehicleEF	SBUS	0.01	0.01
tblVehicleEF	SBUS	2.7000e-005	1.2000e-005
tblVehicleEF	SBUS	2.9000e-004	0.69
tblVehicleEF	SBUS	8.9230e-003	7.3600e-004
tblVehicleEF	SBUS	0.18	2.88
tblVehicleEF	SBUS	1.0200e-004	3.0000e-006
tblVehicleEF	SBUS	0.15	0.11
tblVehicleEF	SBUS	0.03	2.4220e-003
tblVehicleEF	SBUS	0.03	0.14
tblVehicleEF	UBUS	0.83	2.9490e-003
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.00	0.12
tblVehicleEF	UBUS	6.45	0.14
tblVehicleEF	UBUS	3.01	0.00
tblVehicleEF	UBUS	1,562.30	0.00
tblVehicleEF	UBUS	30.90	0.00
tblVehicleEF	UBUS	0.15	0.00

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.43	0.29
tblVehicleEF	UBUS	0.29	0.27
tblVehicleEF	UBUS	0.10	0.11
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.0130e-003	4.5220e-003
tblVehicleEF	UBUS	3.1700e-004	2.7200e-004
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	5.0200e-003	0.00
tblVehicleEF	UBUS	3.8030e-003	0.00
tblVehicleEF	UBUS	2.9200e-004	0.00
tblVehicleEF	UBUS	1.1700e-003	0.13
tblVehicleEF	UBUS	0.01	0.00
tblVehicleEF	UBUS	5.1700e-004	0.00
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	3.0160e-003	0.00
tblVehicleEF	UBUS	0.16	0.17
tblVehicleEF	UBUS	0.01	0.00
tblVehicleEF	UBUS	3.0600e-004	0.00
tblVehicleEF	UBUS	1.1700e-003	0.13
tblVehicleEF	UBUS	0.01	0.00
tblVehicleEF	UBUS	5.1700e-004	0.00
tblVehicleEF	UBUS	0.86	0.05
tblVehicleEF	UBUS	3.0160e-003	0.00
tblVehicleEF	UBUS	0.17	0.18
tblVehicleEF	UBUS	0.83	3.0010e-003
tblVehicleEF	UBUS	0.03	0.03
tblVehicleEF	UBUS	0.00	0.13
tblVehicleEF	UBUS	6.45	0.14

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	2.28	0.00
tblVehicleEF	UBUS	1,562.31	0.00
tblVehicleEF	UBUS	29.67	0.00
tblVehicleEF	UBUS	0.14	0.00
tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.41	0.28
tblVehicleEF	UBUS	0.26	0.25
tblVehicleEF	UBUS	0.10	0.11
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.0130e-003	4.5220e-003
tblVehicleEF	UBUS	3.1700e-004	2.7200e-004
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	5.0200e-003	0.00
tblVehicleEF	UBUS	3.8030e-003	0.00
tblVehicleEF	UBUS	2.9200e-004	0.00
tblVehicleEF	UBUS	3.5480e-003	0.25
tblVehicleEF	UBUS	0.02	0.00
tblVehicleEF	UBUS	1.3380e-003	0.00
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	2.8260e-003	0.00
tblVehicleEF	UBUS	0.13	0.14
tblVehicleEF	UBUS	0.01	0.00
tblVehicleEF	UBUS	2.9400e-004	0.00
tblVehicleEF	UBUS	3.5480e-003	0.25
tblVehicleEF	UBUS	0.02	0.00
tblVehicleEF	UBUS	1.3380e-003	0.00
tblVehicleEF	UBUS	0.86	0.05
tblVehicleEF	UBUS	2.8260e-003	0.00
tblVehicleEF	UBUS	0.15	0.16

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	0.83	2.9140e-003
tblVehicleEF	UBUS	0.04	0.04
tblVehicleEF	UBUS	0.00	0.12
tblVehicleEF	UBUS	6.45	0.14
tblVehicleEF	UBUS	3.52	0.00
tblVehicleEF	UBUS	1,562.29	0.00
tblVehicleEF	UBUS	31.76	0.00
tblVehicleEF	UBUS	0.15	0.00
tblVehicleEF	UBUS	0.03	0.00
tblVehicleEF	UBUS	0.43	0.29
tblVehicleEF	UBUS	0.30	0.29
tblVehicleEF	UBUS	0.10	0.11
tblVehicleEF	UBUS	0.02	0.02
tblVehicleEF	UBUS	4.0130e-003	4.5220e-003
tblVehicleEF	UBUS	3.1700e-004	2.7200e-004
tblVehicleEF	UBUS	0.04	0.00
tblVehicleEF	UBUS	5.0200e-003	0.00
tblVehicleEF	UBUS	3.8030e-003	0.00
tblVehicleEF	UBUS	2.9200e-004	0.00
tblVehicleEF	UBUS	3.7300e-004	0.11
tblVehicleEF	UBUS	0.01	0.00
tblVehicleEF	UBUS	1.8800e-004	0.00
tblVehicleEF	UBUS	0.03	0.05
tblVehicleEF	UBUS	3.7740e-003	0.00
tblVehicleEF	UBUS	0.17	0.19
tblVehicleEF	UBUS	0.01	0.00
tblVehicleEF	UBUS	3.1400e-004	0.00
tblVehicleEF	UBUS	3.7300e-004	0.11
tblVehicleEF	UBUS	0.01	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

tblVehicleEF	UBUS	1.8800e-004	0.00
tblVehicleEF	UBUS	0.86	0.05
tblVehicleEF	UBUS	3.7740e-003	0.00
tblVehicleEF	UBUS	0.19	0.20
tblVehicleTrips	CC_TL	6.60	2.60
tblVehicleTrips	CC_TL	6.60	2.60
tblVehicleTrips	CNW_TL	6.60	2.60
tblVehicleTrips	CNW_TL	6.60	2.60
tblVehicleTrips	CW_TL	14.70	2.60
tblVehicleTrips	CW_TL	14.70	2.60
tblVehicleTrips	ST_TR	20.87	3.63
tblVehicleTrips	ST_TR	9.10	0.15
tblVehicleTrips	SU_TR	26.73	3.63
tblVehicleTrips	SU_TR	13.60	0.15
tblVehicleTrips	WD_TR	32.93	3.63
tblVehicleTrips	WD_TR	28.82	0.15

2.0 Emissions Summary

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.1 Overall Construction (Maximum Daily Emission)

Unmitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.8090	18.8195	14.9162	0.0322	7.2103	0.8555	7.9533	3.4586	0.7996	4.1422	0.0000	3,173.2805	3,173.2805	0.6486	0.1126	3,221.7903
2023	57.4335	12.4209	13.9661	0.0274	0.4120	0.5198	0.9318	0.1108	0.5018	0.6126	0.0000	2,557.6970	2,557.6970	0.4152	0.0433	2,579.3040
Maximum	**57.4335**	**18.8195**	**14.9162**	**0.0322**	**7.2103**	**0.8555**	**7.9533**	**3.4586**	**0.7996**	**4.1422**	**0.0000**	**3,173.2805**	**3,173.2805**	**0.6486**	**0.1126**	**3,221.7903**

Mitigated Construction

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Year	lb/day										lb/day					
2022	1.8090	18.8195	14.9162	0.0322	7.2103	0.8555	7.9533	3.4586	0.7996	4.1422	0.0000	3,173.2805	3,173.2805	0.6486	0.1126	3,221.7903
2023	57.4335	12.4209	13.9661	0.0274	0.4120	0.5198	0.9318	0.1108	0.5018	0.6126	0.0000	2,557.6970	2,557.6970	0.4152	0.0433	2,579.3040
Maximum	**57.4335**	**18.8195**	**14.9162**	**0.0322**	**7.2103**	**0.8555**	**7.9533**	**3.4586**	**0.7996**	**4.1422**	**0.0000**	**3,173.2805**	**3,173.2805**	**0.6486**	**0.1126**	**3,221.7903**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

2.2 Overall Operational

Unmitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7134	6.0000e-005	6.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0141	0.0141	4.0000e-005		0.0150
Energy	6.3500e-003	0.0577	0.0485	3.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003		69.2321	69.2321	1.3300e-003	1.2700e-003	69.6435
Mobile	1.8865	0.5685	1.1648	3.1300e-003	0.2575	5.1000e-003	0.2626	0.0745	3.7500e-003	0.0782		317.9153	317.9153	0.0510	0.0291	327.8731
Total	**3.6062**	**0.6262**	**1.2198**	**3.4800e-003**	**0.2575**	**9.5000e-003**	**0.2670**	**0.0745**	**8.1500e-003**	**0.0826**		**387.1615**	**387.1615**	**0.0524**	**0.0304**	**397.5316**

Mitigated Operational

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Area	1.7134	6.0000e-005	6.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0141	0.0141	4.0000e-005		0.0150
Energy	6.3500e-003	0.0577	0.0485	3.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003		69.2321	69.2321	1.3300e-003	1.2700e-003	69.6435
Mobile	1.8865	0.5685	1.1648	3.1300e-003	0.2575	5.1000e-003	0.2626	0.0745	3.7500e-003	0.0782		317.9153	317.9153	0.0510	0.0291	327.8731
Total	**3.6062**	**0.6262**	**1.2198**	**3.4800e-003**	**0.2575**	**9.5000e-003**	**0.2670**	**0.0745**	**8.1500e-003**	**0.0826**		**387.1615**	**387.1615**	**0.0524**	**0.0304**	**397.5316**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio-CO2	Total CO2	CH4	N20	CO2e
Percent Reduction	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00

3.0 Construction Detail

Construction Phase

Phase Number	Phase Name	Phase Type	Start Date	End Date	Num Days Week	Num Days	Phase Description
1	Demolition	Demolition	1/1/2022	1/28/2022	5	20	
2	Site Preparation	Site Preparation	1/29/2022	2/1/2022	5	2	
3	Grading	Grading	2/2/2022	2/7/2022	5	4	
4	Building Construction	Building Construction	1/1/2023	10/6/2023	5	200	
5	Paving	Paving	10/7/2023	10/20/2023	5	10	
6	Architectural Coating	Architectural Coating	10/21/2023	11/3/2023	5	10	

Acres of Grading (Site Preparation Phase): 1.88

Acres of Grading (Grading Phase): 4

Acres of Paving: 0

Residential Indoor: 0; Residential Outdoor: 0; Non-Residential Indoor: 92,583; Non-Residential Outdoor: 30,861; Striped Parking Area: 0 (Architectural Coating – sqft)

OffRoad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor
Demolition	Concrete/Industrial Saws	1	8.00	81	0.73
Demolition	Rubber Tired Dozers	1	8.00	247	0.40
Demolition	Tractors/Loaders/Backhoes	3	8.00	97	0.37
Site Preparation	Graders	1	8.00	187	0.41
Site Preparation	Rubber Tired Dozers	1	7.00	247	0.40

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Site Preparation	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Grading	Graders	1	8.00	187	0.41
Grading	Rubber Tired Dozers	1	8.00	247	0.40
Grading	Tractors/Loaders/Backhoes	2	7.00	97	0.37
Building Construction	Cranes	1	6.00	231	0.29
Building Construction	Forklifts	1	6.00	89	0.20
Building Construction	Generator Sets	1	8.00	84	0.74
Building Construction	Tractors/Loaders/Backhoes	1	6.00	97	0.37
Building Construction	Welders	3	8.00	46	0.45
Paving	Cement and Mortar Mixers	1	6.00	9	0.56
Paving	Pavers	1	6.00	130	0.42
Paving	Paving Equipment	1	8.00	132	0.36
Paving	Rollers	1	7.00	80	0.38
Paving	Tractors/Loaders/Backhoes	1	8.00	97	0.37
Architectural Coating	Air Compressors	1	6.00	78	0.48

Trips and VMT

Phase Name	Offroad Equipment Count	Worker Trip Number	Vendor Trip Number	Hauling Trip Number	Worker Trip Length	Vendor Trip Length	Hauling Trip Length	Worker Vehicle Class	Vendor Vehicle Class	Hauling Vehicle Class
Demolition	5	13.00	0.00	177.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Site Preparation	3	8.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Grading	4	10.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Building Construction	7	27.00	11.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Paving	5	13.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT
Architectural Coating	1	5.00	0.00	0.00	16.80	6.60	20.00	LD_Mix	HDT_Mix	HHDT

3.1 Mitigation Measures Construction

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9495	0.0000	1.9495	0.2952	0.0000	0.2952			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829		2,323.4168	2,323.4168	0.5921		2,338.2191
Total	**1.6889**	**16.6217**	**13.9605**	**0.0241**	**1.9495**	**0.8379**	**2.7874**	**0.2952**	**0.7829**	**1.0781**		**2,323.4168**	**2,323.4168**	**0.5921**		**2,338.2191**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0490	2.1547	0.3228	6.5500e-003	0.1535	0.0166	0.1701	0.0420	0.0159	0.0579		692.7822	692.7822	2.3700e-003	0.1086	725.1893
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0710	0.0431	0.6329	1.5400e-003	0.1661	9.5000e-004	0.1670	0.0440	8.8000e-004	0.0449		157.0815	157.0815	4.2300e-003	4.0100e-003	158.3819
Total	**0.1200**	**2.1978**	**0.9557**	**8.0900e-003**	**0.3196**	**0.0176**	**0.3371**	**0.0860**	**0.0168**	**0.1028**		**849.8637**	**849.8637**	**6.6000e-003**	**0.1126**	**883.5712**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.2 Demolition - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					1.9495	0.0000	1.9495	0.2952	0.0000	0.2952			0.0000			0.0000
Off-Road	1.6889	16.6217	13.9605	0.0241		0.8379	0.8379		0.7829	0.7829	0.0000	2,323.4168	2,323.4168	0.5921		2,338.2191
Total	**1.6889**	**16.6217**	**13.9605**	**0.0241**	**1.9495**	**0.8379**	**2.7874**	**0.2952**	**0.7829**	**1.0781**	**0.0000**	**2,323.4168**	**2,323.4168**	**0.5921**		**2,338.2191**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0490	2.1547	0.3228	6.5500e-003	0.1535	0.0166	0.1701	0.0420	0.0159	0.0579		692.7822	692.7822	2.3700e-003	0.1086	725.1893
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0710	0.0431	0.6329	1.5400e-003	0.1661	9.5000e-004	0.1670	0.0440	8.8000e-004	0.0449		157.0815	157.0815	4.2300e-003	4.0100e-003	158.3819
Total	**0.1200**	**2.1978**	**0.9557**	**8.0900e-003**	**0.3196**	**0.0176**	**0.3371**	**0.0860**	**0.0168**	**0.1028**		**849.8637**	**849.8637**	**6.6000e-003**	**0.1126**	**883.5712**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727		1,666.1738	1,666.1738	0.5389		1,679.6457
Total	**1.3122**	**14.6277**	**7.0939**	**0.0172**	**6.2662**	**0.6225**	**6.8887**	**3.0041**	**0.5727**	**3.5768**		**1,666.1738**	**1,666.1738**	**0.5389**		**1,679.6457**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0437	0.0265	0.3895	9.5000e-004	0.1022	5.8000e-004	0.1028	0.0271	5.4000e-004	0.0276		96.6655	96.6655	2.6000e-003	2.4700e-003	97.4658
Total	**0.0437**	**0.0265**	**0.3895**	**9.5000e-004**	**0.1022**	**5.8000e-004**	**0.1028**	**0.0271**	**5.4000e-004**	**0.0276**		**96.6655**	**96.6655**	**2.6000e-003**	**2.4700e-003**	**97.4658**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.3 Site Preparation - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					6.2662	0.0000	6.2662	3.0041	0.0000	3.0041			0.0000			0.0000
Off-Road	1.3122	14.6277	7.0939	0.0172		0.6225	0.6225		0.5727	0.5727	0.0000	1,666.1738	1,666.1738	0.5389		1,679.6457
Total	**1.3122**	**14.6277**	**7.0939**	**0.0172**	**6.2662**	**0.6225**	**6.8887**	**3.0041**	**0.5727**	**3.5768**	**0.0000**	**1,666.1738**	**1,666.1738**	**0.5389**		**1,679.6457**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0437	0.0265	0.3895	9.5000e-004	0.1022	5.8000e-004	0.1028	0.0271	5.4000e-004	0.0276		96.6655	96.6655	2.6000e-003	2.4700e-003	97.4658
Total	**0.0437**	**0.0265**	**0.3895**	**9.5000e-004**	**0.1022**	**5.8000e-004**	**0.1028**	**0.0271**	**5.4000e-004**	**0.0276**		**96.6655**	**96.6655**	**2.6000e-003**	**2.4700e-003**	**97.4658**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.5403	16.9836	9.2202	0.0206		0.7423	0.7423		0.6829	0.6829		1,995.4825	1,995.4825	0.6454		2,011.6169
Total	**1.5403**	**16.9836**	**9.2202**	**0.0206**	**7.0826**	**0.7423**	**7.8249**	**3.4247**	**0.6829**	**4.1076**		**1,995.4825**	**1,995.4825**	**0.6454**		**2,011.6169**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0546	0.0331	0.4868	1.1900e-003	0.1277	7.3000e-004	0.1285	0.0339	6.7000e-004	0.0346		120.8319	120.8319	3.2500e-003	3.0800e-003	121.8323
Total	**0.0546**	**0.0331**	**0.4868**	**1.1900e-003**	**0.1277**	**7.3000e-004**	**0.1285**	**0.0339**	**6.7000e-004**	**0.0346**		**120.8319**	**120.8319**	**3.2500e-003**	**3.0800e-003**	**121.8323**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.4 Grading - 2022

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Fugitive Dust					7.0826	0.0000	7.0826	3.4247	0.0000	3.4247			0.0000			0.0000
Off-Road	1.5403	16.9836	9.2202	0.0206		0.7423	0.7423		0.6829	0.6829	0.0000	1,995.4825	1,995.4825	0.6454		2,011.6169
Total	**1.5403**	**16.9836**	**9.2202**	**0.0206**	**7.0826**	**0.7423**	**7.8249**	**3.4247**	**0.6829**	**4.1076**	**0.0000**	**1,995.4825**	**1,995.4825**	**0.6454**		**2,011.6169**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0546	0.0331	0.4868	1.1900e-003	0.1277	7.3000e-004	0.1285	0.0339	6.7000e-004	0.0346		120.8319	120.8319	3.2500e-003	3.0800e-003	121.8323
Total	**0.0546**	**0.0331**	**0.4868**	**1.1900e-003**	**0.1277**	**7.3000e-004**	**0.1285**	**0.0339**	**6.7000e-004**	**0.0346**		**120.8319**	**120.8319**	**3.2500e-003**	**3.0800e-003**	**121.8323**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968		2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**		**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0150	0.6313	0.1481	2.2500e-003	0.0671	3.4300e-003	0.0706	0.0193	3.2800e-003	0.0226		237.6689	237.6689	8.0000e-004	0.0356	248.2925
Worker	0.1382	0.0792	1.2069	3.1100e-003	0.3449	1.8600e-003	0.3467	0.0915	1.7100e-003	0.0932		318.2404	318.2404	7.8900e-003	7.6800e-003	320.7258
Total	**0.1532**	**0.7105**	**1.3550**	**5.3600e-003**	**0.4120**	**5.2900e-003**	**0.4173**	**0.1108**	**4.9900e-003**	**0.1158**		**555.9093**	**555.9093**	**8.6900e-003**	**0.0433**	**569.0183**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.5 Building Construction - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	1.5233	11.7104	12.6111	0.0221		0.5145	0.5145		0.4968	0.4968	0.0000	2,001.7877	2,001.7877	0.3399		2,010.2858
Total	**1.5233**	**11.7104**	**12.6111**	**0.0221**		**0.5145**	**0.5145**		**0.4968**	**0.4968**	**0.0000**	**2,001.7877**	**2,001.7877**	**0.3399**		**2,010.2858**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0150	0.6313	0.1481	2.2500e-003	0.0671	3.4300e-003	0.0706	0.0193	3.2800e-003	0.0226		237.6689	237.6689	8.0000e-004	0.0356	248.2925
Worker	0.1382	0.0792	1.2069	3.1100e-003	0.3449	1.8600e-003	0.3467	0.0915	1.7100e-003	0.0932		318.2404	318.2404	7.8900e-003	7.6800e-003	320.7258
Total	**0.1532**	**0.7105**	**1.3550**	**5.3600e-003**	**0.4120**	**5.2900e-003**	**0.4173**	**0.1108**	**4.9900e-003**	**0.1158**		**555.9093**	**555.9093**	**8.6900e-003**	**0.0433**	**569.0183**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846		1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6446**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**		**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0665	0.0381	0.5811	1.5000e-003	0.1661	9.0000e-004	0.1669	0.0440	8.2000e-004	0.0449		153.2269	153.2269	3.8000e-003	3.7000e-003	154.4235
Total	**0.0665**	**0.0381**	**0.5811**	**1.5000e-003**	**0.1661**	**9.0000e-004**	**0.1669**	**0.0440**	**8.2000e-004**	**0.0449**		**153.2269**	**153.2269**	**3.8000e-003**	**3.7000e-003**	**154.4235**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.6 Paving - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Off-Road	0.6446	6.2357	8.8024	0.0136		0.3084	0.3084		0.2846	0.2846	0.0000	1,297.6880	1,297.6880	0.4114		1,307.9725
Paving	0.0000					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Total	**0.6446**	**6.2357**	**8.8024**	**0.0136**		**0.3084**	**0.3084**		**0.2846**	**0.2846**	**0.0000**	**1,297.6880**	**1,297.6880**	**0.4114**		**1,307.9725**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0665	0.0381	0.5811	1.5000e-003	0.1661	9.0000e-004	0.1669	0.0440	8.2000e-004	0.0449		153.2269	153.2269	3.8000e-003	3.7000e-003	154.4235
Total	**0.0665**	**0.0381**	**0.5811**	**1.5000e-003**	**0.1661**	**9.0000e-004**	**0.1669**	**0.0440**	**8.2000e-004**	**0.0449**		**153.2269**	**153.2269**	**3.8000e-003**	**3.7000e-003**	**154.4235**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Unmitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.2163					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708		281.4481	281.4481	0.0168		281.8690
Total	**57.4080**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**		**281.4481**	**281.4481**	**0.0168**		**281.8690**

Unmitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0256	0.0147	0.2235	5.8000e-004	0.0639	3.4000e-004	0.0642	0.0169	3.2000e-004	0.0173		58.9334	58.9334	1.4600e-003	1.4200e-003	59.3937
Total	**0.0256**	**0.0147**	**0.2235**	**5.8000e-004**	**0.0639**	**3.4000e-004**	**0.0642**	**0.0169**	**3.2000e-004**	**0.0173**		**58.9334**	**58.9334**	**1.4600e-003**	**1.4200e-003**	**59.3937**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

3.7 Architectural Coating - 2023

Mitigated Construction On-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Archit. Coating	57.2163					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Off-Road	0.1917	1.3030	1.8111	2.9700e-003		0.0708	0.0708		0.0708	0.0708	0.0000	281.4481	281.4481	0.0168		281.8690
Total	**57.4080**	**1.3030**	**1.8111**	**2.9700e-003**		**0.0708**	**0.0708**		**0.0708**	**0.0708**	**0.0000**	**281.4481**	**281.4481**	**0.0168**		**281.8690**

Mitigated Construction Off-Site

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Hauling	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Vendor	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Worker	0.0256	0.0147	0.2235	5.8000e-004	0.0639	3.4000e-004	0.0642	0.0169	3.2000e-004	0.0173		58.9334	58.9334	1.4600e-003	1.4200e-003	59.3937
Total	**0.0256**	**0.0147**	**0.2235**	**5.8000e-004**	**0.0639**	**3.4000e-004**	**0.0642**	**0.0169**	**3.2000e-004**	**0.0173**		**58.9334**	**58.9334**	**1.4600e-003**	**1.4200e-003**	**59.3937**

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

4.0 Operational Detail - Mobile

4.1 Mitigation Measures Mobile

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.8865	0.5685	1.1648	3.1300e-003	0.2575	5.1000e-003	0.2626	0.0745	3.7500e-003	0.0782		317.9153	317.9153	0.0510	0.0291	327.8731
Unmitigated	1.8865	0.5685	1.1648	3.1300e-003	0.2575	5.1000e-003	0.2626	0.0745	3.7500e-003	0.0782		317.9153	317.9153	0.0510	0.0291	327.8731

4.2 Trip Summary Information

	Average Daily Trip Rate			Unmitigated	Mitigated
Land Use	Weekday	Saturday	Sunday	Annual VMT	Annual VMT
Health Club	224.05	224.05	224.05	131,670	131,670
Recreational Swimming Pool	0.38	0.38	0.38	220	220
Total	224.43	224.43	224.43	131,890	131,890

4.3 Trip Type Information

	Miles			Trip %			Trip Purpose %		
Land Use	H-W or C-W	H-S or C-C	H-O or C-NW	H-W or C-W	H-S or C-C	H-O or C-NW	Primary	Diverted	Pass-by
Health Club	2.60	2.60	2.60	16.90	64.10	19.00	52	39	9
Recreational Swimming Pool	2.60	2.60	2.60	33.00	48.00	19.00	52	39	9

4.4 Fleet Mix

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
Health Club	0.432255	0.063343	0.225240	0.158296	0.047221	0.009429	0.011320	0.004341	0.000681	0.000465	0.038076	0.001344	0.007989
Recreational Swimming Pool	0.432255	0.063343	0.225240	0.158296	0.047221	0.009429	0.011320	0.004341	0.000681	0.000465	0.038076	0.001344	0.007989

5.0 Energy Detail

Historical Energy Use: N

5.1 Mitigation Measures Energy

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
NaturalGas Mitigated	6.3500e-003	0.0577	0.0485	3.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003		69.2321	69.2321	1.3300e-003	1.2700e-003	69.6435
NaturalGas Unmitigated	6.3500e-003	0.0577	0.0485	3.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003		69.2321	69.2321	1.3300e-003	1.2700e-003	69.6435

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

5.2 Energy by Land Use - NaturalGas

Unmitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Health Club	588.473	6.3500e-003	0.0577	0.0485	3.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003		69.2321	69.2321	1.3300e-003	1.2700e-003	69.6435
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**6.3500e-003**	**0.0577**	**0.0485**	**3.5000e-004**		**4.3800e-003**	**4.3800e-003**		**4.3800e-003**	**4.3800e-003**		**69.2321**	**69.2321**	**1.3300e-003**	**1.2700e-003**	**69.6435**

Mitigated

	NaturalGas Use	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Land Use	kBTU/yr	lb/day										lb/day					
Health Club	0.588473	6.3500e-003	0.0577	0.0485	3.5000e-004		4.3800e-003	4.3800e-003		4.3800e-003	4.3800e-003		69.2321	69.2321	1.3300e-003	1.2700e-003	69.6435
Recreational Swimming Pool	0	0.0000	0.0000	0.0000	0.0000		0.0000	0.0000		0.0000	0.0000		0.0000	0.0000	0.0000	0.0000	0.0000
Total		**6.3500e-003**	**0.0577**	**0.0485**	**3.5000e-004**		**4.3800e-003**	**4.3800e-003**		**4.3800e-003**	**4.3800e-003**		**69.2321**	**69.2321**	**1.3300e-003**	**1.2700e-003**	**69.6435**

6.0 Area Detail

56 Acre Master Plan - Multigenerational Center - El Dorado-Lake Tahoe County, Summer

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.1 Mitigation Measures Area

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
Category	lb/day										lb/day					
Mitigated	1.7134	6.0000e-005	6.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0141	0.0141	4.0000e-005		0.0150
Unmitigated	1.7134	6.0000e-005	6.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0141	0.0141	4.0000e-005		0.0150

6.2 Area by SubCategory

Unmitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3919					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3209					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-004	6.0000e-005	6.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0141	0.0141	4.0000e-005		0.0150
Total	**1.7133**	**6.0000e-005**	**6.5500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0141**	**0.0141**	**4.0000e-005**		**0.0150**

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

6.2 Area by SubCategory

Mitigated

	ROG	NOx	CO	SO2	Fugitive PM10	Exhaust PM10	PM10 Total	Fugitive PM2.5	Exhaust PM2.5	PM2.5 Total	Bio- CO2	NBio- CO2	Total CO2	CH4	N2O	CO2e
SubCategory	lb/day										lb/day					
Architectural Coating	0.3919					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Consumer Products	1.3209					0.0000	0.0000		0.0000	0.0000			0.0000			0.0000
Landscaping	6.0000e-004	6.0000e-005	6.5500e-003	0.0000		2.0000e-005	2.0000e-005		2.0000e-005	2.0000e-005		0.0141	0.0141	4.0000e-005		0.0150
Total	**1.7133**	**6.0000e-005**	**6.5500e-003**	**0.0000**		**2.0000e-005**	**2.0000e-005**		**2.0000e-005**	**2.0000e-005**		**0.0141**	**0.0141**	**4.0000e-005**		**0.0150**

7.0 Water Detail

7.1 Mitigation Measures Water

EMFAC Off-Model Adjustment Factors for Gasoline Light Duty Vehicle to Account for the SAFE Vehicle Rule Applied

8.0 Waste Detail

8.1 Mitigation Measures Waste

9.0 Operational Offroad

Equipment Type	Number	Hours/Day	Days/Year	Horse Power	Load Factor	Fuel Type

10.0 Stationary Equipment

Fire Pumps and Emergency Generators

Equipment Type	Number	Hours/Day	Hours/Year	Horse Power	Load Factor	Fuel Type

Boilers

Equipment Type	Number	Heat Input/Day	Heat Input/Year	Boiler Rating	Fuel Type

User Defined Equipment

Equipment Type	Number

11.0 Vegetation

Energy Calculations Summary

Construction Fuel Usage Summary

Construction Year	Diesel Off-road Equipment (gallons)	Gasoline On-road (gallons)	Diesel On-road (gallons)	Diesel Combined
2022	18,616	31,908	96	18,712
2023	18,108	33,829	95	18,203
2024	16,033	26,679	94	16,127
2025	54	201	0	54

Total Gasoline	**92,616**	**gallons**
Total Diesel	**53,096**	**gallons**

2025 Construction Offroad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of days	Average Daily Factor	Diesel Fuel Usage
Site Preparation	Rubber Tired Dozers	3	8.00	247	0.40	7	0.6	498
Site Preparation	Tractors/Loaders/Backhoes	4	8.00	97	0.37	7	0.6	241
Grading	Excavators	2	8.00	158	0.38	14	0.6	403
Grading	Graders	1	8.00	187	0.41	14	0.6	258
Grading	Rubber Tired Dozers	1	8.00	247	0.40	14	0.6	332
Grading	Scrapers	2	8.00	367	0.48	14	0.6	1,184
Grading	Tractors/Loaders/Backhoes	2	8.00	97	0.37	14	0.6	241
Building	Cranes	1	7.00	231	0.29	240	0.6	3,376
Building	Forklifts	3	8.00	89	0.20	240	0.6	3,076
Building Construction	Generator Sets	1	8.00	84	0.74	240	0.6	3,580
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37	240	0.6	5,427
							TOTAL	**18,616**

2026 Construction Offroad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of days	Average Daily Factor	Diesel Fuel Usage
Building Construction	Cranes	1	7.00	231	0.29	261	0.6	3,672
Building Construction	Forklifts	3	8.00	89	0.20	261	0.6	3,345
Building Construction	Generator Sets	1	8.00	84	0.74	261	0.6	3,894
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37	261	0.6	5,901
Building Construction	Welders	1	8.00	46	0.45	261	0.6	1,297
							TOTAL	**18,108**

2027 Construction Offroad Equipment

Phase Name	Offroad Equipment	Amount	Usage Hours	Horse Power	Load Factor	Number of days	Average Daily Factor	Diesel Fuel Usage
Building Construction	Cranes	1	7.00	231	0.29	199	0.6	2,800
Building Construction	Forklifts	3	8.00	89	0.20	199	0.6	2,550
Building Construction	Generator Sets	1	8.00	84	0.74	199	0.6	2,969
Building Construction	Tractors/Loaders/Backhoes	3	7.00	97	0.37	199	0.6	4,500
Building Construction	Welders	1	8.00	46	0.45	199	0.6	989
Paving	Pavers	2	8.00	130	0.42	35	0.6	917
Paving	Paving Equipment	2	8.00	132	0.36	35	0.6	798
Paving	Rollers	2	8.00	80	0.38	35	0.6	511
Architectural Coating	Air Compressors	1	6.00	78	0.48	27	0.6	182
							TOTAL	**16,033**

	Year	Start Date	End Date	Network Days
Site Preparation	2025	1/1/2025	1/9/2025	7
Grading	2025	1/10/2025	1/29/2025	14
Building Construction	2025	1/30/2025	12/31/2025	240
Building Construction	2026	1/1/2026	12/31/2026	261
Building Construction	2027	1/1/2027	10/6/2027	199
Paving	2027	10/7/2027	11/24/2027	35
Architectural Coating	2027	11/25/2027	12/31/2027	27
Architectural Coating	2028	1/1/2028	1/12/2028	8

2028 Construction Offroad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of days	Average Daily Factor	Diesel Fuel Usage
Architectural Coating	Air Compressors	1	6.00	78	0.48	8	0.6	54
							TOTAL	**54**

Trips and VMT

2025

Phase Name	Daily Worker Trip	Days per Year	Total Worker Trips	Total Vendor Trips	Total Hauling Trips	Worker Trip Length (miles)	Vendor Trip Length (miles)	Haul Trip Length (miles)	Total Worker Trip Length (miles)	Total Vendor Trip Length (miles)	Total Haul Trip Length (miles)	**Total gallons of gasoline**	**Total gallons of diesel**
Site Preparation	18.00	7	126	0.00	0.00	16.80	6.60	20.00	2116.8	0	0	**74**	**0**
Grading	20.00	14	280	0.00	0.00	16.80	6.60	20.00	4704	0	0	**164**	**0**
Building Construction	225.00	240	54000	89.00	0.00	16.80	6.60	20.00	907200	587.4	0	**31,670**	**96**
											TOTAL	**31,908**	**96**

2026

Phase Name	Daily Worker Trip	Days per Year	Total Worker Trips	Total Vendor Trips	Total Hauling Trips	Worker Trip Length (miles)	Vendor Trip Length (miles)	Haul Trip Length (miles)	Total Worker Trip Length (miles)	Total Vendor Trip Length (miles)	Total Haul Trip Length (miles)	**Total gallons of gasoline**	**Total gallons of diesel**
Building Construction	225.00	261	58725	89.00	0.00	16.80	6.60	20.00	986580	587.4	0	**33,829**	**95**
											TOTAL	**33,829**	**95**

2027

Phase Name	Daily Worker Trip	Days per Year	Total Worker Trips	Total Vendor Trips	Total Hauling Trips	Worker Trip Length (miles)	Vendor Trip Length (miles)	Haul Trip Length (miles)	Total Worker Trip Length (miles)	Total Vendor Trip Length (miles)	Total Haul Trip Length (miles)	**Total gallons of gasoline**	**Total gallons of diesel**
Building Construction	225.00	199	44775	89.00	0.00	16.80	6.60	20.00	752220	587.4	0	**25,681**	**94**
Paving	15.00	35	525	0.00	0.00	16.80	6.60	20.00	8820	0	0	**301**	**0**
Architectural Coating	45.00	27	1215	0.00	0.00	16.80	6.60	20.00	20412	0	0	**697**	**0**
											TOTAL	**26,679**	**94**

2028

Phase Name	Daily Worker Trip	Days per Year	Total Worker Trips	Total Vendor Trips	Total Hauling Trips	Worker Trip Length (miles)	Vendor Trip Length (miles)	Haul Trip Length (miles)	Total Worker Trip Length (miles)	Total Vendor Trip Length (miles)	Total Haul Trip Length (miles)	**Total gallons of gasoline**	**Total gallons of diesel**
Architectural Coating	45.00	8	360	0.00	0.00	16.80	6.60	20.00	6048	0	0	**201**	**0**
											TOTAL	**201**	**0**

Notes: Consistent with CalEEMod, worker vehicles assumed to be gasoline and 50% LDA, 25% LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy-Duty Trucks (T7).

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: Sub-Area
Region: El Dorado (LT)
Calendar Year: 2025, 2026, 2027, 2028
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed miles/hr	Fuel	Population vehicles	VMT miles/day	Trips trips/day	Fuel gas 1,000 gallons/day	Diesel gas 1,000 gallons/day	Miles per gallon	Gasoline miles per gallon	Diesel miles per gallon
El Dorado (LT)	2025	LDA	Aggregate	Aggregate	Gasoline	4216.7520	161650.2858	19194.6282	5.0430	0.0000	32.05	28.65	6.14
El Dorado (LT)	2025	LDT1	Aggregate	Aggregate	Gasoline	1196.3822	35690.2445	4956.6792	1.3800	0.0000	25.86		
El Dorado (LT)	2025	LDT2	Aggregate	Aggregate	Gasoline	5112.1143	186533.7896	22782.9707	7.5793	0.0000	24.61		
El Dorado (LT)	2025	T7 Tractor	Aggregate	Aggregate	Diesel	3.9205	291.3426	56.9646	0.0000	0.047419571	6.14		

Notes: Consistent with CalEEMod, worker vehicles assumed to be gasoline and 50% LDA, 25% LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy-Duty Trucks (T7).

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: Sub-Area
Region: El Dorado (LT)
Calendar Year: 2025, 2026, 2027, 2028
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Trips	Fuel gas	Diesel gas	Miles per gallon	Gasoline miles per gallon	Diesel miles per gallon
				miles/hr		vehicles	miles/day	trips/day	1,000 gallons/day	1,000 gallons/day			
El Dorado (LT)	2026	LDA	Aggregate	Aggregate	Gasoline	4358.668013	169630.3293	19921.95412	5.176629672	0.0000	32.77	29.16	6.19
El Dorado (LT)	2026	LDT1	Aggregate	Aggregate	Gasoline	1139.937878	33734.53975	4700.330358	1.290976986	0.0000	26.13		
El Dorado (LT)	2026	LDT2	Aggregate	Aggregate	Gasoline	5060.295694	183391.0296	22461.11935	7.338989973	0.0000	24.99		
El Dorado (LT)	2026	T7 Tractor	Aggregate	Aggregate	Diesel	4.110289396	296.5186944	59.72250492	0.0000	0.047892182	6.19		

Notes: Consistent with CalEEMod, worker vehicles assumed to be gasoline and 50% LDA, 25% LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy-Duty Trucks (T7).

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: Sub-Area
Region: El Dorado (LT)
Calendar Year: 2025, 2026, 2027, 2028
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed miles/hr	Fuel	Population vehicles	VMT miles/day	Trips trips/day	Fuel gas 1,000 gallons/day	Diesel gas 1,000 gallons/day	Miles per gallon	Gasoline miles per gallon	Diesel miles per gallon
El Dorado (LT)	2027	LDA	Aggregate	Aggregate	Gasoline	4513.0120	177889.5563	20701.8486	4.9144	0.0000	36.20	29.29	6.25
El Dorado (LT)	2027	LDT1	Aggregate	Aggregate	Gasoline	1083.4259	31859.0395	4450.7252	1.4703	0.0000	21.67		
El Dorado (LT)	2027	LDT2	Aggregate	Aggregate	Gasoline	5005.9931	180205.3645	22133.9436	7.8005	0.0000	23.10		
El Dorado (LT)	2027	T7 Tractor	Aggregate	Aggregate	Diesel	4.2851	301.2510	62.2622	0.0000	0.048227751	6.25		

Notes: Consistent with CalEEMod, worker vehicles assumed to be gasoline and 50% LDA, 25% LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy-Duty Trucks (T7).

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: Sub-Area
Region: El Dorado (LT)
Calendar Year: 2025, 2026, 2027, 2028
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed	Fuel	Population	VMT	Trips	Fuel gas	Diesel gas	Miles per gallon	Gasoline miles per gallon	Diesel miles per gallon
				miles/hr		vehicles	miles/day	trips/day	1,000 gallons/day	1,000 gallons/day			
El Dorado (LT)	2028	LDA	Aggregate	Aggregate	Gasoline	4679.700674	186076.9343	21528.97169	5.466070917	0.0000	34.04	30.14	6.31
El Dorado (LT)	2028	LDT1	Aggregate	Aggregate	Gasoline	1028.812666	30047.41794	4212.270905	1.124538125	0.0000	26.72		
El Dorado (LT)	2028	LDT2	Aggregate	Aggregate	Gasoline	4951.752267	176901.4058	21813.54081	6.868811261	0.0000	25.75		
El Dorado (LT)	2028	T7 Tractor	Aggregate	Aggregate	Diesel	4.443573651	305.4986593	64.56512515	0.0000	0.0484	6.31		

Notes: Consistent with CalEEMod, worker vehicles assumed to be gasoline and 50% LDA, 25% LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy-Duty Trucks (T7).

Operational Energy Summary

Land Use	Electricity kWh/year	Electricity MWh/year	Natural Gas kBTU/year	Natural Gas therm/year
Arena	399,170	399	329,173	3,292
City Park	0	0	0	0
Government (Civic Center)	267,000	267	483,500	4,835
Motel	227,383	227	644,827	6,448
TOTAL	893,553	894	1,457,500	14,575

Energy Calculations Summary

Operational Fuel Use Summary

Fuel Type	Fleet Mix (%)	Gallons per Mile	Annual VMT	Gallons
Gasoline	98.86%	0.03	3,153,300	102,566
Diesel	1.14%	0.11		4,087

Notes:

1. Fleet mix calculated from CalEEMod default values.
2. Gallons per mile calculated from EMFAC 2021.
3. Annual VMT obtained from CalEEMod output file.

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: County
Region: Sacramento
Calendar Year: 2028
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed miles/hr	Fuel	Population vehicles	VMT miles/day	Trips trips/day	Gasoline Fuel Consumption 1,000 gallons/day	Diesel Fuel Consumption 1,000 gallons/day
El Dorado (	2040	All Other Buses	Aggregate	Aggregate	Diesel	17.86500394	801.4666241	158.9985351		0.083009326
El Dorado (	2040	LDA	Aggregate	Aggregate	Gasoline	6610.278618	247948.4368	30322.26492	6.597278785	
El Dorado (	2040	LDA	Aggregate	Aggregate	Diesel	5.629813924	177.6651511	23.93358433		0.003200779
El Dorado (	2040	LDT1	Aggregate	Aggregate	Gasoline	571.5520697	16462.62933	2355.399001	0.534750879	
El Dorado (	2040	LDT1	Aggregate	Aggregate	Diesel	0.003590905	0.14647516	0.016849114		4.68618E-06
El Dorado (	2040	LDT2	Aggregate	Aggregate	Gasoline	4416.579127	145675.7653	19080.34267	4.946887658	
El Dorado (	2040	LDT2	Aggregate	Aggregate	Diesel	15.23539837	538.4492575	67.80558015		0.013456014
El Dorado (	2040	LHD1	Aggregate	Aggregate	Gasoline	319.5339374	9431.169188	4760.579561	0.909328569	
El Dorado (	2040	LHD1	Aggregate	Aggregate	Diesel	156.3645837	4605.394842	1966.869756		0.283387659
El Dorado (	2040	LHD2	Aggregate	Aggregate	Gasoline	18.34556401	606.9990766	273.3215689	0.062955446	
El Dorado (	2040	LHD2	Aggregate	Aggregate	Diesel	72.19242191	2146.465233	908.0898495		0.156609224
El Dorado (	2040	MCY	Aggregate	Aggregate	Gasoline	436.4848757	1917.73851	872.9697514	0.045472737	
El Dorado (	2040	MDV	Aggregate	Aggregate	Gasoline	2382.948231	76532.50035	10213.87134	3.13	
El Dorado (	2040	MDV	Aggregate	Aggregate	Diesel	39.15015517	1106.453437	164.9094385		0.037036193
El Dorado (	2040	MH	Aggregate	Aggregate	Gasoline	25.21447185	225.7020639	2.522455764	0.05	
El Dorado (	2040	MH	Aggregate	Aggregate	Diesel	21.94286735	165.8708255	2.194286735		0.017707383
El Dorado (	2040	Motor Coach	Aggregate	Aggregate	Diesel	4.448505624	558.6471907	102.2266592		0.089359361
El Dorado (	2040	OBUS	Aggregate	Aggregate	Gasoline	3.199081891	81.0428146	64.00723048	0.02	
El Dorado (	2040	PTO	Aggregate	Aggregate	Diesel	0	43.19010331	0		0.009356396
El Dorado (	2040	SBUS	Aggregate	Aggregate	Gasoline	0.665083574	31.84295827	2.660334295	0.002778195	
El Dorado (	2040	SBUS	Aggregate	Aggregate	Diesel	18.45194745	398.1082207	267.184199		0.043762698
El Dorado (	2040	T6 instate heavy	Aggregate	Aggregate	Diesel	6.20467704	256.2402602	79.97001592		0.029101287
El Dorado (	2040	T6 instate small	Aggregate	Aggregate	Diesel	39.40615307	1418.360538	462.1527598		0.152453062
El Dorado (	2040	T6 Public	Aggregate	Aggregate	Diesel	40.7644697	1578.440963	209.1217296		0.183776313
El Dorado (	2040	T6 Utility	Aggregate	Aggregate	Diesel	1.760787081	71.15657146	22.53807463		0.007446918
El Dorado (	2040	T6TS	Aggregate	Aggregate	Gasoline	20.44145802	734.9158194	408.9926921	0.141097374	
El Dorado (	2040	T7 CAIRP	Aggregate	Aggregate	Diesel	28.95879532	5864.193768	665.4731165		0.798806255
El Dorado (	2040	T7 NNOOS	Aggregate	Aggregate	Diesel	31.19961975	8765.658345	716.9672618		1.135994231
El Dorado (	2040	T7 NOOS	Aggregate	Aggregate	Diesel	13.52092601	3184.407972	310.7108798		0.417514344
El Dorado (	2040	T7 Public	Aggregate	Aggregate	Diesel	41.67238226	1659.052844	213.779321		0.281517669
El Dorado (	2040	T7 Single	Aggregate	Aggregate	Diesel	1.940062717	200.639117	18.2753908		0.032226463
El Dorado (	2040	T7 SWCV	Aggregate	Aggregate	Diesel	2.293224788	148.6793794	10.54883402		0.047445656
El Dorado (	2040	T7 Tractor	Aggregate	Aggregate	Diesel	5.436487756	334.7356896	78.99216709		0.046954442
El Dorado (	2040	T7 Utility	Aggregate	Aggregate	Diesel	1.301959325	52.8360375	16.66507936		0.008398498
El Dorado (	2040	T7IS	Aggregate	Aggregate	Gasoline	0.0212416	2.124145349	0.425001935	0.000459201	
									16.44	**3.88**

TOTAL	533,727		26.3	0.04
Total (Gas)	499,651		30.4	0.03
Total (Diesel)	34,076		8.8	0.11

Annual VMT
3,153,300

	Mix (%)	Miles	Gallons
Gas	98.9%	3,117,387	102,566
Diesel	1.1%	35,910	4,087

Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
All Project Land Uses	0.537634	0.053691	0.194038	0.124297	0.024088	0.005854	0.018660	0.009652	0.000885	0.000000	0.027794	0.000851	0.002555

Gas	98.9%
Diesel	1.1%

Energy Calculations Summary

Construction Fuel Usage Summary

Construction Year	Diesel Off-road Equipment (gallons)	Gasoline On-road (gallons)	Diesel On-road (gallons)	Diesel Combined
2022	1,599	174	587	2,186
2023	10,748	3,400	12	10,760
Total Gasoline	**3,574**	**gallons**		
Total Diesel	**12,946**	**gallons**		

2022 Construction Offroad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of days	Average Daily Factor	Diesel Fuel Usage
Demolition	Concrete/Industrial Saws	1	8	81	0.73	20	0.6	284
Demolition	Rubber Tired Dozers	1	8	247	0.4	20	0.6	474
Demolition	Tractors/Loaders/Backhoes	3	8	97	0.37	20	0.6	517
Site Preparation	Graders	1	8	187	0.41	2	0.6	37
Site Preparation	Rubber Tired Dozers	1	7	247	0.4	2	0.6	41
Site Preparation	Tractors/Loaders/Backhoes	1	8	97	0.37	2	0.6	17
Grading	Graders	1	8	187	0.41	4	0.6	74
Grading	Rubber Tired Dozers	1	8	247	0.4	4	0.6	95
Grading	Tractors/Loaders/Backhoes	2	7	97	0.37	4	0.6	60
							TOTAL	**1,599**

	Year	Start Date	End Date	Network Days
Demolition	2022	1/1/2022	1/28/2022	20
Site Preparation	2022	1/29/2022	2/1/2022	2
Grading	2022	2/2/2022	2/7/2022	4
Building Construction	2023	1/1/2023	10/6/2023	200
Paving	2023	10/7/2023	10/20/2023	10
Architectural Coating	2023	10/21/2023	11/3/2023	10

2023 Construction Offroad Equipment

Phase Name	Offroad Equipment Type	Amount	Usage Hours	Horse Power	Load Factor	Number of days	Average Daily Factor	Diesel Fuel Usage
Building Construction	Cranes	1	6	231	0.29	200	0.6	2,412
Building Construction	Forklifts	1	6	89	0.2	200	0.6	641
Building Construction	Generator Sets	1	8	84	0.74	200	0.6	2,984
Building Construction	Tractors/Loaders/Backhoes	1	6	97	0.37	200	0.6	1,292
Building Construction	Welders	3	8	46	0.45	200	0.6	2,981
Paving	Cement and Mortar Mixers	1	6	9	0.56	10	0.6	9
Paving	Pavers	1	6	130	0.42	10	0.6	98
Paving	Paving Equipment	1	8	132	0.36	10	0.6	114
Paving	Rollers	1	7	80	0.38	10	0.6	64
Paving	Tractors/Loaders/Backhoes	1	8	97	0.37	10	0.6	86
Architectural Coating	Air Compressors	1	6	78	0.48	10	0.6	67
							TOTAL	**10,748**

Trips and VMT

2022

Phase Name	Daily Worker Trip	Days per Year	Total Worker Trips	Total Vendor Trips	Total Hauling Trips	Worker Trip Length (miles)	Vendor Trip Length (miles)	Haul Trip Length (miles)	Total Worker Trip Length (miles)	Total Vendor Trip Length (miles)	Total Haul Trip Length (miles)	Total gallons of gasoline	Total gallons of diesel
Demolition	5.00	20.00	100.00	0.00	177.00	16.8	6.60	20	1680	0	3540	62	587
Site Preparation	8.00	20	160	0.00	0.00	16.8	6.60	20	2688	0	0	99	0
Grading	10.00	2	20	0.00	0.00	16.8	6.60	20	336	0	0	12	0
											TOTAL	**174**	**587**

2023

Phase Name	Daily Worker Trip	Days per Year	Total Worker Trips	Total Vendor Trips	Total Hauling Trips	Worker Trip Length (miles)	Vendor Trip Length (miles)	Haul Trip Length (miles)	Total Worker Trip Length (miles)	Total Vendor Trip Length (miles)	Total Haul Trip Length (miles)	Total gallons of gasoline	Total gallons of diesel
Building Construction	27.00	200	5400	11.00	0.00	16.80	6.60	20.0	90720	72.6	0	**3,290**	**12**
Paving	13.00	10	130	0.00	0.00	16.80	6.60	20.0	2184	0	0	**79**	**0**
Architectural Coating	5.00	10	50	0.00	0.00	16.80	6.60	20.0	840	0	0	**30**	**0**
											TOTAL	**3,400**	**12**

Notes: Consistent with CalEEMod, worker vehicles assumed to be gasoline and 50% LDA, 25% LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy-Duty Trucks (T7).

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: Sub-Area
Region: El Dorado (LT)
Calendar Year: 2022
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed miles/hr	Fuel	Population vehicles	VMT miles/day	Trips trips/day	Fuel gas 1,000 gallons/day	Diesel gas 1,000 gallons/day	Miles per gallon	Gasoline miles per gallon	Diesel miles per gallon
San Mateo	2022	LDA	Aggregate	Aggregate	Gasoline	3934.050804	136875.3622	17584.32144	4.602396081	0.00	29.74	27.04	6.03
San Mateo	2022	LDT1	Aggregate	Aggregate	Gasoline	1380.167356	41012.78512	5804.492676	1.63268769	0.00	25.12		
San Mateo	2022	LDT2	Aggregate	Aggregate	Gasoline	5244.10864	189721.6053	23682.85259	8.057097344	0.00	23.55		
San Mateo	2022	T7 Tractor	Aggregate	Aggregate	Diesel	3.340865928	274.3183394	48.54278193	0.00	0.045469615	6.03		

Notes: Consistent with CalEEMod, worker vehicles assumed to be gasoline and 50% LDA, 25% LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy-Duty Trucks (T7).

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: Sub-Area
Region: El Dorado (LT)
Calendar Year: 2022, 2023, 2024, 2025
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed miles/hr	Fuel	Population vehicles	VMT miles/day	Trips trips/day	Fuel gas 1,000 gallons/day	Diesel gas 1,000 gallons/day	Miles per gallon	Gasoline miles per gallon	Diesel miles per gallon
El Dorado (LT)	2023	LDA	Aggregate	Aggregate	Gasoline	4012.6722	145657.7557	18052.1844	4.7729	0.0000	30.52	27.57	6.07
El Dorado (LT)	2023	LDT1	Aggregate	Aggregate	Gasoline	1316.7966	39439.9021	5508.3099	1.5555	0.0000	25.36		
El Dorado (LT)	2023	LDT2	Aggregate	Aggregate	Gasoline	5204.9344	190242.7722	23400.5622	7.9624	0.0000	23.89		
El Dorado (LT)	2023	T7 Tractor	Aggregate	Aggregate	Diesel	3.5054	280.3124	50.9335	0.0000	0.0462	6.07		

Notes: Consistent with CalEEMod, worker vehicles assumed to be gasoline and 50% LDA, 25% LDT1, and 25% LDT2. Vendor and haul trips are assumed to be 100% diesel Heavy-Duty Trucks (T7).

Operational Energy Summary

Land Use	Electricity kWh/year	Electricity MWh/year	Natural Gas kBTU/year	Natural Gas therm/year
Health Club	260,467	260	214,793	2,148
Recreational Swimming Pool	0	0	0	0
TOTAL	260,467	260	214,793	2,148

Energy Calculations Summary

Operational Fuel Use Summary

Fuel Type	Fleet Mix (%)	Gallons per Mile	Annual VMT	Gallons
Gasoline	98.81%	0.04	81,979	3,493
Diesel	1.19%	0.11		107

Notes:

1. Fleet mix calculated from CalEEMod default values.
2. Gallons per mile calculated from EMFAC 2021.
3. Annual VMT obtained from CalEEMod output file.

Source: EMFAC2021 (v1.0.1) Emissions Inventory
Region Type: Sub-Area
Region: El Dorado (LT)
Calendar Year: 2024
Season: Annual
Vehicle Classification: EMFAC2011 Categories
Units: miles/day for CVMT and EVMT, trips/day for Trips, kWh/day for Energy Consumption, tons/day for Emissions, 1000 gallons/day for Fuel Consumption

Region	CalYr	VehClass	MdlYr	Speed miles/hr	Fuel	Population vehicles	VMT miles/day	Trips trips/day	Gasoline Fuel Consumption 1,000 gallons/day	Diesel Fuel Consumption 1,000 gallons/day
El Dorado (	2024	All Other Buses	Aggregate	Aggregate	Diesel	15.76478274	761.3141527	140.3065663		0.086372447
El Dorado (	2024	LDA	Aggregate	Aggregate	Gasoline	4101.455832	153890.1081	18576.59716	4.914361995	
El Dorado (	2024	LDA	Aggregate	Aggregate	Diesel	17.56668238	567.6061752	74.19375836		0.012528179
El Dorado (	2024	LDT1	Aggregate	Aggregate	Gasoline	1254.924664	37648.17599	5224.542969	1.470336379	
El Dorado (	2024	LDT1	Aggregate	Aggregate	Diesel	0.000877206	0.044222613	0.004455195		1.52675E-06
El Dorado (	2024	LDT2	Aggregate	Aggregate	Gasoline	5160.782076	189139.9096	23100.18936	7.800495822	
El Dorado (	2024	LDT2	Aggregate	Aggregate	Diesel	14.65214881	594.8094244	67.85026778		0.01759442
El Dorado (	2024	LHD1	Aggregate	Aggregate	Gasoline	531.4956827	16791.12985	7918.493744	1.898236379	
El Dorado (	2024	LHD1	Aggregate	Aggregate	Diesel	409.7616559	14121.75545	5154.286151		0.882696838
El Dorado (	2024	LHD2	Aggregate	Aggregate	Gasoline	41.28588293	1399.912643	615.0981397	0.170792995	
El Dorado (	2024	LHD2	Aggregate	Aggregate	Diesel	134.0597975	5137.583353	1686.303606		0.396653867
El Dorado (	2024	MCY	Aggregate	Aggregate	Gasoline	546.9686709	2644.886395	1093.937342	0.066642881	
El Dorado (	2024	MDV	Aggregate	Aggregate	Gasoline	2832.288976	92241.85432	12352.41331	4.60562829	
El Dorado (	2024	MDV	Aggregate	Aggregate	Diesel	72.32679184	2887.603865	334.4769786		0.108667448
El Dorado (	2024	MH	Aggregate	Aggregate	Gasoline	93.50080815	772.9058661	9.353820847	0.175541948	
El Dorado (	2024	MH	Aggregate	Aggregate	Diesel	39.99341466	358.4545856	3.999341466		0.038083484
El Dorado (	2024	Motor Coach	Aggregate	Aggregate	Diesel	3.667940659	511.800459	84.28927634		0.093065958
El Dorado (	2024	OBUS	Aggregate	Aggregate	Gasoline	6.770938035	274.9123362	135.4729282	0.057486988	
El Dorado (	2024	PTO	Aggregate	Aggregate	Diesel	0	31.99550515	0		0.006936195
El Dorado (	2024	SBUS	Aggregate	Aggregate	Gasoline	0.227568962	11.15112501	0.910275847	0.000997133	
El Dorado (	2024	SBUS	Aggregate	Aggregate	Diesel	27.44878983	570.2131552	397.4584768		0.069357326
El Dorado (	2024	T6 instate heavy	Aggregate	Aggregate	Diesel	6.14208295	279.10685	78.36415805		0.033155648
El Dorado (	2024	T6 instate small	Aggregate	Aggregate	Diesel	48.8079285	1954.797744	572.7701221		0.228483883
El Dorado (	2024	T6 Public	Aggregate	Aggregate	Diesel	54.34860631	2200.728554	278.8083504		0.284609972
El Dorado (	2024	T6 Utility	Aggregate	Aggregate	Diesel	3.276840855	137.5832187	41.94356295		0.015506141
El Dorado (	2024	T6TS	Aggregate	Aggregate	Gasoline	26.28622939	1015.592746	525.9348777	0.219674768	
El Dorado (	2024	T7 CAIRP	Aggregate	Aggregate	Diesel	26.82854739	5462.485696	616.5200189		0.893273699
El Dorado (	2024	T7 NNOOS	Aggregate	Aggregate	Diesel	23.99388393	6493.655843	551.3794528		1.043369511
El Dorado (	2024	T7 NOOS	Aggregate	Aggregate	Diesel	10.1115301	2359.029821	232.3629617		0.385255453
El Dorado (	2024	T7 Public	Aggregate	Aggregate	Diesel	51.89586555	2242.396453	266.2257903		0.430247986
El Dorado (	2024	T7 Single	Aggregate	Aggregate	Diesel	2.73557035	148.7823492	25.7690727		0.024536769
El Dorado (	2024	T7 SWCV	Aggregate	Aggregate	Diesel	3.131783718	202.6762317	14.4062051		0.084163202
El Dorado (	2024	T7 Tractor	Aggregate	Aggregate	Diesel	3.717586632	285.9503889	54.01653377		0.046874151
El Dorado (	2024	T7 Utility	Aggregate	Aggregate	Diesel	1.658573183	75.20771453	21.22973674		0.012945837
El Dorado (	2024	T7IS	Aggregate	Aggregate	Gasoline	0.002468013	0.577241221	0.049380007	0.000129968	
									21.38	**5.19**

TOTAL	543,217		20.4	0.05
Total (Gas)	495,831		23.2	0.04
Total (Diesel)	47,386		9.1	0.11

Annual VMT
81979

	Mix (%)	Miles	Gallons
Gas	98.8%	81,002	3,493
Diesel	1.2%	977	107

Fleet Mix

Land Use	LDA	LDT1	LDT2	MDV	LHD1	LHD2	MHD	HHD	OBUS	UBUS	MCY	SBUS	MH
All Project Land Uses	0.378954	0.065789	0.258497	0.168857	0.048916	0.010258	0.014095	0.009387	0.001428	0	0.036485	0.001106	0.00623

Gas	98.8%
Diesel	1.2%

Appendix B

Noise Modeling Data

Construction Source Noise Prediction Model

Location/Threshold	Distance to Nearest Receptor in feet	Combined Predicted Noise Level (L_{eq} dBA)
	113,542	
Residences south of plan area in Al Tahoe neighborhood	50	84
Residences east of the plan area in Bijou neighborhood	55	83
Inn by the Lake hotel	53	83
Inn by the Lake hotel	500	58
Saint Theresa Catholic Church	490	58
South Tahoe Middle School fields	680	54
South Tahoe Middle School buildings	1070	49

Equipment	Reference Noise Levels (L_{max}) at 50 feet[1]	Usage Factor[1]
Excavator	85	0.4
Front End Loader	80	0.4
Generator	82	0.5

Ground Type	soft
Source Height	8
Receiver Height	5
Ground Factor[2]	0.63

Predicted Noise Level [3]	L_{eq} dBA at 50 feet[3]
Excavator	81.0
Front End Loader	76.0
Generator	79.0

Combined Predicted Noise Level (L_{eq} dBA at 50 feet)
83.9

Sources:

[1] Obtained from the FHWA Roadway Construction Noise Model, January 2006. Table 1.

[2] Based on Table 4-26 from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 86).

[3] Based on the following from the Federal Transit Noise and Vibration Impact Assessment, 2018 (pg 176 and 177).

L_{eq}(equip) = E.L.+10*log (U.F.) - 20*log (D/50) - 10*G*log (D/50)

Where: E.L. = Emission Level;

U.F.= Usage Factor;

G = Constant that accounts for topography and ground effects (FTA 2018: pg 86); and

D = Distance from source to receiver.

Attenuation Calculations for Stationary Noise Sources

KEY:
- Orange cells are for input.
- Grey cells are intermediate calculations performed by the model.
- Green cells are data to present in a written analysis (output).

STEP 1: Identify the noise source and enter the reference noise level (dBA and distance).

STEP 2: Select the ground type (hard or soft), and enter the source and receiver heights.

STEP 3: Select the distance to the receiver.

Noise Source/ID	Reference Noise Level			Attenuation Characteristics				Attenuated Noise Level at Receptor		
	noise level (dBA)	@	distance (ft)	Ground Type (soft/hard)	Source Height (ft)	Receiver Height (ft)	Ground Factor	noise level (dBA)	@	distance (ft)
HVAC units	70.0	@	50	soft	10	5	0.62	43.8	@	500
HVAC units	70.0	@	50	hard	10	5	0.00	52.5	@	375

Notes:

Estimates of attenuated noise levels do not account for reductions from intervening barriers, including walls, trees, vegetation, or structures of any type.

Computation of the attenuated noise level is based on the equation presented on pg. 176 and 177 of FTA 2018.

Computation of the ground factor is based on the equation presentd in Table 4-26 on pg. 86 of FTA 2018, where the distance of the reference noise leve can be adjusted and the usage factor is not applied (i.e., the usage factor is equal to 1).

Sources:

Federal Transit Association (FTA). 2018 (September). Transit Noise and Vibration Impact Assessment. Washington, D.C. Available: <http://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-

Distance Propagation Calculations for Stationary Sources of Ground Vibration

KEY: Orange cells are for input.

Grey cells are intermediate calculations performed by the model.

Green cells are data to present in a written analysis (output).

STEP 1: Determine units in which to perform calculation.

— If vibration decibels (VdB), then use Table A and proceed to Steps 2A and 3A.

— If peak particle velocity (PPV), then use Table B and proceed to Steps 2B and 3B.

STEP 2A: Identify the vibration source and enter the reference vibration level (VdB) and distance.

STEP 3A: Select the distance to the receiver.

Table A. Propagation of vibration decibels (VdB) with distance

Noise Source/ID	Reference Noise Level			Attenuated Noise Level at Receptor		
	vibration level (VdB)	@	distance (ft)	vibration level (VdB)	@	distance (ft)
Bulldozer	87	@	25	79.9	@	43

The Lv metric (VdB) is used to assess the likelihood for vibration to result in human annoyance.

STEP 2B: Identify the vibration source and enter the reference peak particle velocity (PPV) and distance.

STEP 3B: Select the distance to the receiver.

Table B. Propagation of peak particle velocity (PPV) with distance

Noise Source/ID	Reference Noise Level			Attenuated Noise Level at Receptor		
	vibration level (PPV)	@	distance (ft)	vibration level (PPV)	@	distance (ft)
Bulldozer	0.890	@	25	0.49	@	37

The PPV metric (in/sec) is used for assessing the likelihood for the potential of structural damage.

Notes:

Computation of propagated vibration levels is based on the equations presented on pg. 185 of FTA 2018. Estimates of attenuated vibration levels do not account for reductions from intervening underground barriers or other underground structures of any type, or changes in soil type.

Federal Transit Association (FTA). 2018 (September). Transit Noise and Vibration Impact Assessment Manual. https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf

Appendix C

56 Acres Master Plan
Transportation Analysis

56 Acres Master Plan Transportation Analysis

Prepared for the

The City of South Lake Tahoe, California

CITY OF SOUTH LAKE TAHOE

October 15, 2021

Prepared by LSC Transportation Consultants

56 Acres Master Plan

Transportation Analysis

Prepared for

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October 15, 2021

Project Number #207430

TRANSPORTATION CONSULTANTS, INC.

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TABLE OF CONTENTS

CHAPTER *PAGE*

LIST OF TABLES

TABLES

Chapter 1
Introduction

INTRODUCTION

This document provides a transportation analysis for full buildout of the South Lake Tahoe 56 Acres Master Plan. The 56 Acres Parcel/South Lake Tahoe Recreational Area (56 Acres) is centrally located in the City of South Lake Tahoe directly south of Lake Tahoe. The 56 Acres is bounded by Lake Tahoe Boulevard (US 50) to the west, Lake Tahoe to the north, properties along Lyons Avenue to the south, and Rufus Allen Boulevard to the east. The area is currently the location of the Lake Tahoe Historical Museum, the South Lake Tahoe Parks and Recreational Center and swimming pool, the South Lake Tahoe Ice Arena, the City of Lake Tahoe Campground, an El Dorado County operations facility, and the El Dorado County Library. About half of the 56 Acres consists of the Campground by the Lake, which includes 178 campsites that accommodate both tent camping and RVs. The surrounding area has a variety of mixed land uses such as commercial retail, restaurants, residential neighborhoods, and schools.

The purpose of this report is to present an analysis of the transportation impacts associated with the proposed project. Initially, existing traffic conditions near the proposed site are discussed. The proposed land uses associated with the project are then assessed in terms of the generation of new traffic. Then the impact vehicle miles traveled (VMT) is evaluated. An appropriate distribution of traffic onto the adjacent roadway system is then identified. Using this distribution pattern, the forecasted generated trips are assigned to the nearby roadway system to identify the impact on intersection Level of Service (LOS). In addition, intersection queuing analysis is evaluated, along with impacts to bicycle/pedestrian and transit conditions.

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Chapter 2
Existing Conditions

The following discussion presents information regarding existing transportation conditions in the study area.

ROADWAY CHARACTERISTICS

The project site is served by the following existing roadways:

US Highway 50 is the primary highway serving Lake Tahoe's south shore. As part of its transcontinental route within the region, it connects Carson City on the east with Sacramento on the west. Between the "Y" and Stateline, Nevada, it is the primary east-west roadway, turning south at the "Y" towards Echo Summit. Within the vicinity of the site, this undivided highway contains two travel lanes in each direction, plus a central two-way left-turn lane (TWLTL), and exclusive left-turn lanes at major intersections. US Highway 50 is also called Lake Tahoe Boulevard within the vicinity of the project. The posted speed limit is 40 miles per hour. In the study area, traffic signals are located at Lyons Avenue, Tallac Avenue, Lakeview Avenue, and Rufus Allen Boulevard.

Rufus Allen Boulevard is a two-lane roadway that intersects US 50 and provides access to a school to the south and recreational uses and residential uses. The posted speed limit on Rufus Allen Boulevard is 15 miles per hour when children are present.

Lyons Avenue is a two-lane roadway that intersects US 50 and provides access to recreational uses to the south. The posted speed limit is 15 miles per hour when children are present.

EXISTING TRAFFIC VOLUMES

Intersection volumes were obtained from previous counts conducted in peak summer conditions in August 2017 for the US 50/Rufus Allen Avenue, Rufus Allen Avenue/Swim Center driveway, Rufus Allen Avenue/Ice Rink driveway, and US 50/Lyons Avenue intersections. Caltrans traffic volumes were reviewed on US 50 east and west of Rufus Allen Boulevard. Counts for the US 50/Tallac Avenue intersection were performed in September 2020. Caltrans count volumes have varied less than one third of one percent (0.33%) over the last five years of available data (2014 to 2018). Therefore, the previous intersection volumes do not need to be adjusted. Existing traffic volumes are shown in Table 1.

EXISTING TRANSIT CONDITIONS

56 Acres is currently served by the Tahoe Transportation District (TTD) Route 50. Route 50 operates daily between 6:30 AM and 8:05 PM eastbound and between 7:00 AM and 8:28 PM westbound. The site is served by two eastbound stops along US 50 (at the Visitor/Senior Center south of San Francisco Avenue and west of Rufus Allen Boulevard) and two westbound stops (north of San Jose Avenue and south of San Francisco Avenue). The first three of these stops have shelters, while all are provided with benches and pullouts. TTD also provides ADA paratransit service during the same hours as fixed route operations. Prior reservations are recommended, though same-day trips are accommodated as capacity allows.

Table 1: Peak Hour Intersection Turning Movement Volumes

Scenario	Northbound			Southbound			Eastbound			Westbound			Total
	Left	Through	Right	Left	Through	Right	Left	Through	Right	Left	Through	Right	
Existing No Project Total Volumes													
US 50/Rufus Allen	34	0	90	0	0	0	0	1383	93	73	1183	0	2856
Rufus Allen/Library Driveway	8	90	0	0	135	31	34	0	8	0	0	0	306
Rufus Allen/Future Main St/Existing Camping	13	62	0	0	79	64	0	0	0	0	0	0	218
Rufus Allen/Existing Ice Rink Driveway	4	58	0	0	63	15	17	0	5	0	0	0	162
Rufus Allen/Existing Swim Center Driveway	9	62	0	0	52	9	11	0	14	0	0	0	157
US 50/Lyons Ave	0	1364	76	21	1280	0	0	0	0	69	0	20	2830
US 50/Tallac Ave	31	1408	0	0	1274	54	64	0	62	0	0	0	2893
Camping Driveway	0	0	15	0	0	0	0	0	0	26	0	0	41
Project Net Impact													
US 50/Rufus Allen	3	0	68	0	0	0	0	4	3	71	-3	0	147
Rufus Allen/Library/Rec Center	2	27	0	0	28	46	45	0	2	0	0	0	150
Rufus Allen/Main Street Driveway	5	18	0	0	22	8	11	0	7	0	0	0	71
Rufus Allen/Existing Ice Rink Driveway	23	2	0	0	5	24	20	0	19	0	0	0	93
Rufus Allen/Old Swim Center Driveway	0	25	0	0	24	0	0	0	0	0	0	0	49
US 50/Lyons Ave	0	70	16	0	80	0	0	0	0	11	0	0	177
US 50/Tallac Ave/Main Street	1	4	64	2	3	0	0	13	0	77	14	2	180
Main Street/Civic Center/Camping	3	0	3	10	0	86	72	4	2	3	3	8	194
Existing Plus Project													
US 50/Rufus Allen	21	0	103	0	0	0	0	1383	82	89	1177	0	2856
Rufus Allen/Library/Rec Center	2	74	0	0	115	55	50	0	8	0	0	0	304
Rufus Allen/Main Street Driveway	16	25	0	0	57	65	52	0	7	0	0	0	222
Rufus Allen/Existing Ice Rink Driveway	23	20	0	0	40	24	20	0	19	0	0	0	146
Rufus Allen/Old Swim Center Driveway	0	43	0	0	59	0	0	0	0	0	0	0	102
US 50/Lyons Ave	0	1423	31	14	1439	0	0	0	0	23	0	13	2943
US 50/Tallac Ave/Main Street	25	1305	105	2	1265	50	60	14	55	133	22	6	3042
Main Street/Civic Center/Camping	3	0	3	10	0	86	72	46	2	3	71	8	304
Future No Project													
US 50/Rufus Allen	34	0	90	0	0	0	0	1383	93	73	1198	0	2871
Rufus Allen/Library Driveway	8	90	0	0	135	31	34	0	8	0	0	0	306
Rufus Allen/Future Main Street Driveway	13	62	0	0	79	64	0	0	0	0	0	0	218
Rufus Allen/Existing Ice Rink Driveway	4	58	0	0	63	15	17	0	5	0	0	0	162
Rufus Allen/Existing Swim Center Driveway	9	62	0	0	52	9	11	0	14	0	0	0	157
US 50/Lyons Ave	0	1364	76	21	1307	0	0	0	0	69	0	20	2857
US 50/Tallac Ave	31	1408	0	0	1301	54	64	0	62	0	0	0	2920
Camping Driveway	0	0	15	0	0	0	0	0	0	26	0	0	41
Future Plus Project													
US 50/Rufus Allen	21	0	103	0	0	0	0	1383	82	89	1192	0	2872
Rufus Allen/Library Driveway	2	74	0	0	115	55	50	0	8	0	0	0	304
Rufus Allen/Future Main Street Driveway	16	25	0	0	57	65	52	0	7	0	0	0	222
Rufus Allen/Existing Ice Rink Driveway	23	20	0	0	40	24	20	0	19	0	0	0	146
Rufus Allen/Existing Swim Center Driveway	0	43	0	0	59	0	0	0	0	0	0	0	102
US 50/Lyons Ave	0	1423	31	14	1467	0	0	0	0	23	0	13	2971
US 50/Tallac Ave	25	1305	105	2	1291	50	60	14	55	133	22	6	3069
Main Street/Civic Center/Camping	3	0	3	10	0	86	72	46	2	3	71	8	304

Source: LSC Transportation Consultants, Inc.

Route 50 annual ridership has slowly declined by 43 percent over the past five fiscal years from 170,682 passengers to 119,322 passengers. ADA paratransit ridership (prior to COVID) was relatively consistent over the year, ranging between 1,000 and 1,500 trips per month.

EXISTING BICYCLE AND PEDESTRIAN CONDITIONS

Existing Facilities

The site is served by numerous bicycle and pedestrian facilities. A major multi-use path runs along Lake Tahoe Boulevard/US 50 between San Jose Avenue and Stateline. This multiuse path connects to one within 56 Acres that can accessed from Rufus Allan Boulevard and the crosswalk located along Lakeview Avenue and US 50. In addition, bicycle lanes are provided on either side of US 50. A designated bike route

also runs along Rufus Allan Boulevard along the east side of the 56 Acres. Various types of permanent bicycle racks exist throughout South Lake Tahoe. They are frequently installed adjacent to major businesses as well as near transit stops and major parking areas within 56 Acres. Lastly, sidewalks and crosswalks are located at major intersections along US 50.

Pedestrian and Bicycle Volumes

TRPA monitors bicycle and pedestrian activity throughout Lake Tahoe to understand high use areas. The highest volume of bicycle and pedestrian use along the shared path occurred during Labor Day weekend (Sunday, September 3rd) of 2017 at 1,882 users, followed by July 4th (1,451 users), and Memorial Day (May 28th) at 1,347 users. Between November and April, path user volume tends to stay under 200 users per day.

Overall Non-Auto Access

In sum, the site is served by relatively good transit and bicycle/pedestrian access opportunities. The location near major trip generators (such as shopping) also makes the site relatively conducive to non-auto travel.

REVIEW OF PREVIOUS STUDIES AND PLANS

Over the past two decades, there have been many plans evaluating the 56 Acres area. These studies and their relevance to the 56 Acres Master Plan are described below, from most recent to oldest.

Regional Transportation Plan (2020)

A draft of the Linking Tahoe: Regional Transportation Plan was released in early 2020. The plan considers the entire Lake Tahoe basin and provides a 2045 Regional Transportation Vision. The plan ultimately includes water transit, bicycle, and pedestrian trail improvements as well as regional transit connections with implementation milestones in 2025, 2035, and 2045. Over the next five years, the plan aims to increase regional transit connections, create seven miles of new trails, provide real-time parking information for select east shore locations, and encourage more opportunities for carpooling throughout the region.

Planned improvements that will directly impact the 56 Acres area include a public private partnership with existing water taxi service along south shore, improved shared-use trail conditions along US 50, and DC fast charging hubs located near the site to support electric scooters and bicycles. All of these projects would increase mobility to and from 56 Acres parcel through the encouragement of alternative modes of travel within the region.

Tahoe Transportation District Short Range Transit Plan (2017)

The Short-Range Transit Plan (SRTP), completed by the TTD, provides policies that aim to improve safety, workforce development, fleet expansion/replacement, facility capacity, and future service options. In addition, the SRTP gives an overview of existing service characteristics, ridership trends, and current operational details. Of the various proposed routes, the Emerald Bay High Frequency Route will impact the 56 Acres parcel the most by increasing frequency of Route 50 to meet the demand of the new route.

However, as of 2020 this route has not been implemented and financial limitations are expected to preclude this improvement without new funding sources.

South Lake Tahoe Parks, Trails and Recreation Master Plan (2014)

The Master Plan provides a summary of existing recreational facilities in South Lake Tahoe as well as recommendations for future improvements for the region. Key recommendations include improving regional coordination, maintaining existing facilities, developing new facilities, programming additional recreational activities, and ensuring operations and management. The plan also prioritizes actions by easily attainable "quick wins" to be implemented in the first year and more difficult to achieve, long term goals. The primary recommendations affecting the 56 Acres area includes the following:

- South Lake Tahoe Recreation Area campground upgrades
- South Lake Tahoe Recreation Area shop relocation
- Recreation/Aquatic Center master plan (Community Outreach)

The Master Plan identifies the 56 Acres area as an opportune site for coordinated City and County efforts towards funding and improvement. As a part of these efforts, the plan recommends updating the design concept, constructing a front entry to the park from US 50, creating a plaza and crosswalk to connect the park to the Lakeview Commons, upgrading the campground, relocating the Public Works, and improving internal access and connectivity throughout the area.

US 50 Transportation Concept Report and Corridor System Management Plan (2014)

Caltrans prepared a Transportation Concept Report for US Route 50 in District 3 in 2014. For the highway segment that passes by the 56 Acres, the construction of Class II bicycle lanes is included in the plan. As of 2020, there does not appear to be any Class II bicycle lanes running east or west along this corridor.

2030 South Lake Tahoe General Plan (2011)

The 2030 South Lake Tahoe General Plan was completed through public outreach and multi-jurisdiction coordination. The document provides a summary of goals, policies, and programs to fulfill the environmental, economic, and socially sustainable objectives of South Lake Tahoe. The Transportation and Circulation Element of the plan emphasized policies and goals organized under six categories. Various policies were identified for the continued improvement of US 50. These policies include improving traffic flows, implementing adaptive signal timing to prioritize transit, and increasing bicycle lanes and pedestrian paths along the corridor.

Lake Tahoe Region Bicycle and Pedestrian Plan (2010)

The Bicycle and Pedestrian Plan (BPP) considers the entire Lake Tahoe Basin for recommended improvements to bicycle and pedestrian facilities. The planning process was centered around path/lane construction and connectivity, path/lane maintenance, safety and education, and programs. Fixing gaps in the existing network, multi-modal connectivity, and environmental impacts were also considered in prioritizing projects.

The plan calls for Class II bicycle lanes along both sides of US 50 and Lake Tahoe Boulevard, sidewalks along the south side of US 50/Tahoe Lake Boulevard, and a shared use Class I lane along the north side of Lake Tahoe Boulevard between Rufus Allen Boulevard and Ski Run Boulevard. As of 2020, there are sidewalks located along south side of US 50/Lake Tahoe Boulevard. as well as a shared-use Class I path on the north side of Lake Tahoe Boulevard. Currently there is a small shoulder on US 50/Lake Tahoe Boulevard, but it does not appear to be a sanctioned bicycle lane.

Bijou/Al Tahoe Community Plan (1995)

The 56 Acres area is a part of the Bijou/Al Tahoe Community Plan of South Lake Tahoe. The Commercial Plan recognizes the commercial node and tourist characteristics of the area while establishing goals, objectives, and policies to achieve a 2007 vision. The plan proposed transportation, bicycle, pedestrian, and road improvements, many of which have since been implemented.

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Chapter 3
Future No-Project Traffic Volumes

Future traffic volumes not associated with the proposed project were developed using volumes provided by TRPA from the regional TransCAD travel demand model. The travel demand model has a base year of 2018 and projects volumes to the year 2045. The daily volumes represent a "model day," which is an early (June) and late (September) summer weekday (Monday thru Thursday). Due to limitations with the model, projections are available only at US 50/Rufus Allen Boulevard and US 50/Lyons Avenue.

At US 50 and Rufus Allen Boulevard, the 2018 base volumes were 3,899 in the eastbound direction and 4,476 in the westbound direction. For the 2045 year, the eastbound volumes would decrease to 3,869 (0.0.0% annual change) and the westbound volumes would increase to 4,534 (0.05% annual increase). At US 50 and Lyons Avenue, the 2018 base volumes were 3,982 in the northbound direction and 4,637 in the southbound direction. For the 2045 year, the northbound volumes would increase to 3,983 (0.0% annual change) and the westbound volumes would increase to 4,734 (0.07% annual increase).

These growth factors were then applied to the through volumes of the Existing No Project set of volumes which resulted in the Future No Project set of volumes as seen in Table 1, above.

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Chapter 4
Trip Generation, Distribution, and Assignment

TRIP GENERATION

The basis for the VMT analysis as well as the Level of Service analysis is an assessment of the impacts of the proposed land use changes on daily and peak-hour trip generation. For most uses, the daily trip generation rate identified in Trip Generation 10th Edition (Institute of Transportation Engineers, 2017) was applied. By use, the following was used to define trip generation:

- Recreation Center—Traffic counts were conducted in 2017 as part of the separate Recreation Center traffic analysis and are used directly to define the daily vehicle-trips.

- Ice Skating Center—While ITE does not provide daily rates by KSF for this use, a PM peak-hour rate per KSF is available as well as PM peak-hour and daily rates per seat. The ratio of daily to peak-hour rates per seat was applied to the peak-hour rate per KSF to identify the daily rate per KSF.

- Campground—ITE does not provide a daily rate per campground site but does provide a PM peak-hour rate. This was factored based on the ratio of daily to PM peak-hour rates for the Motel land use to identify a daily rate of 4.02 per site. As a check, two other transportation analyses for campgrounds were reviewed:

    - The Tijuana River Valley Regional Park Campground and Education Center Transportation Impact Analysis (Chen Ryan, September 2018) assumed a rate of 4.0 vehicle-trips per site per day.

    - The Traffic Impact Analysis—Under Canvas, Teton study conducted by SET Engineering in November 2021 used a rate of 2.0 vehicle-trips per site per day (for a development with a high level of internal amenities).

    - Based on this information, the calculated rate of 4.02 is appropriate.

- Cabin—The ITE rate for the Motel land use was applied.

- Library—The ITE rate was used.

- Senior Center—As no daily rate is available for a Senior Center, daily trips were estimated as follows:

    - The daily attendance is reported to be 41.

- A non-auto rate of 10 percent is applied. Additional discussion of non-auto travel in the area is presented below.

- An Average Vehicle Occupancy (AVO) of 1.5 is assumed.

- Factoring the attendance by the non-auto reduction and dividing by the average vehicle occupancy yields 25 daily attendee vehicle round-trips, or 50 one-way vehicle-trips.

- Four employees are assumed to report to work at the Senior Center each day, with a non-auto mode share of 37 percent and average vehicle occupancy of 1.26 (based on TRPA TransCAD model data). This results in 4 employee vehicle-trips per day.

- Two utility (food delivery, refuse, etc.) visits are assumed to occur per day, or 4 one-way vehicle trips.

- In sum, the Senior Center is estimated to generate 58 one-way vehicle-trips per day.

- Historical Museum—While ITE provide a PM peak-hour rate for the Museum land use, no daily rate is available. The Museum peak-hour rate was factored by the ratio of the daily to peak-hour rates for the Library land use to estimate a daily Museum rate.

- Art Museum—The ITE daily rate for a Craft Store was applied.

- Chamber Office—The ITE daily rate for a Government Office Building was applied.

- Outdoor Events—As standard rates for outdoor concert events are not available, trip generation was estimated as follows:

  - The project proponent indicates that events will range from 500 to 1,000 attendees. A median value of 750 was assumed.

  - The Lake Tahoe Visitors Authority in 2018 conducted surveys at the Harveys Outdoor Amphitheater indicating that 18 percent of attendees arrive by non-auto means. Reflecting that there is a lower number of residences/lodging units within a convenient walking distance of the 56 Acres Site, this factor was reduced by 25 percent to 13.5 percent.

  - These same surveys indicated an AVO of 2.77, which was directly applied.

  - Factoring for non-auto access, dividing by the AVO, and multiplying by to 2 convert to one-way vehicle-trips, the attendees are estimated to generate 468 vehicle-trips per event.

  - An average of 25 employees (performers, security, concessions, etc.) are estimated.

- A relatively low proportion of employee non-auto travel of 15 percent is assumed, reflecting that workers at an episodic event are less likely to use non-auto modes.
- An employee average vehicle occupancy of 1.26 is applied. In total, workers are estimated to generate 38 vehicle-trips.
- An average of 10 utility vehicles (20 one-way vehicle-trips) is assumed.
- In total, an average concert event generated 522 vehicle-trips.

- Passive Park Uses—The ITE rate for a Public Park is applied.
- Corporation Yard and Vector Control Uses—The ITE rate for General Light Industrial is applied.
- Fire Training Facility—The ITE rate for Community/Junior College is applied.

Reduction for Non-Auto Trips

Standard trip generation rates are largely based on studies conducted in typical suburban settings that have limited bicycling, walking and transit travel. The Tahoe Region, in comparison, has a relatively high level of non-auto travel (particularly among those walking and cycling) reflecting the recreational economy. As such, it is appropriate to consider reduction in trip generation associated with non-auto travel.

Fortunately, TRPA has a long-standing program to conduct travel surveys of persons in key commercial and recreational activity centers around the region. Summer surveys—generating data on travel modes and patterns—are conducted every four years. The responses collected over the last two surveys (in 2014 and 2018) were analyzed for the location between Ski Run Boulevard on the east and the South Y on the west and are summarized in Table 2. Note that the responses for the Stateline area (which has an even higher proportion of non-auto travel) were excluded from this review.

TABLE 2: Non-Auto Travel Mode Survey Data

Person Type	Trip Purpose	Total Surveys	Non-auto	Non-Auto %
Resident	Commercial	186	38	20%
Visitor	Commercial	160	40	25%
Visitor	Recreation	528	130	25%
Resident	Work	196	72	37%
Resident	Recreation	101	24	24%
Total Visitor		688	170	25%

Source: TRPA Travel Surveys conducted in Summer 2014 and Summer 2018 for areas between Ski Run on the east and South Y on the west.

As shown, depending on the type of respondent and trip purpose, non-auto travel ranges from 20 percent to 37 percent. This data was used as the basis for the individual non-auto factors by use, as discussed below:

- Ice Skating Center—The observed resident recreational non-auto proportion was reduced by 50 percent reflecting the need to carry sports equipment, to 12 percent.

- Campsites and Cabins—The proportion of total trips generated by the regional access trip (travel to and from Tahoe from the visitor's home or airport) was first calculated. City Parks and Recreation Department data for the existing campground indicates an average length of stay of 2.4 days. This is equivalent to 0.82 access trips per site per day. Divided by the total trips per site per day (4.02), 20 percent of the total trips generated by a campsite are regional access trips. None of the regional access trips are assumed to be by non-auto modes, while the proportion of local trips (such as travel to restaurants, beach, etc.) is 25 percent (per the total visitor non-auto mode survey data). Overall, 20 percent of all visitor trips are by non-auto modes.

- Library—The resident recreation non-auto mode factor was applied.

- Museum and Art Center—The visitor commercial non-auto mode factor was applied.

- Chamber Office—A relatively low (10 percent) factor was applied, reflecting that visitors will be predominantly arriving by car and that employees are less seasonal.

- Passive Park Space—The visitor recreation non-auto mode factor was applied.

No non-auto reductions were assumed for the corporation yard, vector control and fire training facility.

Pass-by Reductions

"Pass-by trips" consist of trips generated by drivers already passing by a site (such as along US 50, in this case) that simply make an additional stop as part of a longer trip. For instance, a high proportion of trips generated by a gas station are pass-by trips. These trips result in new turning movements at site access intersections but do not add to traffic volumes on the regional access roads or to regional VMT. The ITE Trip General Handbook (3rd edition) provides data on pass-by proportions for many land use types. Most of the existing land uses generate primary trips rather than pass-by trips. For example, campground trips and employment trips are primary trips. However, there are several existing uses that generate pass-by trips, consisting of the Library, Museum, and Art Center uses. As pass-by data is not available for these uses, the ITE pass-by factor for Variety Store retail use (37 percent) was applied. While there may be other uses (recreation center, ice rink, passive park uses) that have some pass-by trip activity, this is assumed to be zero as no applicable data is available and in order to be conservative.

Trip Generation at Site Driveways

Multiplying the land use quantities by the trip rates and applying reductions for non-auto trips and pass-by trips yields the vehicle trips generated at the site driveways for proposed project conditions. As shown

in Tables 3 and 4, the proposed land uses are forecasted to generate a total of approximately 4,844 one-way daily vehicle trips (DVTE) at the site driveways on a weekday, including 451 PM peak-hour vehicle-trips (223 inbound plus 228 outbound). The existing land uses are forecasted to generate a total of approximately 3,376 one-way daily vehicle trips (DVTE) at the site driveways on a weekday, including 295 PM peak-hour vehicle-trips (149 inbound plus 146 outbound). Subtracting the proposed daily vehicle trips from the existing daily vehicle trips results in a net increase of 1,468 daily vehicle trips, including 156 PM peak-hour vehicle-trips (74 inbound plus 82 outbound) upon full buildout of the project.

TABLE 3: Existing 56 Acres PM Peak-Hour Trip Generation

					Peak Day PM Peak-Hour						
					Site Driveways			Passby Reductions		New External Trips	
Building/Area	Existing Uses (1)	Daily Trips	PM Pk Hr Trip Generation Rate	PM % In	Total	In	Out	In	Out	In	Out
Recreation Center	39 KSF	952	--	--	76	35	41	0	0	35	41
Ice Skating Center	37 KSF	516	2.63	55%	86	47	39	0	0	47	39
Campground	172 Occupied Sites	553	0.27	65%	37	24	13	0	0	24	13
Cabins	7 Occupied Rooms	49	0.74	45%	4	2	2	0	0	2	2
Library	15 KSF	544	8.16	48%	62	30	32	15	16	14	16
Senior Center	41 Daily Attendees	58	--	--	6	1	4	0	0	1	4
Historical Museum	2.1 KSF	3	0.66	71%	1	0	0	0	0	0	0
Art Center	1.144 KSF	32	6.21	46%	4	2	2	1	1	1	1
Chamber Office (?)	3 KSF	61	3.19	43%	9	4	5	0	0	4	5
Outdoor Event Space	750 Attendees	522	--	--	*Not Included in Base Analysis*						
Passive Park Space	2.7 Acres	4	0.31	39%	1	0	0	0	0	0	0
Corp Yard	3.864 KSF	19	0.83	18%	3	1	3	0	0	1	3
Vector Control	3.4 KSF	17	0.83	18%	3	1	2	0	0	1	2
Fire Training Facility	2.25 KSF	46	2.27	48%	5	2	3	0	0	2	3
TOTAL		3,376			295	149	146	16	18	132	129

TRIP DISTRIBUTION AND ASSIGNMENT

The trip distribution pattern for new trip generated on the project site was developed based on the proportion of South Lake Tahoe population in various directions from the site, the convenience of various access routes, and the regional access patterns. In particular, the fact that much of the uses are municipal in nature indicates that the site's location with regards to citywide population is an important factor. The results are shown in Table 5. Trips from the existing land uses were assigned to study intersections. These trips were then removed from the existing no project scenario to create an "existing volumes minus existing 56 Acres site land use" set of volumes.

With construction of the new Main Street, some existing trips will be diverted to using the new Main Street rather than using their original route. For instance, trips between US 50 south of the site and the library can be expected to shift to use Main Street. The trips from the "existing volumes minus existing 56 Acres site land uses" were redistributed to incorporate the new Main Steet.

TABLE 4: Proposed Buildout 56 Acres PM Peak-Hour Trip Generation

Building/Area	Proposed Uses	Daily Trips	PM Pk Hr Trip Generation Rate	PM % In	Peak Day PM Peak-Hour						
					Site Driveways			Passby Reductions		New External Trips	
					Total	In	Out	In	Out	In	Out
Recreation Center	62.72 KSF	1446	2.31	0.47	115	53	62	0	0	53	62
Ice Skating Center	37.00 KSF	516	2.63	55%	86	47	39	0	0	47	39
Campground	118 Occupied Sites	379	0.27	65%	25	17	9	0	0	17	9
Cabins	17 Occupied Rooms	118	0.74	45%	10	5	6	0	0	5	6
Library	15 KSF	544	8.16	48%	62	30	32	15	16	14	16
Senior Center	41 Daily Attendees	58	--	--	6	1	4	0	0	1	4
Historical Museum	2.1 KSF	3	0.66	71%	1	0	0	0	0	0	0
Art Center	1.144 KSF	32	6.21	46%	4	2	2	1	1	1	1
Chamber Office	3 KSF	61	3.19	43%	9	4	5	0	0	4	5
Outdoor Event Space - Lakeview Commons	750 Attendees	522	--	--	*Not Included in Base Analysis*						
New Outdoor Event Space	375 Attendees	261	--	--	*Not Included in Base Analysis*						
Passive Park Space	6.00 Acres	10	0.31	39%	1	1	1	0	0	1	1
New Civic Center Building	25.00 KSF	508	3.19	43%	72	31	41	0	0	31	41
TOTAL		4,458			390	190	201	16	18	173	183
Net Change		1,082			95	41	54	0	0	41	54

Table 5: SLT 56 Acres Master Plan - Trip Distribution

Origin/Destination	Percent of Traffic
US 50 South of Lyons Avenue	48%
Tallac Avenue West of US 50	7%
Lakeview Avenue West of US 50	3%
US 50 East of Rufus Allen Blvd	39%
Pickett Avenue East of Rufus Allen Blvd	2%
Area Along Lyons Ave/Rufus Allen Blvd S. of 56 Acres	1%

Source: LSC Transportation Consultants, Inc.

The trip distribution pattern for vehicle trips made to/from the project are then estimated for the proposed land uses. These trips were then assigned to study intersections resulting in the "Project Net Impact" volume set as shown in Table 1. These volumes were then added to the "exiting volumes minus existing 56 Acres site land use" volumes to create the "Existing plus Project" set of volumes as seen in Table 1.

The "existing volumes minus existing 56 Acres site land uses" through volumes were increased using the same growth factors as mentioned previously. Using these growth volumes and adding the "Project Net Impact" results in the "Future plus Project" set of volumes as seen in the bottom of Table 1.

Chapter 5
Vehicle Miles Traveled

Vehicle miles traveled was evaluated in accordance with TRPA's *"Project Impact Analysis Update: Project Impact Assessment and Air Quality Mitigation Fee Framework"* (TRPA April 21, 2021). For this multi-use project, each land use is analyzed independently and then summed. As existing uses will be modified, it is necessary to assess VMT both for existing uses as well as buildout future uses. This analysis is conducted under the CEQA analysis guidelines, by which the total trip length (regardless of jurisdiction) is considered.

EXISTING LAND USE VMT

Existing VMT is calculated by multiplying trip generation by an annual-to-peak daily factor and multiplying by the average trip length for each.

Average Annual Daily Trip Factors

Table 3, above, presents the peak daily trip generation for existing land uses. It is important to note that this figure represents trip generation during the busiest season of each land use (largely, but not entirely, summer). VMT analysis, however, is conducted on an average annual daily basis, reflecting that it is a basis for overall greenhouse gas emissions. It is therefore necessary to define factors that reflect the ratio of average daily activity (and thus trip generation) to peak daily activity. These factors were defined as follows:

- Recreation Center—City Parks and Recreation Department provided data for the existing recreation center daily use and campground/cabins for the 2018 calendar year.

- Ice Skating Center—The Tahoe Ice Arena 2021 Seasonal Usage Estimates Study was analyzed to develop an appropriate factor.

- Campground/Cabins—City Parks and Recreation Department provided data for the existing recreation center and campground/cabins for the 2017 season (April 1 to October 31). The utilization rate during the season was calculated separately for the campground sites and the cabins, and then factored by the proportion of total annual days in the operating season. Note that this assumes cabins are available year-round.

- Library and Chamber Office—A factor of 0.82 was applied, reflecting operations 6 pays per week and 12 annual holidays.

- Senior Center and Art Museum—The factor of 0.68 reflects operations 5 days per week and 12 annual holidays.

- Museum—The factor of 0.41 reflects operations 3 days per week and 7 annual holidays on days of operation.

- Outdoor Event Space—As a maximum of 10 events are held per year (per City input), the factor reflects that events occur on only 3 percent of annual days.

- Passive Park Use—The ITE ratio of peak weekly (Sunday) to average daily trip generation was applied and assumed to occur throughout the year.

- Corp Yard—Operation was assumed 5 days per week, with 12 holidays per year.

- Vector Control—This facility typically operates 5 days per week (excluding holidays) from April 1st to mid-November.

- Fire Training Facility—Classes were assumed to be held 60 days per year.

Average Trip Length

The final data element needed to define VMT is the average vehicle trip-length (in miles). These values were defined as follows:

- Recreation Center, Library, Senior Center, Passive Park Use—These uses are assumed to be used in large part by City of South Lake Tahoe residents. An average trip length of 2.60 was defined by identifying the travel distance to the 53 individual Traffic Analysis Zones (TAZs) in the TRPA TransCAD regional transportation model and weighting them by the population in each TAZ (per TRPA data) to define the average overall trip length.

- Ice Skating Center—This facility will have a broader overall attendee area, as the only ice facility of regulation size in the South Shore. A similar TAZ population weighted trip length analysis was conducted, assuming attendee travel from all of the South Shore.

- Campground and Cabin—These land uses generate two types of trips: regional access trips (to and from Tahoe) and local trips. As discussed above, 20 percent of trips generated by these land uses are regional access trips. Table 6 presents an analysis of the average trip length for these regional access trips, assuming that the preponderance of such trips come from residents of Nevada and California, indicating an average trip length of 219 miles. For local trips, the zonal average trip length identified by TRPA for the VMT analysis zone encompassing the 56 Acres Parcel (4.51 miles) was used. The weighted average of these lengths is 47.4 miles.

- Museum, Art Center, Corporation Yard, Vector Control, Fire Training Facility—The TRPA average trip length for the VMT analysis zone of 4.51 is applied.

- Special Events—Events at the 56 Acres typically generate most of the attendance from the South Shore region, though some attendees may come from other portions of the Tahoe Region. Table 7 presents an estimate of the regional distribution of origination locations for event attendees, and the corresponding mileage. As shown, the weighted average trip length is 4.8 miles.

TABLE 6: Campground/Cabin Average Trip Length

Origination	Percent of Trips	Trip Length (Miles)
Regional Access Trip Origin/Destination		
Reno/Sparks/RTIA	12%	59
Sacramento	20%	100
Bay Area	39%	180
Central Valley	8%	265
Los Angeles	12%	440
Las Vegas	4%	460
San Diego Region	6%	528
	% Of Total Trips	
Weighted Average: Regional Access	20%	218.78
Local Trip Average Length	80%	4.51
Total Campground/Cabin Avg. Trip Length		47.36

Based on LTVA survey of concert attendees.

TABLE 7: Calculation of Event Attendee Trip Length

Trip Origin	Distance (Miles)	Proportion of Event Attendees
North Shore	29.4	4%
West Shore	25.0	3%
Camp Richardson	5.7	8%
Meyers/Pioneer Trail South	7.0	10%
Tahoe Keys	4.4	8%
Tahoe Valley	3.4	11%
Bijou/Al Tahoe	0.8	16%
Pioneer Trail North/Ski Run	2.8	12%
Casino Core (W. of Stateline)	2.0	17%
Stateline	2.4	5%
Lower Kingsbury	3.4	3%
Upper Kingsbury	5.9	1%
Round Hill	4.6	2%
East Shore (North of Round Hill)	9.0	1%
		100%
Weighted Average	4.8	

Source: LTVA surveys of event attendees, adjusted by LSC for local events.

TOTAL EXISTING VMT

Multiplying the average daily trips by the average trip length for each use category and summing over all categories yields a total average daily VMT generated by existing 56 Acres uses of 12,523. Of this total, by far the largest proportion is generated by the campground, with 7,262 VMT (58 percent of the total), along with 485 (3.9 percent) generated by the cabins. This is in large part a result of the relatively long average trip length associated with regional access trips. The only other land uses generating more than 10 percent of the total VMT is the Recreation Center, with 1,433 VMT and the Ice Skating Center with 1,546. The results are shown in Table 8.

TABLE 8: 56 Acres Vehicle-Miles of Travel -- Existing

Building/Area	ITE Use Category	ITE #	Land Use Units	Existing Uses (1)	Daily Trip Generation Rate	Non-Auto Reduction	Pass-By Reduction	Daily Trips	Average/ Peak Day Factor	Average Daily Trips	CEQA VMT Analysis: Average Trip Length (Miles)	CEQA VMT Analysis: Average Daily VMT	CEQA VMT Analysis: % of Avg Daily VMT
Recreation Center	Recreational Community Center	495	KSF	39	--	--	--	952	0.58	552	2.60	1,433	11.4%
Ice Skating Center	Ice Skating Rink	465	KSF	37	15.84	12%	0%	516	0.70	361	4.28	1,546	12.3%
Campground	Campground/Recreational Vehicle Park	416	Occupied Sites	172	4.02	20%	0%	553	0.28	153	47.4	7,262	58.0%
Cabins	Motel	320	Occupied Rooms	7	8.71	20%	0%	49	0.21	10	47.4	485	3.9%
Library	Library	590	KSF	15	72.05	24%	34%	544	0.82	448	2.60	1,164	9.3%
Senior Center	NA	NA	# Daily Attendees	41 attendees	--	--	0%	58	0.68	40	2.60	103	0.8%
Historical Museum	Museum	580	KSF	2.10	2.91	25%	34%	3	0.41	1	4.51	6	0.0%
Art Center	Craft Store	879	KSF	1.14	56.55	25%	34%	32	0.68	22	4.51	98	0.8%
Chamber Office	Government Office Building	730	KSF	3.00	22.59	10%	0%	61	0.82	50	4.51	227	1.8%
Outdoor Event Space	NA	NA	Attendees	750	--	--	0%	522	0.03	14	4.84	69	0.6%
Passive Park Space	Public Park	411	Acres	2.70	2.19	25%	0%	4	0.53	2	2.60	5	0.0%
Corp Yard	General Light Industrial	110	KSF	3.86	4.96	0%	0%	19	0.68	13	4.51	58	0.5%
Vector Control	General Light Industrial	110	KSF	3.4	4.96	0%	0%	17	0.43	7	4.51	33	0.3%
Fire Training Facility	Community College	540	KSF	2.25	20.25	0%	0%	46	0.16	8	4.51	34	0.3%
TOTAL								3,376		1,682		12,523	100.0%

Note 1: Includes uses within the previous 5 years

Future Buildout VMT Analysis

The future VMT associated with the project consists of two elements: the VMT effects of shifting land uses to and from the site, and the VMT generated by future land uses on the 56 Acres Parcel. The following relocations are expected by upon full build-out of the project:

- The existing vector control facility and corporation yard would be relocated to the industrial corridor of South Lake Tahoe (i.e., South Y Industrial Area).
- The fire training facility will be located off-site to a location near Bijou Park and LTCC area.
- The existing City Hall land uses currently at the airport would shift to the site.
- The existing Planning Department uses current at the old City Hall site on Tata Lane would shift to the site.

The VMT associated with these relocated land uses are shown in Table 9.

Multiplying the average daily trips by the average trip length for each use category and summing over all categories yields a total average daily VMT generated by the proposed 56 Acres uses of 15,039. Of this total, by far the largest proportion is generated by the campground, with 4,977 VMT (33 percent of the total), along with 3,468 (23 percent) generated by the cabins. This is in large part a result of the relatively long average trip length associated with regional access trips. The only other three land uses generating more than 10 percent of the total VMT is the Ice-Skating Center with 2,580 VMT and the Recreation Center with 2,176 VMT. The results are shown in Table 10.

TOTAL CHANGE IN VMT

The net change in VMT for the project is calculated by taking the VMT from the buildout on the 56 Acres Parcel, subtracting the existing VMT and adding the net change in VMT elsewhere for each land use, and then summing over all land use categories. As shown in Table 11, the net increase for the project (considering the total trip length, per CEQA requirements) is 1,123 total VMT (a 9 percent increase in VMT).

The City of South Lake Tahoe has not established formal significance criteria for VMT analysis. However, the TRPA has adopted standards, including a screening value, as presented in the *TRPA Project Impact Assessment Guidelines* (June 2021). This indicates that projects that result in a net increase of average annual daily VMT not less than 1,300 within a town or regional center or a half-mile distance of a town or regional center (which the 56-Acre site is) is a low-VMT proposal that is not considered significant. For purposes of this analysis, the TRPA criteria is applied. Based on this criteria, there is no need to evaluate specific mitigation measures to reduce VMT, beyond the payment of regional VMT mitigation fees.

TABLE 9: 56 Acres Vehicle-Miles of Travel -- Impact of Relocation of Land Uses

Building/Area	ITE Use Category	ITE #	Land Use Units	Relocated Quantity	Daily Trip Generation Rate	Non-Auto Reduction	Pass-By Reduction	Daily Trips	Average/ Peak Day Factor	Average Daily Trips	Average Trip Length (Miles)	Average Daily VMT
Uses Eliminated Elsewhere												
Existing City Hall Functions at Airport	Government Office Building	730	KSF	-16.67	22.59	4%	0%	-362	0.82	-298	3.95	-1179
Existing Planning Department Functions at Tata Lane	Government Office Building	730	KSF	-7.4	22.59	10%	0%	-150	0.82	-124	2.71	-335
Uses Relocated Elsewhere												
Corp Yard	General Light Industrial	110	KSF	3.86	4.96	0%	0%	19	0.68	13	4.51	58
Vector Control	General Light Industrial	110	KSF	3.4	4.96	0%	0%	17	0.43	7	4.31	32
Fire Training Facility	Community College	540	KSF	2.25	20.25	0%	0%	46	0.16	8	4.13	31
TOTAL										-394		-1,393

TABLE 10: 56 Acres Vehicle-Miles of Travel -- Proposed Buildout

Building/Area	ITE Use Category	ITE #	Land Use Units	Proposed Buildout Quantity	Daily Trip Generation Rate	Non-Auto Reduction	Pass-By Reduction	Daily Trips	Average/ Peak Day Factor	Average Daily Trips	CEQA VMT Analysis		
											Average Trip Length (Miles)	Average Daily VMT	% of Avg Daily VMT
Recreation Center	Recreational Community Center	495	KSF	62.72	28.82	20%	0%	1,446	0.58	838	2.60	2,176	14.5%
Ice Skating Center	Ice Skating Rink	465	KSF	37.00	15.84	12%	0%	516	0.70	361	4.28	1,546	10.3%
Campground	Campground/Recreational Vehicle Park	416	Occupied Sites	118	4.02	20%	0%	379	0.28	105	47.4	4,977	33.1%
Cabins	Motel	320	Occupied Rooms	17	8.71	20%	0%	118	0.62	73	47.4	3,468	23.1%
Library	Library	590	KSF	15	72.05	24%	34%	544	0.82	448	2.60	1,164	7.7%
Senior Center	NA	NA	# Daily Attendees	41 attendees	--	--	0%	58	0.68	40	2.60	103	0.7%
Historical Museum	Museum	580	KSF	2.10	2.91	25%	34%	3	0.41	1	4.51	6	0.0%
Art Center	Craft Store	879	KSF	1.14	56.55	25%	34%	32	0.68	22	4.51	98	0.7%
Chamber Office	Government Office Building	730	KSF	3.00	22.59	10%	0%	61	0.82	50	4.51	227	1.5%
Outdoor Event Space - Lakeview Commons	NA	NA	Attendees	750	--	--	0%	522	0.03	14	4.84	69	0.5%
New Outdoor Event Space	NA	NA	Attendees	375	--	--	0%	261	0.08	21	4.84	104	0.7%
Passive Park Space	Public Park	411	Acres	6.00	2.19	25%	0%	10	0.53	5	2.60	14	0.1%
New Civic Center Building	Government Office Building	730	KSF	25.00	22.59	10%	0%	508	0.82	419	2.60	1,087	7.2%
TOTAL								4,458		2,399		15,039	100.0%

TABLE 11: Summary of Change in Average Daily VMT

	TOTAL VMT			
	Existing on 56 Acre Parcel	Buildout on 56 Parcel	Change in VMT Elsewhere	Net Change
Recreation Center	1,433	2,176	0	743
Ice Skating Center	1,546	1,546	0	0
Campground	7,262	4,977	0	-2,285
Cabins	485	3,468	0	2,983
Library	1,164	1,164	0	0
Senior Center	103	103	0	0
Historical Museum	6	6	0	0
Art Center	98	98	0	0
Chamber Office	227	227	0	0
Outdoor Event Spaces	69	173	0	104
Passive Park Space	5	14	0	9
Municipal Office Uses	0	1,087	-1,514	-427
Corp Yard	58	0	58	0
Vector Control	33	0	32	-1
Fire Training Facility	34	0	31	-3
TOTAL	12,523	15,039	-1,393	1,123
Percent Change				9%
Subtotal by Land Use Category				
Tourist Accom. Units	7,747			698
Public Service	1,723			-431
Recreation	3,053			856
Percent of Total Change by Land Use Category				
Tourist Accom. Units				62%
Public Service				-38%
Recreation				76%

Chapter 6
Level of Service

Though Level of Service analysis is no longer a requirement under CEQA, the City would like sufficient circulation/LOS analysis to identify potential areas of concern.

LEVEL OF SERVICE

LOS is a quantitative and qualitative measure of traffic conditions on isolated sections of roadway or intersections. LOS ranges from "A" (with no congestion) to "F" (where the system fails with gridlock or stop-and-go conditions prevailing). Detailed LOS definitions are included in Appendix A. As is the standard for traffic engineering analyses, intersection LOS is analyzed based upon the procedures presented in the *Highway Capacity Manual* (Federal Highways Administration, 2016) using the Synchro software application (Version 10.3, Trafficware). The LOS calculations are contained in Appendix B for further reference.

TRPA LOS Standards

The LOS standards for the Lake Tahoe Basin, established by the Tahoe Regional Planning Agency (TRPA), are set forth in the *2019 Regional Transportation Plan* with the intent that the Region's highway system and signalized intersections during peak periods shall not exceed the following:

1. LOS C on rural scenic/recreational roads,
2. LOS D in rural developed areas,
3. LOS D on urban roads, or
4. LOS D for signalized intersections as LOS E may be acceptable during peak periods not to exceed four hours per day.

The *Regional Transportation Plan Mobility 2035* (TMPO/TRPA, 2012) also states that: "These vehicle LOS standards may be exceeded when provisions for multimodal amenities and/or services (such as transit, bicycling, and walking facilities) are adequate to provide mobility for users at a level that is proportional to the project-generated traffic in relation to overall traffic conditions on affected roadways" (pp. 2 – 10). While the Tahoe Regional Planning Compact looks to "reduce the dependency on the private automobile", there are currently no adopted requirements or standards regarding the quality of service of other travel modes (i.e., transit, biking, or walking) that could potentially reduce the demand on the roadway system. The TRPA does not have a specific adopted standard for unsignalized intersections.

City LOS Standards

Policy TC-1.2 in the *South Lake Tahoe General Plan* sets forth that the City shall establish a minimum LOS standard of "D" for all City streets and intersections. Up to four hours per day of LOS "E" shall be considered acceptable. LOS shall be considered based on average delay for the intersection as a whole for signalized intersections, and for the worst approach for intersections controlled by stop signs or roundabouts. LOS shall be evaluated for a busy, but not peak, traffic day in the peak seasons.

Existing Year Intersection Level of Service

As shown in Table 12, all study intersections currently attain the LOS thresholds during the existing year condition without the project. With implementation of the proposed project, although average delays would increase slightly the LOS would remain acceptable, with no changes in LOS.

Future Year Intersection Level of Service

As shown in Table 12, all study intersections will attain the LOS thresholds during the future year condition without the project. With implementation of the proposed project, although average delays would increase slightly the LOS would remain acceptable. In summary, the LOS at all study intersections would remain acceptable with the project, with no changes in LOS at existing intersections.

Table 12: SLT 56 Acres - Intersection LOS Summary

Intersection	Control Type	LOS Threshold	Existing No Project		Existing Plus Project		Future No Project		Future Plus Project	
			Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS	Delay (sec/veh)	LOS
US 50/Rufus Allen	Signalized	D	8.9	A	9.3	A	8.9	A	9.3	A
Rufus Allen/Library/Rec Center	TWSC	D	10.2	B	10.1	B	10.2	B	10.1	B
Rufus Allen/Main Street Driveway	TWSC	D	7.6	A	9.7	A	7.6	A	9.7	A
Rufus Allen/Existing Ice Rink Driveway	TWSC	D	9.3	A	9.1	A	9.3	A	9.1	A
Rufus Allen/Old Swim Center Driveway	TWSC	D	9.0	A	0.0	A	9.0	A	0.0	A
US 50/Lyons Ave	Signalized	D	6.6	A	4.8	A	6.6	A	4.8	A
US 50/Tallac Ave/Main Street	Signalized	D	6.2	A	15.1	B	6.2	A	15.2	B
Main Street/Civic Center/Camping	TWSC	D	8.4	A	10.2	B	8.4	A	10.2	B

BOLD text indicates that LOS standard is exceeded.
OVF = Overflow. Overflow indicates a delay greater than 200 seconds per vehicle, which cannot be accurately calculated using HCM methodology.
TWSC = Two-Way Stop-Control; AWSC = All-Way Stop-Control
NOTE 1: Level of service for signalized intersections is reported for the total intersection.
NOTE 2: Level of service for roundabouts and other unsignalized intersections is reported for the worst movement.

Source: LSC Transportation Consultants, Inc.

Chapter 7
Other Transportation Impacts and Conclusions

INTERSECTION QUEUING ANALYSIS

Traffic queues at specific intersections that exceed the storage capacity of turn lanes, or that block turn movements at important nearby intersections or driveways, can cause operational problems beyond those identified in the LOS analysis. The 95th-percentile traffic queue length (the queue length that is only exceeded 5 percent of the time) was reviewed at locations where queuing could potentially cause traffic concerns. Based on this review, no intersection queuing concerns are identified at the study intersections with implementation of the project.

IMPACT ON BICYCLE AND PEDESTRIAN CONDITIONS

The proposed Master Plan includes a comprehensive network of multipurpose bicycle/pedestrian facilities within the site. These facilities are located to direct cyclists and walkers to locations along US 50 with traffic signals that have crosswalks (at Tallac Avenue, Lakeview Avenue and Rufus Allen Boulevard). As a result, cyclists and pedestrians would be provided with protected crossing of US 50.

IMPACT ON TRANSIT SERVICES

The 56 Acres is currently served by TTD Route 50, scheduled to provide serve every 30 minutes 7 days a week. Stops are located along US 50 at Modesto Avenue, San Jose Avenue and Rufus Allen Boulevard. The proposed project will improve transit accessibility in two ways. First, the new location of the recreation center will place it closer to a transit stop than the current location. Secondly, shifting City Hall from the current location at the airport (which is not currently served by transit) to the 56 Acres will provide transit service to this important public function.

The changes in land uses will overall result in a modest increase in transit ridership. Existing (and pre-pandemic) capacity on TTD Route 50 is adequate to accommodate the expected increase.

CONCLUSIONS

- The project is forecasted to generate about 15,039 total VMT with completion of the project. Subtracting out the forecasted existing VMT and the change in land use VMT results in a net increase of 1,123 total VMT considered on a total-trip-length basis.

- The project is forecasted to generate a total of approximately 4,458 one-way daily vehicle trips (DVTE) at the site driveways on a weekday, including 390 PM peak-hour vehicle-trips (190 inbound plus 201 outbound). This is a net increase of 1,082 one-way daily vehicle trips from the existing land uses, including an increase of 95 PM peak-hour vehicle-trips (41 inbound plus 54 outbound).

- The LOS at all study intersections would remain acceptable with the project.

- No intersection queuing concerns are identified at the study intersections with implementation of the project.

- No significant impacts regarding transit or bicycle/pedestrian conditions would result from implementation of the project.

Appendix A
LOS Descriptions

DESCRIPTIONS OF LEVELS OF SERVICE

The concept of level of service is defined as a qualitative measure describing operational conditions within a traffic stream, and their perception by motorists and/or passengers. A level of service definition generally describes these conditions in terms of such factors as speed and travel time, freedom to maneuver, traffic interruptions, comfort and convenience, and safety. Six levels of service are defined for each type of facility for which analysis procedures are available. They are given letter designations, from A to F, with level of service A representing the best operating conditions and level of service F the worst.

Level of Service Definitions

In general, the various levels of service are defined as follows for uninterrupted flow facilities:

- **Level of service A** represents free flow. Individual users are virtually unaffected by the presence of others in the traffic stream. Freedom to select desired speeds and to maneuver within the traffic stream is extremely high. The general level of comfort and convenience provided to the motorist, passenger, or pedestrian is excellent.

- **Level of service B** is in the range of stable flow, but the presence of other users in the traffic stream begins to be noticeable. Freedom to select desired speeds is relatively unaffected, but there is a slight decline in the freedom to maneuver within the traffic stream from LOS A. The level of comfort and convenience provided is somewhat less than at LOS A, because the presence of others in the traffic stream begins to affect individual behavior.

- **Level of service C** is in the range of stable flow, but marks the beginning of the range of flow in which the operation of individual users becomes significantly affected by interactions with others in the traffic stream. The selection of speed is now affected by the presence of others, and maneuvering within the traffic stream requires substantial vigilance on the part of the user. The general level of comfort and convenience declines noticeably at this level.

- **Level of Service D** represents high-density, but stable, flow. Speed and freedom to maneuver are severely restricted, and the driver or pedestrian experiences a generally poor level of comfort and convenience. Small increases in traffic flow will generally cause operational problems at this level.

- **Level of service E** represents operating conditions at or near the capacity level. All speeds are reduced to a low, but relatively uniform value. Freedom to maneuver within the traffic stream is extremely difficult, and it is generally accomplished by forcing a vehicle or pedestrian to “give way” to accommodate such maneuvers. Comfort and convenience levels are extremely poor, and driver or pedestrian frustration is generally high. Operations at this level are usually unstable, because small increases in flow or minor perturbations within the traffic stream will cause breakdowns.

- **Level of service F** is used to define forced or breakdown flow. This condition exists wherever the amount of traffic approaching a point exceeds the amount which can traverse the point. Queues form behind such locations. Operations within the queue are characterized by stop-and-go waves, and they are extremely unstable. Vehicles may progress at reasonable speeds for several hundred feet or more, then be required to stop in a cyclic fashion. Level of service F is used to describe the operating conditions within the queue, as well as the point of the breakdown. It should be noted, however, that in many cases operating conditions of vehicles or pedestrians discharged from the queue may be quite good. Nevertheless, it is the point at which arrival flow exceeds discharge flow which causes the queue to form, and level of service F is an appropriate designation for such points.

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1383	93	73	1183	34	90
Future Volume (veh/h)	1383	93	73	1183	34	90
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1503	101	79	1286	37	98
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1938	130	116	2575	184	164
Arrive On Green	0.57	0.57	0.07	0.72	0.10	0.10
Sat Flow, veh/h	3474	226	1781	3647	1781	1585
Grp Volume(v), veh/h	787	817	79	1286	37	98
Grp Sat Flow(s),veh/h/ln	1777	1830	1781	1777	1781	1585
Q Serve(g_s), s	17.7	18.0	2.3	8.2	1.0	3.1
Cycle Q Clear(g_c), s	17.7	18.0	2.3	8.2	1.0	3.1
Prop In Lane		0.12	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1018	1049	116	2575	184	164
V/C Ratio(X)	0.77	0.78	0.68	0.50	0.20	0.60
Avail Cap(c_a), veh/h	1241	1278	187	3162	665	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.5	8.6	23.9	3.1	21.5	22.4
Incr Delay (d2), s/veh	2.5	2.6	6.8	0.2	0.5	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	8.7	1.9	1.3	0.8	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.0	11.2	30.7	3.3	22.0	25.9
LnGrp LOS	B	B	C	A	C	C
Approach Vol, veh/h	1604			1365	135	
Approach Delay, s/veh	11.1			4.8	24.8	
Approach LOS	B			A	C	

Timer - Assigned Phs	2	3	4	8
Phs Duration (G+Y+Rc), s	9.9	7.9	34.5	42.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	19.5	5.5	36.5	46.5
Max Q Clear Time (g_c+I1), s	5.1	4.3	20.0	10.2
Green Ext Time (p_c), s	0.3	0.0	9.9	11.6

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	34	8	8	90	135	31
Future Vol, veh/h	34	8	8	90	135	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	9	9	98	147	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	280	164	181	0	-	0
Stage 1	164	-	-	-	-	-
Stage 2	116	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	710	881	1394	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	705	881	1394	-	-	-
Mov Cap-2 Maneuver	705	-	-	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	909	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1394	-	733	-	-
HCM Lane V/C Ratio	0.006	-	0.062	-	-
HCM Control Delay (s)	7.6	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	13	62	79	64
Future Vol, veh/h	0	0	13	62	79	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	14	67	86	70

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	216	121	156	0	-	0
Stage 1	121	-	-	-	-	-
Stage 2	95	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	772	930	1424	-	-	-
Stage 1	904	-	-	-	-	-
Stage 2	929	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	764	930	1424	-	-	-
Mov Cap-2 Maneuver	764	-	-	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	929	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	1.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1424	-	-	-	-
HCM Lane V/C Ratio	0.01	-	-	-	-
HCM Control Delay (s)	7.6	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	5	4	58	63	15
Future Vol, veh/h	17	5	4	58	63	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	5	4	63	68	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	147	76	84	0	-	0
Stage 1	76	-	-	-	-	-
Stage 2	71	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	845	985	1513	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	952	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	842	985	1513	-	-	-
Mov Cap-2 Maneuver	842	-	-	-	-	-
Stage 1	944	-	-	-	-	-
Stage 2	952	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1513	-	871	-	-
HCM Lane V/C Ratio	0.003	-	0.027	-	-
HCM Control Delay (s)	7.4	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

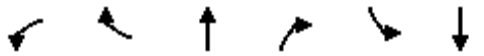
Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	14	9	62	52	9
Future Vol, veh/h	11	14	9	62	52	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	15	10	67	57	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	149	62	67	0	-	0
Stage 1	62	-	-	-	-	-
Stage 2	87	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	843	1003	1535	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	936	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	837	1003	1535	-	-	-
Mov Cap-2 Maneuver	837	-	-	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	936	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1535	-	922	-	-
HCM Lane V/C Ratio	0.006	-	0.029	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	69	20	1364	76	21	1280
Future Volume (veh/h)	69	20	1364	76	21	1280
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	22	1483	83	23	1391
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	105	31	2011	112	50	2549
Arrive On Green	0.08	0.08	0.59	0.59	0.03	0.72
Sat Flow, veh/h	1327	389	3516	191	1781	3647
Grp Volume(v), veh/h	98	0	767	799	23	1391
Grp Sat Flow(s),veh/h/ln	1734	0	1777	1836	1781	1777
Q Serve(g_s), s	2.4	0.0	13.9	14.0	0.6	8.0
Cycle Q Clear(g_c), s	2.4	0.0	13.9	14.0	0.6	8.0
Prop In Lane	0.77	0.22		0.10	1.00	
Lane Grp Cap(c), veh/h	137	0	1044	1079	50	2549
V/C Ratio(X)	0.71	0.00	0.73	0.74	0.46	0.55
Avail Cap(c_a), veh/h	710	0	1338	1383	205	3448
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	0.0	6.6	6.7	21.2	2.9
Incr Delay (d2), s/veh	6.7	0.0	1.6	1.6	6.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.0	5.0	5.2	0.5	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.6	0.0	8.2	8.2	27.8	3.1
LnGrp LOS	C	A	A	A	C	A
Approach Vol, veh/h	98		1566			1414
Approach Delay, s/veh	26.6		8.2			3.5
Approach LOS	C		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.7	30.5			36.2	8.0
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	5.1	33.3			42.9	18.1
Max Q Clear Time (g_c+I1), s	2.6	16.0			10.0	4.4
Green Ext Time (p_c), s	0.0	10.0			12.7	0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.6
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	0	62	0	0	0	31	1408	0	0	1274	54
Future Volume (veh/h)	64	0	62	0	0	0	31	1408	0	0	1274	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	0	67	0	0	0	34	1530	0	0	1385	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	271	0	143	161	4	0	335	2538	0	330	2007	85
Arrive On Green	0.06	0.00	0.09	0.00	0.00	0.00	0.04	0.71	0.00	0.00	0.58	0.58
Sat Flow, veh/h	1781	0	1585	1781	1870	0	1781	3647	0	1781	3473	148
Grp Volume(v), veh/h	70	0	67	0	0	0	34	1530	0	0	707	737
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1777	0	1781	1777	1844
Q Serve(g_s), s	1.8	0.0	1.8	0.0	0.0	0.0	0.3	9.9	0.0	0.0	12.8	12.9
Cycle Q Clear(g_c), s	1.8	0.0	1.8	0.0	0.0	0.0	0.3	9.9	0.0	0.0	12.8	12.9
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.08
Lane Grp Cap(c), veh/h	271	0	143	161	4	0	335	2538	0	330	1027	1065
V/C Ratio(X)	0.26	0.00	0.47	0.00	0.00	0.00	0.10	0.60	0.00	0.00	0.69	0.69
Avail Cap(c_a), veh/h	355	0	625	362	745	0	464	3366	0	524	1683	1747
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	20.8	0.0	19.9	0.0	0.0	0.0	5.4	3.3	0.0	0.0	6.8	6.8
Incr Delay (d2), s/veh	0.5	0.0	2.4	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.8	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	0.0	1.3	0.0	0.0	0.0	0.1	0.9	0.0	0.0	4.7	4.9
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.3	0.0	22.3	0.0	0.0	0.0	5.5	3.5	0.0	0.0	7.6	7.6
LnGrp LOS	C	A	C	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		137			0			1564			1444	
Approach Delay, s/veh		21.8			0.0			3.6			7.6	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	5.0	37.3	0.0	8.6	6.3	31.0	7.5	1.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.1	43.5	5.3	18.1	5.1	43.5	5.1	18.3
Max Q Clear Time (g_c+I1), s	0.0	11.9	0.0	3.8	2.3	14.9	3.8	0.0
Green Ext Time (p_c), s	0.0	14.3	0.0	0.2	0.0	11.6	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	7.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	26	0	0	15
Future Vol, veh/h	0	0	26	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	28	0	0	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.12	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.218	-	-	3.318
Pot Cap-1 Maneuver	-	-	1622	-	0	1084
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1622	-	-	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	7.3	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1084	-	-	1622	-
HCM Lane V/C Ratio	0.015	-	-	0.017	-
HCM Control Delay (s)	8.4	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1383	82	89	1177	21	103
Future Volume (veh/h)	1383	82	89	1177	21	103
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1503	89	97	1279	23	112
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1953	115	126	2579	196	174
Arrive On Green	0.57	0.57	0.07	0.73	0.11	0.11
Sat Flow, veh/h	3503	201	1781	3647	1781	1585
Grp Volume(v), veh/h	780	812	97	1279	23	112
Grp Sat Flow(s),veh/h/ln	1777	1834	1781	1777	1781	1585
Q Serve(g_s), s	18.3	18.5	2.9	8.4	0.6	3.7
Cycle Q Clear(g_c), s	18.3	18.5	2.9	8.4	0.6	3.7
Prop In Lane		0.11	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1018	1051	126	2579	196	174
V/C Ratio(X)	0.77	0.77	0.77	0.50	0.12	0.64
Avail Cap(c_a), veh/h	1283	1325	244	3347	635	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.9	9.0	25.0	3.2	22.0	23.3
Incr Delay (d2), s/veh	2.2	2.2	9.6	0.1	0.3	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.7	9.0	2.6	1.6	0.5	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.1	11.2	34.6	3.4	22.2	27.2
LnGrp LOS	B	B	C	A	C	C
Approach Vol, veh/h	1592			1376	135	
Approach Delay, s/veh	11.1			5.6	26.4	
Approach LOS	B			A	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		10.5	8.4	35.8		44.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		19.5	7.5	39.5		51.5
Max Q Clear Time (g_c+I1), s		5.7	4.9	20.5		10.4
Green Ext Time (p_c), s		0.3	0.0	10.8		11.9

Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	8	2	74	115	55
Future Vol, veh/h	50	8	2	74	115	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	9	2	80	125	60

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	239	155	185	0	-	0
Stage 1	155	-	-	-	-	-
Stage 2	84	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	749	891	1390	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	748	891	1390	-	-	-
Mov Cap-2 Maneuver	748	-	-	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	939	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1390	-	765	-	-
HCM Lane V/C Ratio	0.002	-	0.082	-	-
HCM Control Delay (s)	7.6	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	52	7	16	25	57	65
Future Vol, veh/h	52	7	16	25	57	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	8	17	27	62	71

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	159	98	133	0	-	0
Stage 1	98	-	-	-	-	-
Stage 2	61	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	832	958	1452	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	962	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	822	958	1452	-	-	-
Mov Cap-2 Maneuver	822	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	962	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	2.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1452	-	836	-	-
HCM Lane V/C Ratio	0.012	-	0.077	-	-
HCM Control Delay (s)	7.5	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	19	23	20	40	24
Future Vol, veh/h	20	19	23	20	40	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	21	25	22	43	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	128	56	69	0	-	0
Stage 1	56	-	-	-	-	-
Stage 2	72	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	866	1011	1532	-	-	-
Stage 1	967	-	-	-	-	-
Stage 2	951	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	851	1011	1532	-	-	-
Mov Cap-2 Maneuver	851	-	-	-	-	-
Stage 1	951	-	-	-	-	-
Stage 2	951	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1532	-	922	-	-
HCM Lane V/C Ratio	0.016	-	0.046	-	-
HCM Control Delay (s)	7.4	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

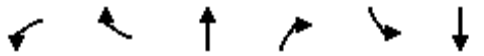
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	43	59	0
Future Vol, veh/h	0	0	0	43	59	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	47	64	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	111	64	64	0	-	0
Stage 1	64	-	-	-	-	-
Stage 2	47	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	886	1000	1538	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	975	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	886	1000	1538	-	-	-
Mov Cap-2 Maneuver	886	-	-	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	975	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1538	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	23	13	1423	31	14	1439
Future Volume (veh/h)	23	13	1423	31	14	1439
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	14	1547	34	15	1564
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	47	26	2211	49	34	2651
Arrive On Green	0.04	0.04	0.62	0.62	0.02	0.75
Sat Flow, veh/h	1068	598	3649	78	1781	3647
Grp Volume(v), veh/h	40	0	772	809	15	1564
Grp Sat Flow(s),veh/h/ln	1709	0	1777	1856	1781	1777
Q Serve(g_s), s	1.0	0.0	12.5	12.5	0.4	8.6
Cycle Q Clear(g_c), s	1.0	0.0	12.5	12.5	0.4	8.6
Prop In Lane	0.62	0.35		0.04	1.00	
Lane Grp Cap(c), veh/h	76	0	1105	1154	34	2651
V/C Ratio(X)	0.53	0.00	0.70	0.70	0.44	0.59
Avail Cap(c_a), veh/h	721	0	1587	1658	212	3970
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	5.4	5.4	20.8	2.5
Incr Delay (d2), s/veh	5.6	0.0	0.8	0.8	8.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	0.0	3.4	3.5	0.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.7	0.0	6.2	6.2	29.5	2.7
LnGrp LOS	C	A	A	A	C	A
Approach Vol, veh/h	40		1581			1579
Approach Delay, s/veh	25.7		6.2			2.9
Approach LOS	C		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.3	31.2			36.5	6.4
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	5.1	38.3			47.9	18.1
Max Q Clear Time (g_c+I1), s	2.4	14.5			10.6	3.0
Green Ext Time (p_c), s	0.0	12.1			15.9	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.8
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	14	55	133	22	6	25	1305	105	2	1265	50
Future Volume (veh/h)	60	14	55	133	22	6	25	1305	105	2	1265	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	15	60	145	24	7	27	1418	114	2	1375	54
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	317	25	100	315	154	45	244	1812	145	189	1800	71
Arrive On Green	0.05	0.08	0.08	0.09	0.11	0.11	0.03	0.54	0.54	0.00	0.52	0.52
Sat Flow, veh/h	1781	327	1308	1781	1391	406	1781	3332	267	1781	3486	137
Grp Volume(v), veh/h	65	0	75	145	0	31	27	753	779	2	700	729
Grp Sat Flow(s),veh/h/ln	1781	0	1635	1781	0	1797	1781	1777	1822	1781	1777	1846
Q Serve(g_s), s	2.1	0.0	2.8	4.6	0.0	1.0	0.4	20.9	21.2	0.0	19.6	19.7
Cycle Q Clear(g_c), s	2.1	0.0	2.8	4.6	0.0	1.0	0.4	20.9	21.2	0.0	19.6	19.7
Prop In Lane	1.00		0.80	1.00		0.23	1.00		0.15	1.00		0.07
Lane Grp Cap(c), veh/h	317	0	125	315	0	199	244	966	991	189	918	953
V/C Ratio(X)	0.20	0.00	0.60	0.46	0.00	0.16	0.11	0.78	0.79	0.01	0.76	0.76
Avail Cap(c_a), veh/h	367	0	475	315	0	534	337	1235	1266	330	1235	1283
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.4	0.0	27.9	23.7	0.0	25.1	9.9	11.3	11.3	10.3	12.0	12.0
Incr Delay (d2), s/veh	0.3	0.0	4.6	1.0	0.0	0.4	0.2	2.5	2.6	0.0	2.0	2.0
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.5	0.0	2.2	3.4	0.0	0.7	0.2	10.9	11.2	0.0	10.4	10.8
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.8	0.0	32.4	24.8	0.0	25.4	10.1	13.8	13.9	10.3	14.0	14.0
LnGrp LOS	C	A	C	C	A	C	B	B	B	B	B	B
Approach Vol, veh/h		140			176			1559			1431	
Approach Delay, s/veh		28.9			24.9			13.8			14.0	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	38.4	10.0	9.3	6.4	36.7	7.9	11.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.1	43.3	5.5	18.1	5.1	43.3	5.1	18.5
Max Q Clear Time (g_c+I1), s	2.0	23.2	6.6	4.8	2.4	21.7	4.1	3.0
Green Ext Time (p_c), s	0.0	10.6	0.0	0.3	0.0	10.1	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	15.1
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	72	46	2	3	71	8	3	0	3	10	0	86
Future Vol, veh/h	72	46	2	3	71	8	3	0	3	10	0	86
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	78	50	2	3	77	9	3	0	3	11	0	93

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	86	0	0	52	0	0	341	299	51	297	296	82
Stage 1	-	-	-	-	-	-	207	207	-	88	88	-
Stage 2	-	-	-	-	-	-	134	92	-	209	208	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1510	-	-	1554	-	-	613	613	1017	655	616	978
Stage 1	-	-	-	-	-	-	795	731	-	920	822	-
Stage 2	-	-	-	-	-	-	869	819	-	793	730	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1510	-	-	1554	-	-	531	579	1017	626	582	978
Mov Cap-2 Maneuver	-	-	-	-	-	-	531	579	-	626	582	-
Stage 1	-	-	-	-	-	-	753	692	-	871	820	-
Stage 2	-	-	-	-	-	-	784	817	-	749	691	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.5	0.3	10.2	9.4
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	698	1510	-	-	1554	-	-	924
HCM Lane V/C Ratio	0.009	0.052	-	-	0.002	-	-	0.113
HCM Control Delay (s)	10.2	7.5	0	-	7.3	0	-	9.4
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0.2	-	-	0	-	-	0.4

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1383	93	73	1198	34	90
Future Volume (veh/h)	1383	93	73	1198	34	90
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1503	101	79	1302	37	98
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1938	130	116	2575	184	164
Arrive On Green	0.57	0.57	0.07	0.72	0.10	0.10
Sat Flow, veh/h	3474	226	1781	3647	1781	1585
Grp Volume(v), veh/h	787	817	79	1302	37	98
Grp Sat Flow(s),veh/h/ln	1777	1830	1781	1777	1781	1585
Q Serve(g_s), s	17.7	18.0	2.3	8.3	1.0	3.1
Cycle Q Clear(g_c), s	17.7	18.0	2.3	8.3	1.0	3.1
Prop In Lane		0.12	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1018	1049	116	2575	184	164
V/C Ratio(X)	0.77	0.78	0.68	0.51	0.20	0.60
Avail Cap(c_a), veh/h	1241	1278	187	3162	665	591
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.5	8.6	23.9	3.1	21.5	22.4
Incr Delay (d2), s/veh	2.5	2.6	6.8	0.2	0.5	3.5
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.3	8.7	1.9	1.3	0.8	2.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.0	11.2	30.7	3.3	22.0	25.9
LnGrp LOS	B	B	C	A	C	C
Approach Vol, veh/h	1604			1381	135	
Approach Delay, s/veh	11.1			4.8	24.8	
Approach LOS	B			A	C	

Timer - Assigned Phs	2	3	4	8
Phs Duration (G+Y+Rc), s	9.9	7.9	34.5	42.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	19.5	5.5	36.5	46.5
Max Q Clear Time (g_c+I1), s	5.1	4.3	20.0	10.3
Green Ext Time (p_c), s	0.3	0.0	9.9	11.8

Intersection Summary	
HCM 6th Ctrl Delay	8.9
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	1.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	34	8	8	90	135	31
Future Vol, veh/h	34	8	8	90	135	31
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	37	9	9	98	147	34

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	280	164	181	0	-	0
Stage 1	164	-	-	-	-	-
Stage 2	116	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	710	881	1394	-	-	-
Stage 1	865	-	-	-	-	-
Stage 2	909	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	705	881	1394	-	-	-
Mov Cap-2 Maneuver	705	-	-	-	-	-
Stage 1	859	-	-	-	-	-
Stage 2	909	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.2	0.6	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1394	-	733	-	-
HCM Lane V/C Ratio	0.006	-	0.062	-	-
HCM Control Delay (s)	7.6	0	10.2	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	0.4

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	13	62	79	64
Future Vol, veh/h	0	0	13	62	79	64
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	14	67	86	70

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	216	121	156	0	-	0
Stage 1	121	-	-	-	-	-
Stage 2	95	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	772	930	1424	-	-	-
Stage 1	904	-	-	-	-	-
Stage 2	929	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	764	930	1424	-	-	-
Mov Cap-2 Maneuver	764	-	-	-	-	-
Stage 1	895	-	-	-	-	-
Stage 2	929	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	1.3	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1424	-	-	-	-
HCM Lane V/C Ratio	0.01	-	-	-	-
HCM Control Delay (s)	7.6	0	0	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-

Intersection	
Int Delay, s/veh	1.5

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	17	5	4	58	63	15
Future Vol, veh/h	17	5	4	58	63	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	18	5	4	63	68	16

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	147	76	84	0	-	0
Stage 1	76	-	-	-	-	-
Stage 2	71	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	845	985	1513	-	-	-
Stage 1	947	-	-	-	-	-
Stage 2	952	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	842	985	1513	-	-	-
Mov Cap-2 Maneuver	842	-	-	-	-	-
Stage 1	944	-	-	-	-	-
Stage 2	952	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.3	0.5	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1513	-	871	-	-
HCM Lane V/C Ratio	0.003	-	0.027	-	-
HCM Control Delay (s)	7.4	0	9.3	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Intersection	
Int Delay, s/veh	1.8

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	11	14	9	62	52	9
Future Vol, veh/h	11	14	9	62	52	9
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	12	15	10	67	57	10

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	149	62	67	0	-	0
Stage 1	62	-	-	-	-	-
Stage 2	87	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	843	1003	1535	-	-	-
Stage 1	961	-	-	-	-	-
Stage 2	936	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	837	1003	1535	-	-	-
Mov Cap-2 Maneuver	837	-	-	-	-	-
Stage 1	954	-	-	-	-	-
Stage 2	936	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9	0.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1535	-	922	-	-
HCM Lane V/C Ratio	0.006	-	0.029	-	-
HCM Control Delay (s)	7.4	0	9	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.1	-	-

Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	69	20	1364	76	21	1307
Future Volume (veh/h)	69	20	1364	76	21	1307
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	75	22	1483	83	23	1421
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	105	31	2011	112	50	2549
Arrive On Green	0.08	0.08	0.59	0.59	0.03	0.72
Sat Flow, veh/h	1327	389	3516	191	1781	3647
Grp Volume(v), veh/h	98	0	767	799	23	1421
Grp Sat Flow(s),veh/h/ln	1734	0	1777	1836	1781	1777
Q Serve(g_s), s	2.4	0.0	13.9	14.0	0.6	8.3
Cycle Q Clear(g_c), s	2.4	0.0	13.9	14.0	0.6	8.3
Prop In Lane	0.77	0.22		0.10	1.00	
Lane Grp Cap(c), veh/h	137	0	1044	1079	50	2549
V/C Ratio(X)	0.71	0.00	0.73	0.74	0.46	0.56
Avail Cap(c_a), veh/h	710	0	1338	1383	205	3448
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	19.9	0.0	6.6	6.7	21.2	2.9
Incr Delay (d2), s/veh	6.7	0.0	1.6	1.6	6.6	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	2.1	0.0	5.0	5.2	0.5	0.4
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	26.6	0.0	8.2	8.2	27.8	3.1
LnGrp LOS	C	A	A	A	C	A
Approach Vol, veh/h	98		1566			1444
Approach Delay, s/veh	26.6		8.2			3.5
Approach LOS	C		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.7	30.5			36.2	8.0
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	5.1	33.3			42.9	18.1
Max Q Clear Time (g_c+I1), s	2.6	16.0			10.3	4.4
Green Ext Time (p_c), s	0.0	10.0			13.0	0.2

Intersection Summary	
HCM 6th Ctrl Delay	6.6
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	64	0	62	0	0	0	31	1408	0	0	1301	54
Future Volume (veh/h)	64	0	62	0	0	0	31	1408	0	0	1301	54
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	70	0	67	0	0	0	34	1530	0	0	1414	59
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	268	0	141	158	4	0	329	2553	0	330	2030	85
Arrive On Green	0.06	0.00	0.09	0.00	0.00	0.00	0.04	0.72	0.00	0.00	0.58	0.58
Sat Flow, veh/h	1781	0	1585	1781	1870	0	1781	3647	0	1781	3476	145
Grp Volume(v), veh/h	70	0	67	0	0	0	34	1530	0	0	721	752
Grp Sat Flow(s),veh/h/ln	1781	0	1585	1781	1870	0	1781	1777	0	1781	1777	1844
Q Serve(g_s), s	1.8	0.0	1.9	0.0	0.0	0.0	0.3	9.9	0.0	0.0	13.3	13.4
Cycle Q Clear(g_c), s	1.8	0.0	1.9	0.0	0.0	0.0	0.3	9.9	0.0	0.0	13.3	13.4
Prop In Lane	1.00		1.00	1.00		0.00	1.00		0.00	1.00		0.08
Lane Grp Cap(c), veh/h	268	0	141	158	4	0	329	2553	0	330	1037	1077
V/C Ratio(X)	0.26	0.00	0.48	0.00	0.00	0.00	0.10	0.60	0.00	0.00	0.70	0.70
Avail Cap(c_a), veh/h	349	0	614	356	733	0	455	3309	0	520	1655	1717
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	0.00	0.00	0.00	1.00	1.00	0.00	0.00	1.00	1.00
Uniform Delay (d), s/veh	21.2	0.0	20.2	0.0	0.0	0.0	5.5	3.3	0.0	0.0	6.8	6.8
Incr Delay (d2), s/veh	0.5	0.0	2.5	0.0	0.0	0.0	0.1	0.2	0.0	0.0	0.9	0.8
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.3	0.0	1.3	0.0	0.0	0.0	0.1	0.9	0.0	0.0	4.9	5.1
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	21.7	0.0	22.7	0.0	0.0	0.0	5.6	3.5	0.0	0.0	7.7	7.7
LnGrp LOS	C	A	C	A	A	A	A	A	A	A	A	A
Approach Vol, veh/h		137			0			1564			1473	
Approach Delay, s/veh		22.2			0.0			3.5			7.7	
Approach LOS		C						A			A	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	10.0	38.1	0.0	8.7	6.3	31.8	7.5	1.2
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.1	43.5	5.3	18.1	5.1	43.5	5.1	18.3
Max Q Clear Time (g_c+I1), s	10.0	11.9	0.0	3.9	2.3	15.4	3.8	0.0
Green Ext Time (p_c), s	0.0	14.3	0.0	0.2	0.0	11.9	0.0	0.0

Intersection Summary	
HCM 6th Ctrl Delay	6.2
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	7.5

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Vol, veh/h	0	0	26	0	0	15
Future Vol, veh/h	0	0	26	0	0	15
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Stop	Stop
RT Channelized	-	None	-	None	-	None
Storage Length	-	-	-	-	-	0
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	28	0	0	16

Major/Minor	Major1		Major2		Minor1	
Conflicting Flow All	0	0	1	0	-	1
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-
Critical Hdwy	-	-	4.12	-	-	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-
Critical Hdwy Stg 2	-	-	-	-	-	-
Follow-up Hdwy	-	-	2.218	-	-	3.318
Pot Cap-1 Maneuver	-	-	1622	-	0	1084
Stage 1	-	-	-	-	0	-
Stage 2	-	-	-	-	0	-
Platoon blocked, %	-	-		-		
Mov Cap-1 Maneuver	-	-	1622	-	-	1084
Mov Cap-2 Maneuver	-	-	-	-	-	-
Stage 1	-	-	-	-	-	-
Stage 2	-	-	-	-	-	-

Approach	EB	WB	NB
HCM Control Delay, s	0	7.3	8.4
HCM LOS			A

Minor Lane/Major Mvmt	NBLn1	EBT	EBR	WBL	WBT
Capacity (veh/h)	1084	-	-	1622	-
HCM Lane V/C Ratio	0.015	-	-	0.017	-
HCM Control Delay (s)	8.4	-	-	7.3	0
HCM Lane LOS	A	-	-	A	A
HCM 95th %tile Q(veh)	0	-	-	0.1	-

Movement	EBT	EBR	WBL	WBT	NBL	NBR
Lane Configurations						
Traffic Volume (veh/h)	1383	82	89	1192	21	103
Future Volume (veh/h)	1383	82	89	1192	21	103
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)		1.00	1.00		1.00	1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No			No	No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	1503	89	97	1296	23	112
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	1953	115	126	2579	196	174
Arrive On Green	0.57	0.57	0.07	0.73	0.11	0.11
Sat Flow, veh/h	3503	201	1781	3647	1781	1585
Grp Volume(v), veh/h	780	812	97	1296	23	112
Grp Sat Flow(s),veh/h/ln	1777	1834	1781	1777	1781	1585
Q Serve(g_s), s	18.3	18.5	2.9	8.6	0.6	3.7
Cycle Q Clear(g_c), s	18.3	18.5	2.9	8.6	0.6	3.7
Prop In Lane		0.11	1.00		1.00	1.00
Lane Grp Cap(c), veh/h	1018	1051	126	2579	196	174
V/C Ratio(X)	0.77	0.77	0.77	0.50	0.12	0.64
Avail Cap(c_a), veh/h	1283	1325	244	3347	635	565
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	8.9	9.0	25.0	3.2	22.0	23.3
Incr Delay (d2), s/veh	2.2	2.2	9.6	0.2	0.3	3.9
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	8.7	9.0	2.6	1.6	0.5	2.5
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	11.1	11.2	34.6	3.4	22.2	27.2
LnGrp LOS	B	B	C	A	C	C
Approach Vol, veh/h	1592			1393	135	
Approach Delay, s/veh	11.1			5.6	26.4	
Approach LOS	B			A	C	

Timer - Assigned Phs		2	3	4		8
Phs Duration (G+Y+Rc), s		10.5	8.4	35.8		44.2
Change Period (Y+Rc), s		4.5	4.5	4.5		4.5
Max Green Setting (Gmax), s		19.5	7.5	39.5		51.5
Max Q Clear Time (g_c+I1), s		5.7	4.9	20.5		10.6
Green Ext Time (p_c), s		0.3	0.0	10.8		12.2

Intersection Summary	
HCM 6th Ctrl Delay	9.3
HCM 6th LOS	A

Intersection	
Int Delay, s/veh	2

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	50	8	2	74	115	55
Future Vol, veh/h	50	8	2	74	115	55
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	54	9	2	80	125	60

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	239	155	185	0	-	0
Stage 1	155	-	-	-	-	-
Stage 2	84	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	749	891	1390	-	-	-
Stage 1	873	-	-	-	-	-
Stage 2	939	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	748	891	1390	-	-	-
Mov Cap-2 Maneuver	748	-	-	-	-	-
Stage 1	871	-	-	-	-	-
Stage 2	939	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	10.1	0.2	0
HCM LOS	B		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1390	-	765	-	-
HCM Lane V/C Ratio	0.002	-	0.082	-	-
HCM Control Delay (s)	7.6	0	10.1	-	-
HCM Lane LOS	A	A	B	-	-
HCM 95th %tile Q(veh)	0	-	0.3	-	-

Intersection	
Int Delay, s/veh	3.1

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	52	7	16	25	57	65
Future Vol, veh/h	52	7	16	25	57	65
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	57	8	17	27	62	71

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	159	98	133	0	-	0
Stage 1	98	-	-	-	-	-
Stage 2	61	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	832	958	1452	-	-	-
Stage 1	926	-	-	-	-	-
Stage 2	962	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	822	958	1452	-	-	-
Mov Cap-2 Maneuver	822	-	-	-	-	-
Stage 1	915	-	-	-	-	-
Stage 2	962	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.7	2.9	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1452	-	836	-	-
HCM Lane V/C Ratio	0.012	-	0.077	-	-
HCM Control Delay (s)	7.5	0	9.7	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0	-	0.2	-	-

Intersection	
Int Delay, s/veh	3.6

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	20	19	23	20	40	24
Future Vol, veh/h	20	19	23	20	40	24
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	22	21	25	22	43	26

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	128	56	69	0	-	0
Stage 1	56	-	-	-	-	-
Stage 2	72	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	866	1011	1532	-	-	-
Stage 1	967	-	-	-	-	-
Stage 2	951	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	851	1011	1532	-	-	-
Mov Cap-2 Maneuver	851	-	-	-	-	-
Stage 1	951	-	-	-	-	-
Stage 2	951	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	9.1	4	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1532	-	922	-	-
HCM Lane V/C Ratio	0.016	-	0.046	-	-
HCM Control Delay (s)	7.4	0	9.1	-	-
HCM Lane LOS	A	A	A	-	-
HCM 95th %tile Q(veh)	0.1	-	0.1	-	-

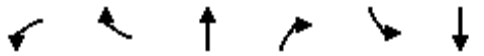
Intersection	
Int Delay, s/veh	0

Movement	EBL	EBR	NBL	NBT	SBT	SBR
Lane Configurations						
Traffic Vol, veh/h	0	0	0	43	59	0
Future Vol, veh/h	0	0	0	43	59	0
Conflicting Peds, #/hr	0	0	0	0	0	0
Sign Control	Stop	Stop	Free	Free	Free	Free
RT Channelized	-	None	-	None	-	None
Storage Length	0	-	-	-	-	-
Veh in Median Storage, #	0	-	-	0	0	-
Grade, %	0	-	-	0	0	-
Peak Hour Factor	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2
Mvmt Flow	0	0	0	47	64	0

Major/Minor	Minor2		Major1		Major2	
Conflicting Flow All	111	64	64	0	-	0
Stage 1	64	-	-	-	-	-
Stage 2	47	-	-	-	-	-
Critical Hdwy	6.42	6.22	4.12	-	-	-
Critical Hdwy Stg 1	5.42	-	-	-	-	-
Critical Hdwy Stg 2	5.42	-	-	-	-	-
Follow-up Hdwy	3.518	3.318	2.218	-	-	-
Pot Cap-1 Maneuver	886	1000	1538	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	975	-	-	-	-	-
Platoon blocked, %				-	-	-
Mov Cap-1 Maneuver	886	1000	1538	-	-	-
Mov Cap-2 Maneuver	886	-	-	-	-	-
Stage 1	959	-	-	-	-	-
Stage 2	975	-	-	-	-	-

Approach	EB	NB	SB
HCM Control Delay, s	0	0	0
HCM LOS	A		

Minor Lane/Major Mvmt	NBL	NBT	EBLn1	SBT	SBR
Capacity (veh/h)	1538	-	-	-	-
HCM Lane V/C Ratio	-	-	-	-	-
HCM Control Delay (s)	0	-	0	-	-
HCM Lane LOS	A	-	A	-	-
HCM 95th %tile Q(veh)	0	-	-	-	-



Movement	WBL	WBR	NBT	NBR	SBL	SBT
Lane Configurations						
Traffic Volume (veh/h)	23	13	1423	31	14	1467
Future Volume (veh/h)	23	13	1423	31	14	1467
Initial Q (Qb), veh	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00	1.00		1.00	1.00	
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach	No		No			No
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	25	14	1547	34	15	1595
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2
Cap, veh/h	47	26	2211	49	34	2651
Arrive On Green	0.04	0.04	0.62	0.62	0.02	0.75
Sat Flow, veh/h	1068	598	3649	78	1781	3647
Grp Volume(v), veh/h	40	0	772	809	15	1595
Grp Sat Flow(s),veh/h/ln	1709	0	1777	1856	1781	1777
Q Serve(g_s), s	1.0	0.0	12.5	12.5	0.4	8.9
Cycle Q Clear(g_c), s	1.0	0.0	12.5	12.5	0.4	8.9
Prop In Lane	0.62	0.35		0.04	1.00	
Lane Grp Cap(c), veh/h	76	0	1105	1154	34	2651
V/C Ratio(X)	0.53	0.00	0.70	0.70	0.44	0.60
Avail Cap(c_a), veh/h	721	0	1587	1658	212	3970
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	20.1	0.0	5.4	5.4	20.8	2.5
Incr Delay (d2), s/veh	5.6	0.0	0.8	0.8	8.7	0.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	0.9	0.0	3.4	3.5	0.4	0.1
Unsig. Movement Delay, s/veh						
LnGrp Delay(d),s/veh	25.7	0.0	6.2	6.2	29.5	2.7
LnGrp LOS	C	A	A	A	C	A
Approach Vol, veh/h	40		1581			1610
Approach Delay, s/veh	25.7		6.2			3.0
Approach LOS	C		A			A

Timer - Assigned Phs	1	2			6	8
Phs Duration (G+Y+Rc), s	5.3	31.2			36.5	6.4
Change Period (Y+Rc), s	4.5	4.5			4.5	4.5
Max Green Setting (Gmax), s	5.1	38.3			47.9	18.1
Max Q Clear Time (g_c+I1), s	2.4	14.5			10.9	3.0
Green Ext Time (p_c), s	0.0	12.1			16.3	0.1

Intersection Summary	
HCM 6th Ctrl Delay	4.8
HCM 6th LOS	A

Notes

User approved volume balancing among the lanes for turning movement.

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations												
Traffic Volume (veh/h)	60	14	55	133	22	6	25	1305	105	2	1291	50
Future Volume (veh/h)	60	14	55	133	22	6	25	1305	105	2	1291	50
Initial Q (Qb), veh	0	0	0	0	0	0	0	0	0	0	0	0
Ped-Bike Adj(A_pbT)	1.00		1.00	1.00		1.00	1.00		1.00	1.00		1.00
Parking Bus, Adj	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Work Zone On Approach		No			No			No			No	
Adj Sat Flow, veh/h/ln	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870	1870
Adj Flow Rate, veh/h	65	15	60	145	24	7	27	1418	114	2	1403	54
Peak Hour Factor	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92	0.92
Percent Heavy Veh, %	2	2	2	2	2	2	2	2	2	2	2	2
Cap, veh/h	316	25	100	313	153	45	239	1819	146	190	1810	70
Arrive On Green	0.05	0.08	0.08	0.09	0.11	0.11	0.03	0.55	0.55	0.00	0.52	0.52
Sat Flow, veh/h	1781	327	1308	1781	1391	406	1781	3332	267	1781	3489	134
Grp Volume(v), veh/h	65	0	75	145	0	31	27	753	779	2	713	744
Grp Sat Flow(s),veh/h/ln	1781	0	1635	1781	0	1797	1781	1777	1822	1781	1777	1846
Q Serve(g_s), s	2.1	0.0	2.8	4.6	0.0	1.0	0.4	20.9	21.2	0.0	20.2	20.3
Cycle Q Clear(g_c), s	2.1	0.0	2.8	4.6	0.0	1.0	0.4	20.9	21.2	0.0	20.2	20.3
Prop In Lane	1.00		0.80	1.00		0.23	1.00		0.15	1.00		0.07
Lane Grp Cap(c), veh/h	316	0	125	313	0	198	239	970	995	190	922	958
V/C Ratio(X)	0.21	0.00	0.60	0.46	0.00	0.16	0.11	0.78	0.78	0.01	0.77	0.78
Avail Cap(c_a), veh/h	365	0	472	313	0	531	331	1228	1259	330	1228	1276
HCM Platoon Ratio	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Upstream Filter(I)	1.00	0.00	1.00	1.00	0.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Uniform Delay (d), s/veh	24.6	0.0	28.0	23.9	0.0	25.3	10.0	11.2	11.3	10.2	12.1	12.2
Incr Delay (d2), s/veh	0.3	0.0	4.6	1.1	0.0	0.4	0.2	2.5	2.6	0.0	2.2	2.2
Initial Q Delay(d3),s/veh	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
%ile BackOfQ(95%),veh/ln	1.6	0.0	2.2	3.5	0.0	0.8	0.2	10.9	11.2	0.0	10.8	11.2
Unsig. Movement Delay, s/veh												
LnGrp Delay(d),s/veh	24.9	0.0	32.6	25.0	0.0	25.6	10.3	13.7	13.8	10.3	14.4	14.4
LnGrp LOS	C	A	C	C	A	C	B	B	B	B	B	B
Approach Vol, veh/h		140			176			1559			1459	
Approach Delay, s/veh		29.0			25.1			13.7			14.4	
Approach LOS		C			C			B			B	

Timer - Assigned Phs	1	2	3	4	5	6	7	8
Phs Duration (G+Y+Rc), s	4.7	38.7	10.0	9.3	6.4	37.0	7.9	11.4
Change Period (Y+Rc), s	4.5	4.5	4.5	4.5	4.5	4.5	4.5	4.5
Max Green Setting (Gmax), s	5.1	43.3	5.5	18.1	5.1	43.3	5.1	18.5
Max Q Clear Time (g_c+I1), s	2.0	23.2	6.6	4.8	2.4	22.3	4.1	3.0
Green Ext Time (p_c), s	0.0	10.6	0.0	0.3	0.0	10.2	0.0	0.1

Intersection Summary	
HCM 6th Ctrl Delay	15.2
HCM 6th LOS	B

Intersection	
Int Delay, s/veh	5

Movement	EBL	EBT	EBR	WBL	WBT	WBR	NBL	NBT	NBR	SBL	SBT	SBR
Lane Configurations		↕			↕			↕			↕	
Traffic Vol, veh/h	72	46	2	3	71	8	3	0	3	10	0	86
Future Vol, veh/h	72	46	2	3	71	8	3	0	3	10	0	86
Conflicting Peds, #/hr	0	0	0	0	0	0	0	0	0	0	0	0
Sign Control	Free	Free	Free	Free	Free	Free	Stop	Stop	Stop	Stop	Stop	Stop
RT Channelized	-	-	None	-	-	None	-	-	None	-	-	None
Storage Length	-	-	-	-	-	-	-	-	-	-	-	-
Veh in Median Storage, #	-	0	-	-	0	-	-	0	-	-	0	-
Grade, %	-	0	-	-	0	-	-	0	-	-	0	-
Peak Hour Factor	92	92	92	92	92	92	92	92	92	92	92	92
Heavy Vehicles, %	2	2	2	2	2	2	2	2	2	2	2	2
Mvmt Flow	78	50	2	3	77	9	3	0	3	11	0	93

Major/Minor	Major1			Major2			Minor1			Minor2		
Conflicting Flow All	86	0	0	52	0	0	341	299	51	297	296	82
Stage 1	-	-	-	-	-	-	207	207	-	88	88	-
Stage 2	-	-	-	-	-	-	134	92	-	209	208	-
Critical Hdwy	4.12	-	-	4.12	-	-	7.12	6.52	6.22	7.12	6.52	6.22
Critical Hdwy Stg 1	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Critical Hdwy Stg 2	-	-	-	-	-	-	6.12	5.52	-	6.12	5.52	-
Follow-up Hdwy	2.218	-	-	2.218	-	-	3.518	4.018	3.318	3.518	4.018	3.318
Pot Cap-1 Maneuver	1510	-	-	1554	-	-	613	613	1017	655	616	978
Stage 1	-	-	-	-	-	-	795	731	-	920	822	-
Stage 2	-	-	-	-	-	-	869	819	-	793	730	-
Platoon blocked, %		-	-		-	-						
Mov Cap-1 Maneuver	1510	-	-	1554	-	-	531	579	1017	626	582	978
Mov Cap-2 Maneuver	-	-	-	-	-	-	531	579	-	626	582	-
Stage 1	-	-	-	-	-	-	753	692	-	871	820	-
Stage 2	-	-	-	-	-	-	784	817	-	749	691	-

Approach	EB	WB	NB	SB
HCM Control Delay, s	4.5	0.3	10.2	9.4
HCM LOS			B	A

Minor Lane/Major Mvmt	NBLn1	EBL	EBT	EBR	WBL	WBT	WBR	SBLn1
Capacity (veh/h)	698	1510	-	-	1554	-	-	924
HCM Lane V/C Ratio	0.009	0.052	-	-	0.002	-	-	0.113
HCM Control Delay (s)	10.2	7.5	0	-	7.3	0	-	9.4
HCM Lane LOS	B	A	A	-	A	A	-	A
HCM 95th %tile Q(veh)	0	0.2	-	-	0	-	-	0.4