

Appendix B

**Vehicle Miles Traveled Analysis**  
**Chabad Jewish Center of Tustin**  
Sasaki Transportation Services, May 2021

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# SASAKI TRANSPORTATION SERVICES, INC.

May 15, 2021

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**SUBJECT: Chabad Jewish Center of Tustin, County of Orange  
Relocation and Expansion Project**

Dear Gentlemen:

Pursuant to the provisions of the California Environmental Quality Act (CEQA), this letter report provides transportation and vehicle miles traveled (“VMT”) evaluations for the proposed relocation and expansion of the Chabad Jewish Center of Tustin (“Chabad”) from its existing Packer Square location (13112 Newport Avenue, Suite H, Tustin, CA 92780) to 18802 E. 17<sup>th</sup> Street (Santa Ana 92705) in the unincorporated “North Tustin Specific Plan” area of the County of Orange (“County”). This study is intended to constitute a component of the project’s CEQA analysis.

## **CEQA REQUIREMENTS**

For California Environmental Quality Act (“CEQA”) compliance requirements related to potential traffic/transportation impacts, Senate Bill (“SB”) 743 substantially changed the transportation analysis methodologies to be used and included in CEQA documents. Vehicle miles traveled (“VMT”) is now the basis for evaluations of potential transportation impacts, replacing level of service (“LOS”) measures.

It should be noted, the CEQA requirement for VMT analyses does not preclude agencies from having projects also assesses LOS and/or other transportation impacts. The needs and procedures for these evaluations is addressed in the GM Element.

### **PROJECT DESCRIPTION**

Operating from leased office space, the existing Chabad (synagogue) currently provides worship service on Saturdays and a Hebrew Sunday school. Proposed is the vacation of the existing office space and the construction and operation of a new permanent facility, designed specifically to accommodate the worship services, Hebrew Sunday school, and new private preschool. The proposed building at the project site will be approximately 9,850 square feet (“SF”) and provide 50 fixed seats for the (continuing) worship service on Saturdays. The new building would also accommodate the Hebrew Sunday school, as well as accommodate the establishment of the private preschool, serving a maximum of 30 pre-kindergarten age students and operating only on weekdays.

Since the proposed project location is about one mile from the existing Chabad, it is anticipated that most, if not all, of the synagogue’s existing membership would remain a part of the congregation subsequent to its relocation. It should be noted, the proposed site was selected, in part, because of the relatively close proximity to the current Chabad location. Strict adherence to the religion’s principles does not allow the arrival/departure of worshipers by motorized vehicle during the Sabbath - some attendees would be expected to walk to attend the Sabbath services.

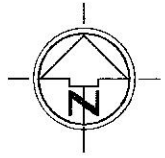
When considering the existing Chabad operations and the proposed project, the actual VMT and LOS impacts would involve the net changes associated with the proposed Chabad project. However, to provide “worst case” evaluations of the Chabad project, the analyses contained within this letter report assumes the Chabad would constitute a new facility (use) to the area. No deductions/credits were applied to account for the Chabad’s existing vehicle trips (and VMT) already using the area transportation system.

**Figure 1** shows the existing and proposed Chabad locations. **Figure 2** presents the conceptual site plan for the proposed Chabad project.

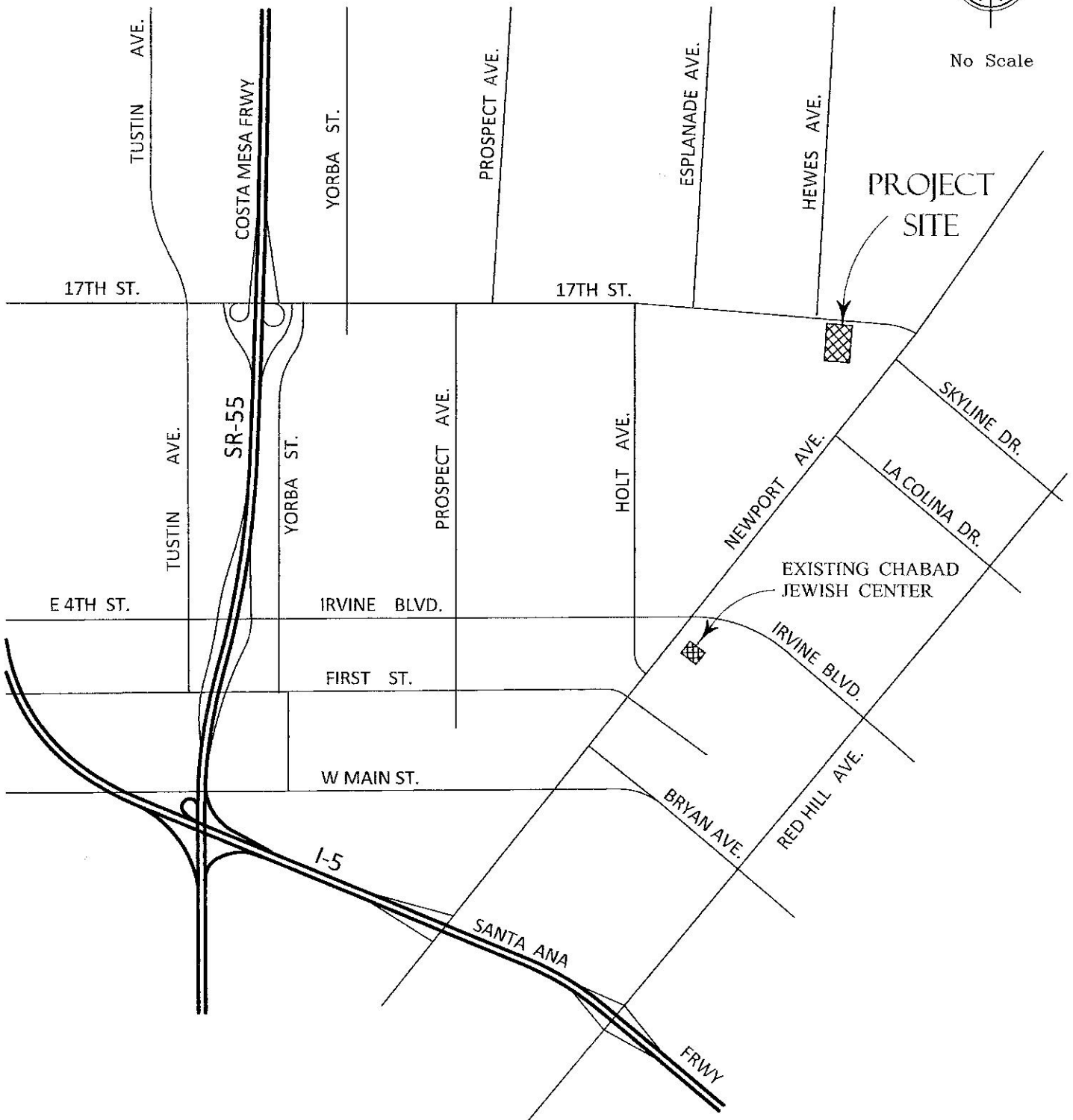
### **INITIAL PROJECT SCREENING (Transportation Related Requirements)**

#### **Thresholds**

In order to determine the County transportation-related thresholds/requirements applicable to the proposed project, several County documents were reviewed, including:

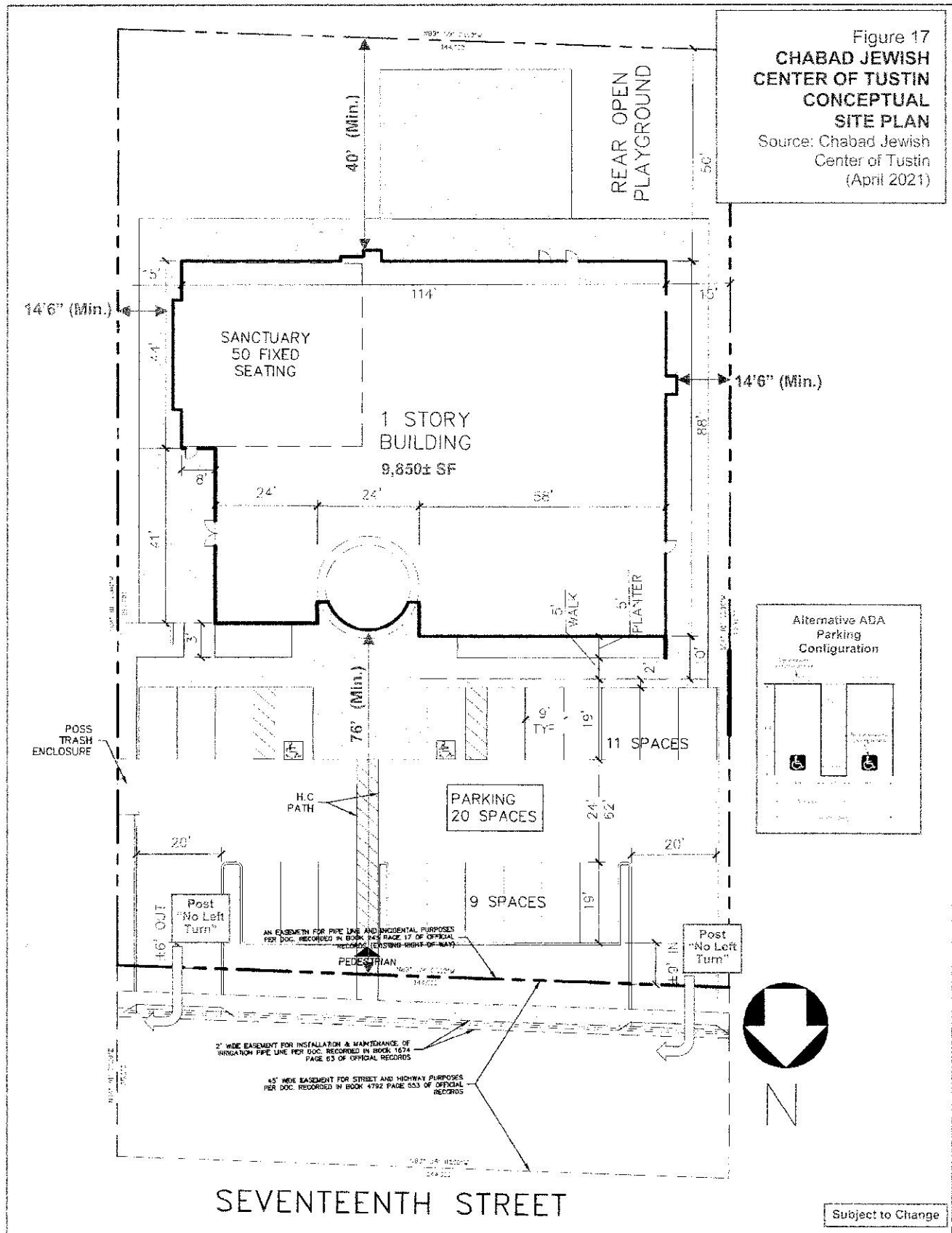


No Scale



# PROJECT LOCATION

FIGURE 1



# SITE PLAN

FIGURE 2

- “2020 Updated Transportation Implementation Manual” Final, Amended November 17, 2020 (“Transportation Manual”)
- “2020 Local CEQA Procedure Manual” Final, Adopted November 17, 2020 (“Local CEQA Manual”)
- “Guidelines for Evaluating Vehicle Miles Traveled Under CEQA,” September 17, 2020, (“VMT Guidelines”).

These publications provide thresholds and guidance for determining if a proposed development project: (1) may be exempt from any portions of, or all transportation-related analytical requirements; and (2) if not exempt, the manner which the requisite analysis should be performed.

The following are some of the objective measures adopted by the County to allow a determination if the Chabad would be exempt from some added studies/requirements.

Related to the Growth Management (“GM”) Element of the “County of Orange General Plan,” the Transportation Manual clarifies the intent of the “Traffic Level of Service Policies” and how these more traditional traffic evaluations are to be implemented on a site- or project-specific basis.

- Two GM Element thresholds applicable to the proposed Chabad were referenced in the Transportation Manual. As stated therein: “The following development projects have been deemed to have significant public benefit or little traffic impact and are exempt from the requirements of the GM Element:”
  - o “(A) Any development on an existing lot resulting in a total daily traffic generation of less than 200 trips” (Transportation Manual, p. 4).
  - o “(G) Places of worship, colleges, welfare, etc. to the extent such facilities are exempt from property tax levies” (Transportation Manual, p. 5).

The Local CEQA Manual provides the methodologies for “Vehicle Miles Traveled Analysis,” in Section 3.6, and includes the VMT Guidelines in Appendix C. The VMT Guidelines include additional details for the evaluation and documentation of the (underlying) analyses supporting the County methodologies. These finding and guidelines are also referenced in the Transportation Manual.

Section 3.6.2 (Project Screening) of the Local CEQA Manual and Sections 3.0 and 3.1 of the VMT Guidelines (as well as the Transportation Manual) provided guidance for the initial VMT evaluations of the proposed Chabad, which is considered a “Land Development Project.” These

references document factors that would result in a determination that a land development project would have less than significant VMT impacts on transportation and circulation.

It is stated that meeting one factor indicates the project would have less-than-significant VMT impacts, and no further analyses would be required. Three “less-than-significant” VMT impact factors pertinent to the proposed Chabad include:

- Projects in a High-Quality Transit Area (“HQTA”): “A HQTA or Corridor is a corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours” (Local CEQA Manual-VMT Guidelines, p. 9).
- Small Project: “A project that generates 500 or fewer average daily trips (ADT)” (Local CEQA Manual-VMT Guidelines, p. 13).
- Public Facilities: “The development of institutional/government and public service uses that support community health, safety or welfare...” (Local CEQA Manual-VMT Guidelines, p. 14).

The supporting documentation, information, and analyses comparing the proposed Chabad project to these County thresholds, are provided in the following sections.

### **Trip Generation**

As noted earlier, thresholds for GM Element and CEQA determinations both include a trip generation component. These evaluations focus on daily trip generation estimates for the proposed project, but some peak hour analyses were included for informational purposes.

The trip generation potential for the proposed project is based upon Institute of Transportation Engineers (“ITE”) trip rates contained in the Trip Generation Manual, 10<sup>th</sup> Edition<sup>1</sup>. As indicated in the Project Description, there are three primary uses/operations planned to occur on the project site consistently each week.

- Saturdays: Worship service with fellowship following the service.
- Sundays: Hebrew school for more intensive studies, generally between 10:00 am and 12:00 pm.
- Weekdays: Private preschool with an anticipated State-licensed maximum of 30 students.

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<sup>1</sup> **Trip Generation Manual, 10<sup>th</sup> Edition**; *Institute of Transportation Engineers (“ITE”)*; September 2017.



The Trip Generation Manual provides trip generation rates for various land uses. The land uses and associated rates, most applicable rates to the proposed Chabad included a “synagogue” (ITE 561), “church” (ITE 560), and “day care center” (ITE 565). Per accepted engineering practices, these rates are intended to reflect typical operations, not special events, unusual days, etc. The land uses and rates referenced are provided in **Table 1** and the reference sheets are provided in the **Appendix**.

Upon examination of the potentially applicable trip rates for the Chabad, traffic engineering evaluations were conducted, and determinations made. Although there is a land use category, “Synagogue” which might initially be viewed as the closest match for the proposed Chabad, some of the data indicated otherwise:

- The “synagogue” trip rates were based on a single study which indicates caution prior to applying within any analyses.
- No daily trip generation rates were provided, and the County thresholds require daily trip generation results.
- The “synagogue” trip rates were developed from studies of a synagogue that had substantially different operational characteristics than the proposed Chabad, as evidenced by the “synagogue” rates shown - specifically Sunday has higher rates than Saturday (for the ITE study facility), while the Chabad is known to have its peak on Saturdays and lesser activity on Sundays.

Alternatively, the “church” (per seat) trip rates were determined to be more representative of the proposed Chabad operations since a daily trip generation rate was provided for the more critical Sundays (which includes their religious services). These “church” (Sunday) rates were applied to the Chabad’s Saturday conditions (when their Sabbath services are held). Number of seats was determined to best reflect the proportional size differences between the study “churches” and the Chabad congregation, which relates directly to trip ends generated. It can be noted, the daily, “church” Sunday rate is anticipated to be conservative since churches often have multiple services on a Sunday, while the Chabad presently has only one service each Saturday.

For the weekend day with a lower trip generation (Saturday for a church and Sunday for the Chabad), the “church” daily rates were again applied to the proposed Chabad; however, it can be noted in **Table 1** that the daily rate was adjusted from 0.25 to 1.00, trip ends per seat, to provide consistency with the peak hour data and the Sunday rates. The 1.00 trip ends per seat is anticipated to be an overly conservative estimate of the current and future Chabad (Saturday operations) but was included to present a “worst-case” scenario.

**TABLE 1**  
**Trip Generation**  
Proposed Chabad Jewish Center of Tustin  
(County of Orange)

Land Use	Units	Daily	AM Peak Hour			PM Peak Hour			
			In	Out	Total	In	Out	Total	
<u>Trip Generation Rates:</u>									
-Synagogue, Saturday	per Family Member	(a)	(b)	0.05	0.06	0.11			
-Synagogue, Sunday	per Family Member	(a)	(b)	0.11	0.12	0.23			
-Church, Sunday	per Seat	1.21	(b)	0.27	0.26	0.53			
-Church, Saturday	per Seat	(c) 0.25 (1.00)	(b)	0.20	0.24	0.44			
-Day Care Center, Weekday	per Student	4.09		0.41	0.37	0.78	0.37	0.42	0.79

Source: Trip Generation Manual, 10th Edition; Institute of Transportation Engineers (ITE); Sept 2017

(a) Daily trip generation rates not provided (one study)

(b) The peak hour rates shown are for the highest (generator) peak hour throughout the day/evening

(c) Conservative Daily rate of 1.00 used to account for high peak hour rates, which is proportional to the Church, Sunday  
Daily vs. Peak Hour rates:  $0.44 \times (1.21 / 0.53) = 1.00$

It can be noted, the ITE land uses/trip rates are per Manual Codes: Synagogue (561), Church (560), and Day Care (565)  
and for the Synagogue, "Family Member" = numbers of individuals

**TABLE 1**  
**Trip Generation**  
**Proposed Chabad Jewish Center of Tustin**  
**(County of Orange)**

Trip Ends Generated:

Proposed Project:

-Chabad JCT, Saturday	50 Seats	61	(d)	14	13	27			
-Hebrew School, Sunday	50 Seats	50	(d)	10	12	22			
-Private Preschool, Weekday	30 Students	123		12	11	23	11	13	24

<b>VMT Trip End, Subtotals:</b>	(e)	
(no existing credits applied)		
- Saturday		61
- Sunday		50
- Weekday		123
<b>VMT Trip End Totals</b>	(e)	<b>123</b>
(worst case)		

(d) Used "Church, Sunday" (and Saturday) rates which are based on more studies, provides Daily trip rates, and appears more representative of the Chabad trip generations. Church Sunday rates were applied to Saturday for the Chabad, and Saturday Church rates were applied to the Chabad Sunday activities (since the service for the Chabad occurs on Sat.)

(e) These VMT estimates are considered "worst case," since no subtractions/credits were applied for the existing, operating Chabad JCT which is currently located about 1 mile from the proposed location. In addition, strict observance of Orthodox practices results in some member families walking to services on Saturdays.

Note: Daily & Peak Trip Ends generated are rounded to the nearest 1

One part of the religious practices for the Chabad would be to avoid motorized travel during the Sabbath (from just before sundown Friday to nightfall on Saturday); therefore, a higher percentage of the Chabad's congregation is anticipated to walk to/from the Saturday service, when compared to a typical church.

**Table 1** presents the trip ends estimated to be generated by the three uses (which all occur on different days). As shown in **Table 1**, totals of 61, 50, and 123 daily trip ends are assumed to be generated by the Chabad service/fellowship, Hebrew Sunday school, and private preschool, respectively. As noted, these analyses were completed assuming the Chabad is a new use to the area, and no subtractions/credits were applied to account for the existing Chabad, which results in "worst-case" evaluations.

### **High-Quality Transit Area**

Projects within 0.5 miles of a HQTA or Corridor with fixed route bus service, with service intervals no longer than 15 minutes during peak commute hours are deemed to have less-than-significant VMT impacts and would be exempt from further VMT analyses.

The proposed Chabad is adjacent to Orange County Transportation Authority ("OCTA") Route 60 which serves E. 17<sup>th</sup> Street (along the project frontage) and has service intervals of 15 minutes or less, during peak commute hours. In addition, OCTA Route 167 serves Newport Avenue as it passes through the 17<sup>th</sup> E. Street intersection, which is less than 0.5 miles from the project site. This line has headways greater than 15 minutes during peak commuter periods but is still an added service within 0.5 miles. The bus schedules for Routes 60 and 167 are provided in the **Appendix**.

### **Analyses**

GM Element: The proposed Chabad satisfies two criteria (only one is required) resulting in a determination that the proposed project has less-than-significant traffic/transportation impacts and is "exempt from the requirements of the GM Element" (per the Transportation Manual). Since traffic LOS requirements are included in the GM Element, the proposed Chabad project is exempt from LOS studies due to the finding of less-than-significant traffic/transportation impacts (per the Transportation Manual).

- The (maximum) 123 daily trip ends generated by the Chabad is less than the threshold of 200 daily trip ends.
- The proposed Chabad will be a "place of worship," also making it exempt from the GM Element.

VMT Study: The proposed Chabad satisfies three criteria (satisfying only one dictates exemption), indicating the project has less-than-significant VMT impacts, and no further evaluations are required (per the Local CEQA Manual).

- The Chabad is within a “HQTA or Corridor... with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.” Per the VMT Guidelines (p. 9) the proposed Chabad would have less-than-significant VMT impacts, and no further evaluations are needed.
- The Chabad also meets the definition of a “Small Project” which “generates 500 or fewer average daily trips (ADT).” The proposed Chabad is anticipated to generate a maximum of 123 daily trip ends which is well below the 500, trip end threshold, allowing conclusion of less-than-significant VMT impacts and no further evaluations are required (per the Local CEQA Manual and VMT Guidelines, p. 13).
- The Chabad would also be considered a public facility (“The development of institutional/government and public service uses that support community health, safety or welfare...”) which (per the Local CEQA Manual - VMT Guidelines, p. 14) indicates less-than-significant VMT impacts, and no further evaluations are needed.

### **Findings**

The proposed Chabad was evaluated for GM Element and CEQA-VMT compliance by referencing applicable County documents (the references cited in this report) and completing all necessary supporting analyses. The traffic analysis findings include:

- 1) As shown in **Table 1**, totals of 61, 50, and 123 daily trip ends are assumed to be generated by the Chabad service/fellowship, Hebrew Sunday school, and private preschool, respectively.
- 2) The proposed Chabad is exempt from GM Element requirements based on published County documents. Since traffic LOS requirements are included in the GM Element, the proposed Chabad is exempt from LOS studies due to the finding of less-than-significant traffic/transportation impacts (per the Transportation Manual).
- 3) Based on the County’s VMT evaluation procedures, the proposed Chabad is found to have less-than-significant VMT impacts and no further VMT analyses are required.

Relative to both VMT and LOS, in the absence of a significant project-related impact, no mitigation measures are required or recommended.

If you have any questions or comments, please do not hesitate to contact us.

Respectfully submitted,

**SASAKI TRANSPORTATION SERVICES, INC.**



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Attachments:

- Tables/Figures
- Appendix



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