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TECHNICAL MEMORANDUM

DATE: February 19, 2025

TO: Scott Mathot, PE, Town of Truckee

FROM: Sierra Brown, PE, LSC Transportation Consultants, Inc.

SUBJECT: Truckee Railyard – Trip Generation Comparison

This memo presents a trip generation comparison for the office-type use of the Tahoe Truckee Community Foundation (TTCF). This proposed use is intended to occupy 3,500 square feet on the ground floor of the Artist Lofts building located at 9848 Donner Pass Road in Truckee, California (APN 019-421-004). This proposed land use will replace the previously analyzed "specialty retail" land use as calculated in the *Truckee Railyard Trip Generation, Trip Distribution, and Parking Generation Analysis* (LSC, May 2008). First, the proposed land uses are discussed. Next, the trip generation of the proposed project is estimated. Finally, the trip generation of the proposed project is compared to the original trip generation.

PROPOSED LAND USES

The proposed land uses of the project are as follows:

- The Gathering Space: A non-commercial cafe/bar type environment with flexible meeting room elements and seating which will host casual conversation in a cafe-like setting and provide training in a classroom style setup, or host a poetry-slam in a lounge-like environment. This space includes the main gathering space, hostess bar, storage, and bathrooms. The space has an occupancy code A-3.
- Facilitators Bull-Pen: Space for TTCF's staff and hosting partners to prepare for convenings, facilitate planning, communications and marketing, and other organizing work that makes for a successful collaboration and solutions building. A full battery of organizing tools will be available and stored along with quiet workspaces for individuals and groups and a private bathroom. The space has an occupancy code B.
- Organizers Offices: Private office space for private conversations and meetings. Three spaces include two private offices and a phone space. The space has an occupancy code B.

Daily Project Use

The space will host various non-profit meetings. Meetings typically last 2-3 hours and will start at various times depending on the type of event. The TTCF will attempt to limit the space to only hosting one meeting a day but occasionally there can be multiple meetings on the same day. The frequency and scale of meetings is as follows:

- Small Collaborative Meetings: 8-12 times a month; 5-15 attendees; can occur at any time between 7:30 AM and 5:00 PM
- Large Collaborative Meetings: 4-8 times a month; 50-75 attendees; can occur at any time between 7:30 AM and 5:00 PM
- Community Belonging Meetings: 1-3 times a month; 75-100 attendees (though many are now hybrid which reduces in-person attendance); can occur at any time between 5:00 PM and 10:00 PM

TTCF will have 15 staff associated with the project. Three of the employees will be full-time in-office. The remaining employees will work hybrid schedules with in-person attendance ranging from 1-3 days a week. On average, approximately 8 total employees (including both full-time, in-office, and hybrid) will be on-site. Employees on-site are expected to work typical office hours between 8:30 AM and 5:00 PM.

Some events may be catered; however, the majority of events are expected to be non-catered or catered by TTCF staff by picking up items at a grocery store.

TRIP GENERATION OF PROPOSED PROJECT

The first step in the analysis of traffic impacts is to prepare an estimate of the number of trips generated by the proposed project. Trip generation is the evaluation of the number of vehicle-trips that will either have an origin or destination at the project site. Daily vehicle trips and peak-hour vehicle trips need to be determined to analyze the potential impacts of the proposed project.

The applicant is requesting a Railyard Master Plan Amendment to create a new land use definition for this nonprofit office and gathering space. As this is not a standard land use, a person-trip analysis is performed.

Based on the frequency and scale of meetings discussed earlier, the weighted average number of weekday visitors is estimated at 30 attendees. Assuming vehicle occupancy rates of 1.0 for small events, 2.5 for large events, and 3.0 for community events, the overall average vehicle occupancy is calculated at 2.39 visitors per vehicle. With an average of 18 events per month distributed amongst small, large, and community events, the estimated daily trip rate is 1.73 trips per vehicle on a weekday. Community events are the only ones scheduled after 5:00 PM. Given that these occur twice a month and assuming all guests arrive during the PM peak hour, the estimated PM peak hour inbound trip rate is 0.02 trips per vehicle.

Small and large events may take place at any time between 7:30 AM and 5:00 PM. Since only one event occurs per day and lasts 2–3 hours, only a small portion of events will conclude during the PM peak hour. Assuming that 25% of small and large events end during this period, the estimated PM peak hour outbound trip rate is 0.14 trips per vehicle.

On an average day, approximately eight employees are expected to be on-site. According to the United States Census Bureau's *2023 American Community Survey 5-Year Estimates* for the Town of Truckee, the vehicle occupancy rate for workers is approximately 1.04. Assuming that half of the employees leave for lunch, the estimated daily trip generation is 3.0 trips per employee vehicle. Since employees work until 5:00 PM, each employee vehicle is assumed to generate one outbound trip during the PM peak hour.

As most events are expected to be non-catered or catered by TTCF staff, service vehicles were deemed insignificant and excluded from the analysis.

Reduction for Internal and Non-Auto

The proposed project is part of a mixed-use land development. As such, some internal trips would occur. In addition, non-auto trips, such as trips made to/from the site via bike, walking, or transit, reduce trip generation. The project is located within convenient walking distance of the existing downtown Truckee land uses. In the original study, a 13 percent reduction for trips between blocks, a 44 percent reduction for trips within the block, and a 5 percent non-auto reduction was applied to the specialty retail land use. The proposed office-type land use will draw less internal trips than a retail land use. As such, a conservative 5 percent reduction between blocks and a 5 percent reduction for trips within the block is applied to the proposed land uses. Consistent with the original study, the non-auto access rate for the proposed project is conservatively assumed to be around 5 percent, as shown in Table 1.

Trip Generation at Site Driveways

Multiplying the land-use quantities by the trip rates and taking reductions for internal and non-auto yields the vehicle trips generated at the site driveways for proposed project conditions. As shown in Table 1, the proposed land uses are forecasted to generate a total of approximately 42 daily vehicle trips at the site driveways on a weekday, including 10 PM peak-hour vehicle trips (0 inbound plus 10 outbound).

ORIGINAL LAND USES

For this space, the original land use analyzed in the Truckee Railyard was defined as 3,500 square feet of "Specialty Retail." The trip generation calculation is summarized at the bottom of Table 1. As shown, the original study concluded the specialty retail land use would generate a total of approximately 72 daily vehicle trips at the site driveways on a weekday, including 4 PM peak-hour vehicle trips (2 inbound plus 2 outbound).

PROJECT NET IMPACT

Comparing the proposed project to the original analysis shows a decrease of 30 daily trips. During the PM peak hour, there will be an increase of 6 PM peak hour trips (-2 inbound and 8 outbound). Though the PM peak hour shows a slight increase in trips, these trips are expected to be distributed across multiple intersections in the downtown and railyard areas. As a result, the impact on any single intersection is likely to be minimal, and the overall impact of the project is expected to be insignificant.

LEVEL OF SERVICE

Per the *2025 Truckee General Plan*, Policy 2.3 states the following:

"Allow flexibility and exceptions to the LOS standards described in Policy P2.1 for the following intersections:

- Bridge Street/Donner Pass Road
- Bridge Street/River Street
- Glenshire Drive/Donner Pass Road

Exceptions to the standards may be allowed in cases where the Town finds that improvements needed to achieve acceptable LOS: (a) should be deferred in order to better coordinate with the planning and implementation of other projects including the Railyard"

As the proposed project is part of the "Railyard", LOS is excluded from the analysis.

CONCLUSIONS

The following conclusions are made based on this analysis:

- The proposed project would generate approximately 42 daily vehicle trips with 10 in the PM peak hour (0 inbound and 10 outbound).
- The original specialty retail land use would generate approximately 72 daily vehicle trips with 4 in the PM peak hour (2 inbound and 2 outbound).
- Comparing the proposed project to the original analysis shows a decrease of 30 daily trips. During the PM peak hour, there will be an increase of 6 PM peak hour trips (-2 inbound and 8 outbound).
- As the project is located in the Railyard area, LOS is not required for this project. However, qualitatively, while the PM peak hour shows a slight increase in trips, the impact on any single intersection is likely to be minimal, and the overall impact of the project is expected to be insignificant.

Table 1: Truckee Railyard Comparison - Trip Generation

Description	Quantity	Unit	Vehicle Occupancy	Trip Generation Rates[1] Daily	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total	Percent Reduction for Trips Between Blocks	Percent Reduction for Trips Internal to Project Site (Within Blocks)	Percent Reduction for External Non-Auto Trips	Site-Generated External One-Way Vehicle Trips at Daily	PM Peak Hour In	PM Peak Hour Out	PM Peak Hour Total
Proposed Land Uses														
Non Profit Office and Gathering Space	30	Visitors	2.39	1.73	0.02	0.14	0.16	5%	5%	5%	20	0	2	2
TTCF Full-Time Onsite Employees	3	Employees	1.04	3.00	0.00	1.00	1.00	0%	0%	5%	9	0	3	3
TTCF Hybrid Employees	5	Employees	1.04	3.00	0.00	1.00	1.00	0%	0%	5%	13	0	5	5
Subtotal Proposed											*42*	*0*	*10*	*10*
Trip Generation in 2008 Report														
Specialty Retail	3.500	KSF	N/A	44.32	1.19	1.52	2.71	13%	44%	5%	72	2	2	4
Project Net Impact											**-30**	**-2**	**8**	**6**

KSF = 1,000 Square Feet

Note 1 - Trip generation rates from the original 2008 report were estimated using the Institute of Transportation Engineers Trip Generation Manual, 7th Edition (2003).

Source: LSC Transportation Consultants, Inc.