Memorandum



To: Luke Evans

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From: Mario Tambellini, PE, TE

Date: November 4, 2020

Subject: Yosemite Under Canvas VMT Analysis - Final

INTRODUCTION

This memorandum has been prepared to present the results of a vehicle miles traveled (VMT) analysis performed for the Yosemite Under Canvas Project (Project). This memorandum presents VMT data to be used in the Project environmental impact report (EIR).

PROJECT DESCRIPTION

The Project site is located adjacent to State Route 120 (SR 120) in the vicinity of Hardin Flat, east of the community of Groveland and west of Yosemite National Park, in Tuolumne County (County), California. The Project proposes to construct a transient tent (no fixed structures) camp for guests to stay from spring through early fall as weather allows. The Project will provide guests with canvas tents, beds, bathroom facilities, meals, and community fire pits. Potable water and sanitary sewer would be provided by on-site public systems owned by Under Canvas. A total of 99 tents are proposed for the Project, along with an office/guest check-in tent, commercial kitchen, communal bathrooms, and a number of support tents.

The Project site is comprised of two parcels, located within unincorporated Tuolumne County, totaling approximately 80.1 acres. The western parcel is zoned Commercial Recreation (C-K), and the eastern parcel is zoned Commercial Recreation (C-K) and Open Space-1 (O-1). Over half of the Project site would remain undeveloped as currently proposed. The site currently consists of undeveloped land previously used for forestry and logging. Adjacent land uses include scattered private residences, recreation facilities, and open space. Figures showing the Project location and site plan are included as Attachment A (ESA, March 2020).

Internal circulation would be provided by a main internal access road (Under Canvas Way) and internal cart paths and footpaths. There is existing access to the property by way of Hardin Flat Road via SR 120. A secondary point of access would be provided for emergency purposes on the northwest side of the site via an existing unimproved roadway that connects to Forest Service Road 1S09. Onsite roadways would not be paved, but would be topped with gravel where needed.

Bus stops for the Yosemite Area Regional Transportation System (YARTS) are proposed on each side of Hardin Flat Road at the entrance to the Yosemite Under Canvas facility, approximately 800 feet south of the Hardin Flat Road/SR 120 intersection. The YARTS operates between May and September and generally offers three round trips a day into Yosemite National Park. The proposed bus stops would provide Project guests with the option to access Yosemite National Park and other regional destinations via transit.

The operational season for the site would generally be from mid-March to mid-October, depending on weather conditions. The average occupancy is estimated to be approximately 2.5 guests per tent. Guests are generally anticipated to arrive for the night, then leave the site in the morning to pursue recreational and

sightseeing opportunities in the area, and then return later in the day. Between 20 and 30 staff members would be employed by the Project during the operation season, with 10 to 15 personnel working on the site at any given time. Employees would largely be drawn from the local community, though some could be recruited from elsewhere. If they desire, employees without housing in the local community would be housed in rental units facilitated by Under Canvas.

PROJECT TRIP GENERATION

A Project trip generation was prepared for the EIR by Environmental Sciences Associates (ESA). ESA developed custom trip generation rates for the Project site using traffic data collected at an existing Under Canvas site, Under Canvas Grand Canyon, that was considered to have characteristics representative of the Project. The custom trip generation rates utilized "occupied tents" as the independent variable. The results of the custom trip generation rate study indicated that each occupied tent would generate approximately 2.6 daily one-way vehicle trips, and less than one trip per hour for the peak hour of the generator and the weekday AM and PM peak hours. Since this memorandum is focused on VMT generated by the Project, only the daily trip generation was considered. Based on the custom trip generation rates from the EIR, the Project is estimated to generate approximately 257 daily trips under full occupancy conditions. Project daily trip generation under full occupancy conditions is summarized in Table 1. Additional details on the custom trip generation rates can be found in the *Trip Generation for Yosemite Under Canvas EIR* technical memorandum (ESA, October 4, 2019).

As stated in the Project description, the Project would be operational from approximately mid-March to mid-October, or approximately seven months out of the year. Therefore, the trip generation under full occupancy conditions discussed above is likely a good representation of the Project operations during the summer season, when the Project is likely to be at or near capacity, but is not a good representation of the Project operations under annual average conditions.

The VMT analysis for the Project was performed using the Tuolumne County Regional Travel Demand Model (RTDM), consistent with County policy. All scenarios in the Tuolumne County RTDM represent annual average weekday conditions. Therefore, an annual average trip generation for the Project was estimated in order to stay consistent with the RTDM. The annual average trip generation rates and estimates for the Project were developed by multiplying the full occupancy values by "7/12", to account for the fact that the Project is only operational seven months out of the year. This memorandum also assumed the Project would generally experience approximately 85% occupancy while operational, based on average campsite occupancy data contained in the Yosemite Valley Plan Supplemental EIR (National Park Service, April 2000), when estimating the annual average trip generation rates. Therefore, the full occupancy trip generation rates were further reduced by 15% to account for the assumed average campsite occupancy. Project daily trip generation under annual average conditions is summarized in Table 1.

Table 1. Yosemite Under Canvas Trip Generation - Daily Conditions

Scenario	Land Use	Rate	Quantity	Daily Vehicle Trips
Full Occupancy	Under Canvas Campground	2.6 trips per occupied site ¹	99 occupied sites	257
Annual Average	Under Canvas Campground	1.29 trips per camp site ²	99 camp sites	128

Notes:

^{1.} Based on data from the Trip Generation for Yosemite Under Canvas EIR technical memorandum (ESA, October 4, 2019).

^{2.} Annual Average Trip Generation Rage = Full Occupancy Trip Generation Rate x 7/12 x 85%. Where "7/12" is the seasonal operations factor and "85%" is the site occupancy factor.

VMT ANALYSIS

Project VMT within and outside Tuolumne County was analyzed using the standard VMT analysis procedures currently being developed for Tuolumne County as part of the Tuolumne County SB 743 VMT Study. VMT analysis was performed for annual average weekday daily conditions. The tools and data used to analyze VMT are summarized below. Minor updates have been made to the VMT analysis since the *DRAFT Yosemite Under Canvas VMT Analysis Memorandum* (Wood Rodgers, April 15, 2020) was prepared to stay consistent with current County analysis guidelines and thresholds. The Project VMT estimate and VMT threshold were updated to better account for all travel and trip lengths between Yosemite National Park and campground type land uses. Yosemite travel was better accounted for via post-processing campground trips using mobile phone and GPS based travel data for existing campgrounds in the County obtained from AirSage and StreetLight.

It is Tuolumne County policy, and generally good practice, to evaluate a campground type of project using a travel demand model. The latest version of the Tuolumne County RTDM, which was recently updated as part of the Tuolumne County SB 743 VMT Study, was used to analyze VMT generated by the Project. The RTDM has scenario years of 2015, 2030, and 2040, and models a typical weekday under annual average conditions. The year 2015 RTDM scenario was considered to be a reasonable approximation of baseline conditions for the Project. RTDM outputs were also post-processed using standard County procedures and tools to estimate total out-of-County VMT generated by County land uses. The out-of-County post-processing procedures and tools utilize year 2018 AirSage trip data, obtained as part of the Tuolumne County SB 743 VMT Study, and California Statewide Travel Demand Model data to estimate out-of-County travel and trips to/from Yosemite National Park. The following scenarios were analyzed using the RTDM:

- Baseline Year 2020 Without Project (using the 2015 RTDM scenario)
- Baseline Year 2020 With Project (using the 2015 RTDM scenario)
- Cumulative Year 2040 Without Project
- Cumulative Year 2040 With Project

Data for the "Without Project" conditions was prepared by running the RTDM year 2015 and 2040 scenarios with no modifications. The "With Project" conditions RTDM scenarios were prepared by adding a new Project Traffic Analysis Zone (TAZ) into the RTDM at the southwest corner of Hardin Flat Road and SR 120 "T" intersection, with a centroid connector providing access to Hardin Flat Road. Land use quantities for the Project were input into the RTDM demographics file under the new Project TAZ. The RTDM "campground/cabin" land use category was used to represent the Project as it had similar trip generation rates and trip types to the Project. The "With Project" RTDM scenarios were run and outputs were extracted and post-processed. Note that the RTDM generally assumed that some of the Project trips would not be new to the County, and instead would be rerouted from other similar land uses.

EFFICIENCY-BASED VMT METRIC

An efficiency-based VMT metric, VMT per campsite, was estimated for the Project using data from the Baseline Year 2020 With Project RTDM run. No VMT reductions were used on the total Project VMT estimated by the RTDM when estimating Project VMT per campsite. Project VMT per campsite was estimated by dividing total Project VMT from the RTDM by the 99 total Project campsites. The Project is estimated to generate approximately 45.3 VMT per campsite, as shown in Table 2.

Table 2. Project VMT - Efficiency-Based VMT Metric

Annual Average Typical Weekday VMT per Campsite		
Estimated Project VMT per Campsite 45.3 VMT/campsite		
Notes: All data calculated with the Tuolumne County Regional Travel Demand Model and post-processing tools.		

INITIAL NET CHANGE IN AFFECTED AREA VMT

Total VMT generated by County land uses (including out of County travel) was calculated for each of the four scenarios analyzed in this memorandum using RTDM data and post-processing procedures and tools. Net change in affected area VMT due to the Project was calculated under Baseline and Cumulative conditions by finding the difference of the "Without Project" and "With Project" total VMT generated by County land uses. Table 3 shows unreduced VMT generated by County land uses for all scenarios, and the net change in total VMT generated by County Land uses under Baseline 2020 and Cumulative 2040 conditions. Detailed VMT data is included as Attachment B.

Table 3. Initial Project VMT - Net Change in Affected Area

Annual Average Typical Weekday Total VMT				
Initial 2020 Without Project Total VMT Generated by County Land Uses	3,374,984			
Initial 2020 With Project Total VMT Generated by County Land Uses	3,376,424			
Initial 2020 Net Change in Total VMT Generated by County Land Uses	+1,440			
Initial 2040 Without Project Total VMT Generated by County Land Uses	3,806,308			
Initial 2040 With Project Total VMT Generated by County Land Uses	3,807,823			
Initial 2040 Net Change in Total VMT Generated by County Land Uses	+1,515			
Notes: All data is estimated from the Tuolumne County Regional Travel Demand Model and standard Tuolumne County				

Notes: All data is estimated from the Tuolumne County Regional Travel Demand Model and standard Tuolumne County post-processing methodologies.

Using the VMT data from Table 2 and Table 3, as well as the total number of Project campsites, we can estimate Total Project VMT and the portion of Project VMT that is estimated to be rerouted from existing land uses, as shown in Table 4. The portion of Project VMT estimated to be rerouted from existing land uses represents visitors who may have stayed at other accommodations in the area if the Project was not operational.

Table 4. Project VMT - New vs. Rerouted VMT

Baseline 2020 Annual Average Typical Weekday Total VMT			
Total Project VMT	4,485		
Portion of Project VMT that is New to the Affected Area 1,440			
Portion of Project VMT that has Been Rerouted from Existing land Uses 3,045			
Notes: All data calculated with the Tuolumne County Regional Travel Demand Model and post-processing tools.			

TRANSIT REDUCTION AND FINAL NET CHANGE IN AFFECTED AREA VMT

As stated in the Project description, YARTS bus stops are proposed on each side of Hardin Flat Road near the entrance to the Yosemite Under Canvas facility. Generally, it can be assumed that some Project guests would use the proposed bus stops to travel to Yosemite National Park, resulting in less overall vehicle trips and a reduction in Project VMT.

Latest YARTS bus ridership data was obtained from the County. The Sonora to Yosemite Valley YARTS route currently operates daily between approximately mid-May and the end of September each year. The route generally runs from the Black Oak Hotel Resort to the Yosemite Valley Visitor Center, where riders can connect to free Yosemite Valley shuttles. The route generally runs along Tuolumne Road, SR 108, SR 120, and Big Oak Flat Road. The route currently has 11 total stops on the way to Yosemite Valley, including the Black Oak Hotel Resort, 9 of which are located outside Yosemite National Park. The 11 stops are as follows:

- Black Oak Hotel Resort
- Sonora Best Western
- Inns of California Downtown Sonora
- Rocca Park Jamestown Main Street
- Mary Laveroni Park
- Yosemite Pines RV Park
- Buck Meadows Restaurant
- Yosemite Lake Campgrounds
- Rush Creek Lodge
- Big Oak Flat-Park Entrance Gate
- Crane Flat Gas Station

The Sonora to Yosemite Valley YARTS route generally has three outgoing trips each morning and three return trips each afternoon, with one hour headways, from the end of May to the end of August. The route generally has only one outgoing and return trip each day in May and September.

According to YARTs bus ridership data from the County, the Sonora to Yosemite Valley route provided 16,358 total rides in 2019 and was operational for 136 total days. Based on these numbers, the Sonora to Yosemite Valley YARTS route provided an average of 120 rides per day. Since there are currently 9 stops outside Yosemite National Park on the route, it can be estimated that each stop had approximately 13.3 YARTS trips per day on average. Therefore, it can be assumed that the proposed YARTS stops at the Project site would serve, on average, 13.3 total trips to/from Yosemite Valley each day.

The proposed Project entrance would be located approximately 30.5 miles away from the Yosemite Valley Visitor Center by car. Therefore, it can be estimated that the proposed YARTS bus stops would result in a daily VMT reduction of approximately 406 vehicle-miles per day while operational. Since the YARTS bus service is only operational 136 days out of the year, or approximately 37.3 percent of the time, the proposed YARTS bus stops would result in an annual average VMT reduction of approximately 151 vehicle-miles per day. VMT transit reductions and a summary of final VMT is shown in Table 5.

Table 5. Final Project VMT - Affected Area VMT

Annual Average Typical Weekday Total VMT				
Initial 2020 Net Change in Total VMT Generated by County Land Uses	+1,440			
Initial 2040 Net Change in Total VMT Generated by County Land Uses	+1,515			
Total Estimated Reduction in VMT due to YARTS	-151			
Final 2020 Net Change in Total VMT Generated by County Land Uses	+1,289			
Final 2040 Net Change in Total VMT Generated by County Land Uses	+1,364			

Notes: All data is estimated from the Tuolumne County Regional Travel Demand Model, standard Tuolumne County post-processing methodologies, and YARTS ridership data from Tuolumne County.

TOURISM IN TUOLUMNE COUNTY

This information in this section is provided as background to the Project VMT threshold discussed in the next section.

Tourism, visitors, and money spent on accommodations in Tuolumne County generally increase over time regardless of changes to the supply of hotel rooms and campsites. In general, population growth in California and the United States is the primary driving force for increases in tourism to state and national parks, such as Yosemite National Park, and similar destinations, as discussed in the *Park and Recreation Trends in California Report* (State of California Resources Agency, 2005). California's population grew by an average

rate of 0.75 percent annually over the last 10 years, based on data from the California Department of Finance, but has been slowing in recent years. California's population grew by approximately 0.35 percent in 2019. The United States' population grew by an average rate of 0.66 percent annually over the last 10 years, based on data from the U.S. Census Bureau, but has also been slowing in recent years. The United States' population grew by approximately 0.6 percent in 2019.

Another large factor driving growth in California tourism is marketing done by the California Travel and Tourism Commission (CTTC), which operates Visit California. The CTTC had a budget of approximately 50 million dollars in 2010. CTTC advertising was seen by 46.2 million consumers globally in 2010, yielding 3.7 million visits and 5.1 billon dollars in spending that otherwise would not have been realized by the state. All year 2010 CTTC statistics were obtained from the *White Paper on California Tourism* (California Travel and Tourism Commission et al., June 2011). According to the article *DMO's Under Assault* (Travel Weekly, July 12, 2017), Visit California's budget was doubled to 100 million dollars in 2014, which resulted in an increase of visitation to California by more than 20 million trips between 2014 and 2017.

Growth in tourism and campground/hotel visitors in Tuolumne County can be tracked using statistics on transient occupancy tax (TOT), i.e. taxes paid on temporary lodging, and total visitor spending on traveler accommodations from the *California Travel Impacts 2010-2019p Report* (Visit California, April 2020). Growth in TOT and visitor spending on accommodations in Tuolumne County are shown in Table 6, Table 7, and Table 8 below.

Table 6. Unincorporated Tuolumne County Transient Occupancy Tax

Year	Transient Occupancy Tax (TOT) for Unincorporated Tuolumne County (\$1,000s) ¹	California Annual Inflation Rate ²	Transient Occupancy Tax (TOT) for Unincorporated Tuolumne County (year 2019 \$, \$1,000s)	Annual % Change from Prior Period (year 2019 \$)
2011	\$1,823	2.6%	\$2,196	n/a
2012	\$2,209	2.2%	\$2,603	18.5%
2013	\$2,417	1.5%	\$2,807	7.8%
2014	\$2,251	1.8%	\$2,567	-8.5%
2015	\$2,645	1.5%	\$2,973	15.8%
2016	\$3,325	2.3%	\$3,655	22.9%
2017	\$4,040	2.9%	\$4,314	18.0%
2018	\$4,576	3.7%	\$4,712	9.2%
2019	\$4,730	3.0%	\$4,730	0.4%
Average	\$3,113	2.4%	\$3,395	10.1%

Notes:

^{1.} Transient Occupancy Tax (TOT) values are from California Travel Impacts 2010-2019p (Visit California, April 2020). TOT in Tuolumne County was 10% for the entire period from 2011 to 2019.

^{2.} California Annual Inflation Rate based on Consumer Price Indices from the California Department of Finance website.

Table 7. Tuolumne County Visitor Spending on Hotel, Motel Accommodation

Year	Visitor Spending on Hotel, Motel Accommodation in Tuolumne County (\$1,000s) ¹	California Annual Inflation Rate ²	Visitor Spending on Hotel, Motel Accommodation in Tuolumne County (year 2019 \$, \$1,000s)	Annual % Change from Prior Period (year 2019 \$)
2010	\$62.2	1.3%	\$76.9	n/a
2011	n/a ³	2.6%	n/a³	n/a³
2012	\$79.9	2.2%	\$94.2	11.2%
2013	n/a³	1.5%	n/a³	n/a³
2014	\$77.9	1.8%	\$88.8	-2.8%
2015	\$91.8	1.5%	\$103.2	16.1%
2016	\$108.9	2.3%	\$119.7	16.0%
2017	\$128.9	2.9%	\$137.6	15.0%
2018	\$124.3	3.7%	\$128.0	-7.0%
2019	\$134.8	3.0%	\$134.8	5.3%
Average	\$101.1	2.3%	\$110.4	6.4%

Notes:

Table 8. Tuolumne County Visitor Spending on Campground Accommodation

Year	Visitor Spending on Campground Accommodation in Tuolumne County (\$1,000s) ¹	California Annual Inflation Rate ²	Visitor Spending on Campground Accommodation in Tuolumne County (year 2019 \$, \$1,000s) ¹	Annual % Change from Prior Period (year 2019 \$)
2010	\$14.2	1.3%	\$17.6	n/a
2011	n/a ³	2.6%	n/a ³	n/a ³
2012	\$14.4	2.2%	\$17.0	-1.7%
2013	n/a ³	1.5%	n/a ³	n/a ³
2014	\$15.4	1.8%	\$17.6	1.8%
2015	\$15.4	1.5%	\$17.3	-1.4%
2016	\$15.6	2.3%	\$17.1	-0.9%
2017	\$16.4	2.9%	\$17.5	2.1%
2018	\$17.2	3.7%	\$17.7	1.1%
2019	\$18.5	3.0%	\$18.5	4.4%
Average	\$15.9	2.3%	\$17.5	0.6%

Notes

As shown in Table 6, TOT, and therefore overnight visitor stays, in Unincorporated Tuolumne County generally increased every year for the last nine (9) years except for 2014, which reflects the 2013 Rim Fire and government shutdowns. As shown in Table 7, visitor spending on hotel and motel accommodation in Tuolumne County increased almost every year over the last 10 years, despite the fact that significant growth in hotel rooms in the County only occurred in two (2) years: 2013, when the Hotel at the Black Oak Casino Resort opened in the spring; and 2016, when the Rush Creek Lodge opened in the spring on SR 120 west of Yosemite National Park. Since substantial growth in visitor spending on hotel and motel accommodation

^{1.} Visitor Spending on Hotel, Motel Accommodation values are from California Travel Impacts 2010-2019p (Visit California, April 2020).

^{2.} California Annual Inflation Rate based on California Consumer Price Indices from the State of California Department of Finance website.

^{3.} No data available.

^{1.} Visitor Spending on Campground Accommodation values are from California Travel Impacts 2010-2019p (Visit California, April 2020).

^{2.} California Annual Inflation Rate based on California Consumer Price Indices from the State of California Department of Finance website.

^{3.} No data available.

occurred even in years when no significant growth in hotel room supply occurred, it can be inferred that other factors besides growth in hotel room supply have a significant effect on growth in visitor spending and total visitors in the County. As shown in Table 8, visitor spending on campground accommodation in Tuolumne County generally increased over the last 10 years, despite the fact that there was very little if any increase in campsite supply in the County over the same time period. The upward trend in visitor spending on campground accommodation is less clear when adjusted for inflation, but this could be due to campground prices not rising as quickly as prices of other goods and services in California, or could potentially show a shift of campground visitors to hotels as new hotels opened in the County in 2013 and 2016. Generally, growth in visitor spending on campground accommodation occurred at a faster rate than growth in campsite supply in Tuolumne County, and so it can be inferred that other factors besides growth in campsite supply have a significant effect on growth in visitor spending and total visitors in the County. Hotel/motel room and campsite supply numbers were obtained from latest available data from the County U-Plan model, County RTDM, and research through online hotel sites such as TripAdvisor.

Based on the above data and discussion, it is reasonable to infer that tourism, visitors, and money spent on accommodations in Tuolumne County generally increase over time regardless of changes to the supply of hotel rooms and campsites.

VMT THRESHOLD AND IMPACTS

Tuolumne County had not adopted final countywide VMT thresholds at the time of preparation of this memorandum. Therefore, an appropriate Project-specific threshold was identified for this Project consistent with recommendations in the Governor's Office of Planning and Research's (OPR) *Technical Advisory on Evaluating Transportation Impacts in CEQA* (OPR Technical Advisory) (December 2018), the current *California Environmental Quality Act Guidelines* (CEQA Guidelines), and the *Tuolumne County SB 743 VMT Thresholds Memorandum* (Wood Rodgers, November 4, 2020).

The language in the current CEQA Guidelines suggests lead agencies should strive to achieve a better balance between state goals and local goals when evaluating transportation impacts with VMT. Based on discussions with the County, the County's goals for a Project VMT threshold are to encourage new development in travel efficient areas of the County and reduce VMT per visitor of the County over time. A "no net increase" approach was considered as a threshold for the Project, but was ultimately not selected. Generally, all newly opened campgrounds may potentially generate some new tourist trips. This means that most or all new campgrounds could potentially have an impact if using a "no net increase threshold". If all new campgrounds have a transportation impact, the adopted threshold would not adequately serve its purpose of encouraging lower VMT developments. The OPR Technical Advisory states: "Agencies should consider whether their actions encourage development in a less travel efficient location by limiting development in travel efficient locations." Since a "no net increase" threshold would likely result in significant impacts for projects in travel efficient locations (for the area), "no net increase" was not considered a valid threshold for evaluation of Project VMT.

When selecting a threshold for this Project, it should be considered that recreational trips in Tuolumne County are not solely driven by new land uses, and are largely dependent on annual growth in visitation to Yosemite National Park, Stanislaus National Forest, and other tourist destinations in the area. As discussed in the Tourism in Tuolumne County section of this memorandum, annual growth in visitation to the area is primarily driven by population growth in California and the United States as well as tourism marketing performed by state organizations such as Visit California. As stated in the Tourism in Tuolumne County section of this memorandum, visitor growth to Tuolumne County and Yosemite National Park has generally increased over time regardless of changes to the supply of hotel rooms and campsites in the area. Therefore, new recreational trips to the County may occur whether or not a new campground is constructed, and so the County's focus should potentially be on providing accommodations in more travel efficient locations for those visitors. If visitors to the region are provided with new places to stay that generate less VMT than existing campgrounds, the VMT per visitor of the region could potentially be lowered over time. Another factor to consider is that there is currently a lack of lodging options along SR 120 west of Yosemite National

Park, and constructing new facilities in this area could potentially get current visitors to stay closer to the park, reducing VMT in the region.

It should also be acknowledged that campgrounds in different areas of the County serve different purposes and visitors, which results in different travel patterns. As part of the currently ongoing Tuolumne County SB 743 VMT Study, the County was divided into nine (9) subareas based on proximity and travel characteristics. The nine (9) subareas are shown in Attachment C. The Project is located in the East County Subarea. Therefore, based on all the factors discussed above, and consistent with threshold recommendations in the OPR Technical Advisory and the *Tuolumne County SB 743 VMT Thresholds Memorandum*, a reasonable VMT threshold for this Project was considered to be:

"less than or equal to the East County Subarea existing average campground VMT per campsite"

The Project VMT threshold was considered reasonable because it supports the County's goals of encouraging new development in travel efficient areas of the County and reducing VMT per visitor of the County over time. Existing average campground VMT per campsite in the East County Subarea was calculated as part of the Project VMT analysis using the same version of the RTDM and same methodologies used to estimate Project VMT in this memorandum, and is consistent with the threshold value recommended in Table 3 of the current *Tuolumne County SB 743 VMT Thresholds Memorandum*. Table 9 shows the proposed threshold and how Project VMT per campground compares against it.

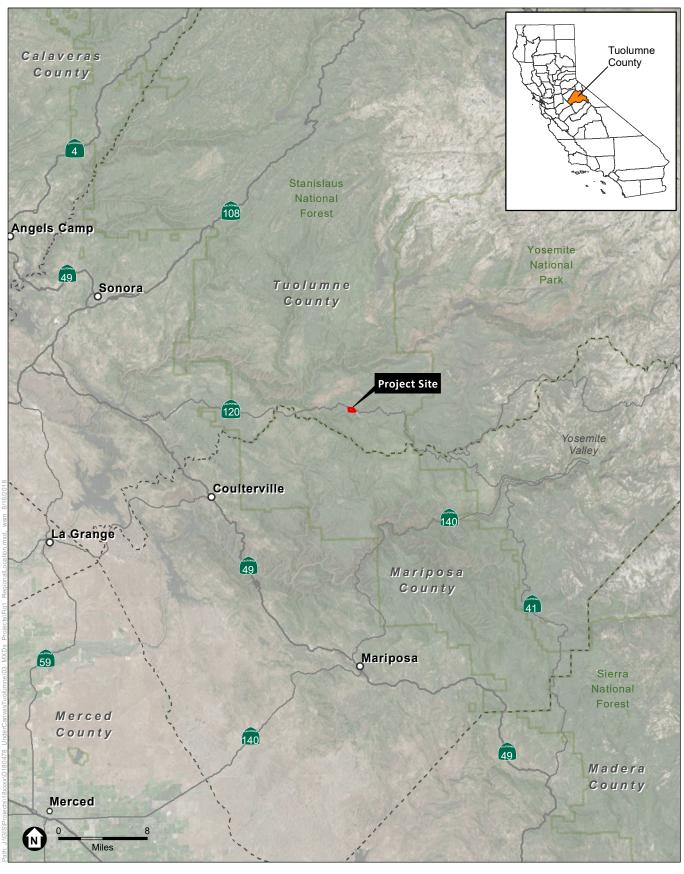
Table 9. Project VMT vs. Threshold - Efficiency-Based VMT Metric

Annual Average Typical Weekday VMT per Campsite				
Project VMT per Campsite	45.3 VMT/campsite			
Existing Average Campground VMT per Campsite in the East County Subarea (Threshold)	58.5 VMT / campsite			
Percent Difference	-22.6%			
Notes: All data calculated with the Tuolumne County Regional Travel Demand Model and post-processing tools.				

As shown in Table 9, the Project VMT per campsite is projected to be approximately 22.6 percent below the threshold. The Project is projected to be below the threshold because of its proximity to tourist destinations and Project provided amenities. Since the Project VMT is below the threshold, and an efficiency-based threshold was used, Project VMT impacts are projected to be "less than significant" under Baseline plus Project and Cumulative (i.e. long term future) plus Project conditions, consistent with methodologies in the OPR Technical Advisory.

Note that the *Tuolumne County SB 743 VMT Thresholds Memorandum* has been updated with new analysis and recommendations since preparation of the *DRAFT Yosemite Under Canvas VMT Analysis Memorandum* (dated April 15, 2020). As a result, the existing average East County Subarea campground VMT per campsite shown in Table 3 of the latest *Tuolumne County SB 743 VMT Thresholds Memorandum* (dated November 4, 2020), and shown in Table 9 of this memorandum, is different than the existing average East County Subarea campground VMT per campsite previously used as the basis for the threshold in the *DRAFT Yosemite Under Canvas VMT Analysis Memorandum*. The current Project VMT estimate and threshold included in Table 9 of this memorandum are both based on the updated methodology, consistent with the current *Tuolumne County SB 743 VMT Thresholds Memorandum*, and represent a refined VMT analysis for the Project.

ATTACHMENT A Project Location and Site Plan



SOURCE: Esri, 2015; ESA, 2018

Yosemite Under Canvas Project

Figure 2-1
Regional Location

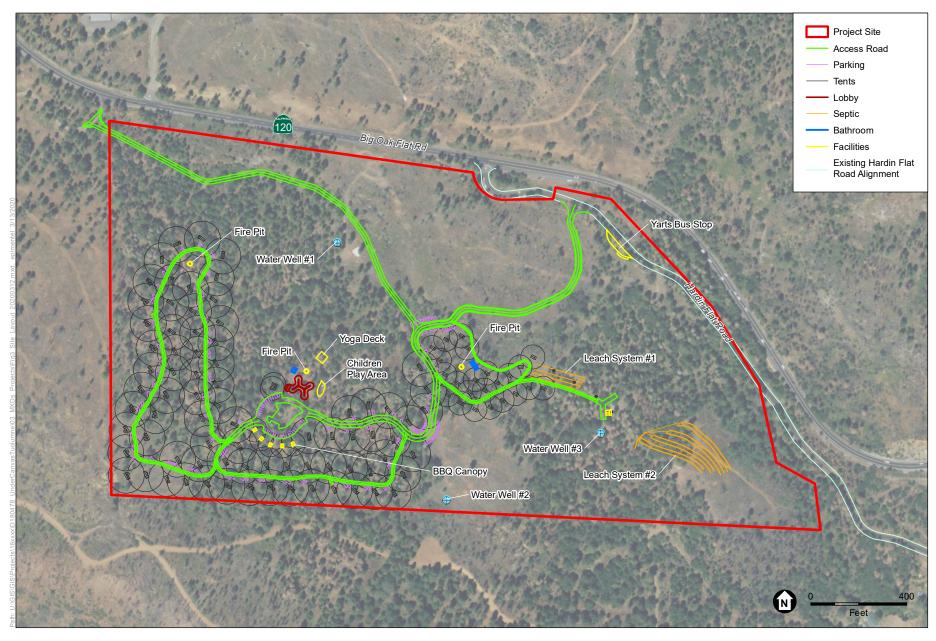




SOURCE: USDA, 2016; ESA, 2018

Yosemite Under Canvas Project
Figure 2-2
Project Site





SOURCE: USDA, 2016; ESA, 2020

Yosemite Under Canvas Project

Figure 3
Project Site Plan





Attachment B Yosemite Under Canvas VMT Data Summary

Initial Annual Average VMT Generated by County Land Uses (from Tuolumne County RTDM and post-processing)

Scenario	Daily VMT (County Land Uses)	Project Daily Trip Generation
2020 Without Project	3,374,984	
2020 With Project	3,376,424	128
2020 Delta	+1,440	
2040 Without Project	3,806,308	
2040 With Project	3,807,823	128
2040 Delta	+1,515	

Final Annual Average Project VMT with Transit Reduction	
Existing Average YARTS Riders per Stop:	13.3 riders
Average Distance between Project and Yosemite Valley Visitor Center:	30.5 miles
VMT Reduction per Day for a YARTS Bus Stop:	406 vehicle-miles
YARTS Day of Operation per Year:	136 days
Annual Average VMT Reduction for a YARTS Bus Stop:	151 vehicle-miles
Final Annual Average Year 2020 Net Change in Daily VMT Generated by the County:	1,289 vehicle-miles
Final Annual Average Year 2040 Net Change in Daily VMT Generated by the County:	1,364 vehilce-miles

Notes:

VMT = Vehicle Miles Traveled, RTDM = Tuolumne County Regional Travel Demand Model



