

## Appendix G.2 Supplemental Traffic Analysis

# MEMORANDUM

---

To: Sergio Valdez  
Los Angeles Department of Transportation

Date: October 6, 2015

---

From: David S. Shender, P.E.  
Corinna M. Gutierrez, P.E.  
Linscott, Law & Greenspan, Engineers

LLG Ref: 5-08-3744-2

---

Subject: **Harvard-Westlake School Parking, Safety and Athletics Improvement Plan – Supplemental Traffic Analysis**

---

This memorandum (the “Supplemental Traffic Analysis”) has been prepared by Linscott, Law & Greenspan, Engineers (“LLG”) to summarize the supplemental traffic analysis prepared for the proposed Harvard-Westlake School Parking, Safety and Athletics Improvement Plan (the “Project”) located at 3701 Coldwater Canyon Avenue (the “Project Site”) in the Sherman Oaks-Studio City-Toluca Lake-Cahuenga Pass Plan area of the City of Los Angeles, California. LLG previously prepared the traffic impact study<sup>1</sup> dated October 30, 2012 for the Project (the “2012 Traffic Study”). The findings of the 2012 Traffic Study were confirmed based on the Los Angeles Department of Transportation (“LADOT”) assessment letter<sup>2</sup> dated March 26, 2013, which is attached in *Appendix A*.

This Supplemental Traffic Analysis evaluates the potential traffic impacts of the Project based on the following updated information:

- Revised Build-out Year: The 2012 Traffic Study assumed build-out of the Project by 2016. Due to the passage of time since the preparation of the 2012 Traffic Study and in order to be conservative, this Supplemental Traffic Analysis assumes a build-out year of 2019.
- New Manual Traffic Counts: The 2012 Traffic Study was based on traffic counts conducted at the study intersections in 2011. For this Supplemental Traffic Analysis, updated traffic counts were conducted at the same study intersections to determine if there have been changes in local traffic volumes.
- Confirmation of Related Projects: A review was conducted of related development projects information to confirm, and update if necessary, the list of related projects provided in the 2012 Traffic Study.
- Updated Grading Information. The 2012 Traffic Study assumed removal of 135,000 cubic yards of material from the Project Site to construct the Project.

---

<sup>1</sup> *Traffic & Parking Impact Study – Harvard-Westlake School Parking Improvement Plan*, LLG, October 30, 2012.

<sup>2</sup> *Traffic Assessment for the Proposed Harvard-Westlake School Parking Improvement Plan at 3701 Coldwater Canyon Avenue*, Sergio D. Valdez, March 26, 2013.

Based on updated information, the amount of material to be removed is approximately 140,000 cubic yards of material<sup>3</sup>.

- Limited Hauling: Harvard-Westlake has volunteered to limit hauling activities to occur between 9:00 AM to 4:00 PM Monday through Friday, and 10:00 AM to 4:00 PM on Saturday to reduce vehicular trips during the weekday commuter peak hours. No hauling will occur on Sundays or holidays. Therefore, instead of the typical weekday commuter AM and PM peak hours, weekday and Saturday peak hours have been analyzed based on the peak hours of traffic coinciding with highest number of truck trips.

This Supplemental Traffic Analysis evaluates the potential traffic impacts related to the *construction* of the Project, as well as a traffic analysis for the intersection of Coldwater Canyon Avenue and the Harvard-Westlake driveway following completion and occupancy of the Project. It is noted that no changes to student enrollment and school-related traffic have occurred since the preparation of the 2012 Traffic Study. Further, no increases in student enrollment at Harvard-Westlake are proposed as part of the Project.

The 2012 Traffic Study also included the proposed implementation of voluntary roadway improvements in the Project vicinity to further enhance traffic circulation along Coldwater Canyon Avenue. These voluntary improvements consisted of the removal of on-street parking along the west side of Coldwater Canyon Avenue between Ventura Boulevard and Van Noord Avenue during the morning peak period to accommodate the installation of a second southbound through lane. However, as summarized in LADOT's March 26, 2013 assessment letter, these voluntary roadway improvements were rejected by LADOT for potential implementation. Accordingly, the voluntary roadway improvements are no longer proposed as part of the Project and therefore are not considered in this Supplemental Traffic Analysis.

Based on the updated traffic analysis contained herein – including the updated traffic data and in consideration of the revised Project construction information – it is concluded that construction of the Project will not create significant traffic impacts at any of the five study intersections during the weekday and Saturday analyzed peak hours. These findings are consistent with the 2012 Traffic Study which also concluded that construction of the Project would not significantly impact any of the five study intersections. Further, this Supplemental Traffic Analysis concludes that no significant traffic impacts are expected at the Coldwater Canyon Avenue/Harvard-Westlake driveway following completion and occupancy of the Project, which is also consistent with the findings in the 2012 Traffic Study.

---

<sup>3</sup> The Project will result in the removal of 137,000 cubic yards of material; however, in order to be conservative, this Supplemental Traffic Analysis assumed the removal of 140,000 cubic yards of material.

## **Project Description**

The Harvard-Westlake property is located on the east and west sides of Coldwater Canyon Avenue, approximately 1/3 of a mile south of Ventura Boulevard and 1.3 miles north of Mulholland Drive. The segment of Coldwater Canyon Avenue between the Project Site and Ventura Boulevard is a relatively straight and gently sloping roadway. The Harvard-Westlake Campus is located at 3700 Coldwater Canyon Avenue on the east side of Coldwater Canyon Avenue and is generally bounded by Halkirk Street to the north, Coldwater Canyon to the west, and Hacienda Drive to the south. The site of the proposed Harvard-Westlake parking structure with athletic field is located at 3701 Coldwater Canyon Avenue, on the west side of Coldwater Canyon Avenue, directly across from the Harvard-Westlake campus.

Harvard-Westlake seeks to obtain approvals to develop a three-story parking structure consisting of 750 parking spaces and an athletic practice field. The proposed structure will be utilized by faculty/staff, students, and visitors to the school. The Project also consists of the construction of a pedestrian bridge crossing Coldwater Canyon Avenue that will connect the proposed structure to the existing campus. No increase in student enrollment or faculty is proposed as part of the Project.

Additionally, in compliance with the City of Los Angeles Municipal Code, the Project includes street dedication and widening on the west side of Coldwater Canyon Avenue along the school's property frontage in order to provide: (i) separate right-turn lanes and (ii) extended left-turn lanes in the northbound and southbound directions at the intersection of Coldwater Canyon Avenue and the Harvard-Westlake Driveway. A second southbound through lane on Coldwater Canyon Avenue will also be installed along the Project frontage to provide additional capacity for southbound traffic and minimize potential delay and loss of green traffic signal time to non-School related vehicles. Harvard-Westlake has also requested that the City approve an airspace vacation over Coldwater Canyon Avenue for the pedestrian bridge.

Lastly, the Project proposes the vacation of Hacienda Drive west of Coldwater Canyon Avenue. Hacienda Drive is currently a dedicated 30-foot wide roadway, but it not an improved street. Further, Hacienda Drive extends westerly and terminates approximately 200 feet west of Coldwater Canyon Road (i.e., it does not connect to any other public streets). As such, it is not anticipated that vacation of Hacienda Drive will have any adverse effects on traffic operations, vehicular access and public safety.

## Revised Construction Information

The 2012 Traffic Study evaluated the potential traffic impacts associated with construction-related activities, both overall as well as during each phase of construction of the Project. Based on information reviewed by LLG, it was determined that the grading and material export phase of construction would generate the highest number of vehicle trips, and therefore the greatest potential for traffic impacts, as compared to final grading and finishing. Therefore, the grading and material export phase was determined to be the Peak Construction Phase. The 2012 Traffic Study included information regarding construction worker trips, on-site equipment operation, as well as off-site truck traffic generation.

The 2012 Traffic Study assumed that excavation would occur on the Project Site during the first year of construction. Based on information reviewed by LLG, it was estimated that construction of the Project would result in the need to remove approximately 135,000 cubic yards of material from the site. The potential traffic impacts related to the removal of this material were evaluated at intersections between the Project Site and the U.S. 101 freeway. Consistent with standard LADOT policies, these impacts were evaluated at the study intersections during the weekday and Saturday commuter peak hours.

The intersections evaluated in the 2012 Traffic Study, and again herein in conjunction with this Supplemental Traffic Analysis are as follows:

1. Coldwater Canyon Avenue / U.S. 101 Northbound Ramps
2. Coldwater Canyon Avenue / U.S. 101 Southbound Ramps
3. Coldwater Canyon Avenue / Moorpark Street
4. Coldwater Canyon Avenue / Ventura Boulevard
5. Coldwater Canyon Avenue / Harvard-Westlake Driveway

As stated in the 2012 Traffic Study, construction grading and material export was expected to result in 30-50 truck trips per day, as well as 16-20 workers on-site. However, based on Harvard-Westlake's voluntary proposal to limit hauling hours to avoid peak commuter times, it is expected that there will be up to 160 truck trips per day (80 inbound trips and 80 outbound trips) supported by approximately 33 workers on-site. Of the 160 total truck trips, 144 truck trips will be related to haul trucks while the remaining 16 truck trips will be by cement trucks used for initial grading activities. As previously stated, the export associated with the excavation phase was estimated in the 2012 Traffic Study at 135,000 cubic yards of material. Harvard-Westlake anticipates that trucks carrying 14 cubic yards of material would be used during the export period. Thus, on a daily basis, approximately 1,008 cubic yards of material would be removed from the Project Site.

The 2012 Traffic Study assumed an equal number of truck trips would occur each hour over a 10-hour work day (e.g., 7:00 AM to 5:00 PM) Monday through Friday. As part of this revised Supplemental Traffic Analysis, hauling/construction hours have been limited to 7-hours per day Monday through Friday (e.g., 9:00 AM to 4:00 PM), outside of the typical weekday commuter AM and PM peak hours, and 6-hours on Saturday (e.g., 10:00 AM to 4:00 PM). Of the 160 daily truck trips hauling material or delivering cement and/or supplies Monday through Friday, Harvard-Westlake would limit hauling and deliveries to 12 truck trips (6 inbound trips and 6 outbound trips) during the 9:00 - 10:00 AM hour and the 3:00 - 4:00 PM hour and 24 truck trips (12 inbound trips and 12 outbound trips) during the 2:00 PM – 3:00 PM hour. During the remaining four hours between 10:00 AM and 2:00 PM, it is estimated that approximately 28 truck trips per hour (14 inbound trips and 14 outbound trips) would occur. On Saturdays, 160 daily truck trips are also anticipated (6-hour workday with approximately 28 truck trips per hour).

To conservatively estimate the equivalent number of passenger vehicles associated with trucks traveling to and from the project site, a passenger car equivalency factor of 2.0 truck trips was utilized based on standard traffic engineering practice. The use of the 2.0 passenger car equivalent (PCE) in the forecast of construction-related traffic is very conservative (“worst case”) as the *Highway Capacity Manual 2010* (HCM) published by the Transportation Research Board recommends a lower PCE factor of 1.5 for heavy vehicles, including trucks. Therefore, assuming 160 daily truck trips, it is estimated that trucks would generate approximately 320 passenger car equivalent trips (i.e., 160 PCE inbound trips and 160 PCE outbound trips) on a daily basis.

It is noted that significant traffic impacts based on this relatively limited hourly volume of truck trips on a Saturday would normally not be expected because of the typically lower levels of ambient traffic volumes on the local street system on weekends as compared to the weekday commuter peak hours usually analyzed in traffic impact studies. However, as detailed in a following section, an analysis of potential traffic impacts due to construction of the Project on a Saturday has been provided as part of this revised Supplemental Traffic Analysis.

In addition, if the length of the hauling/grading period is extended for any reason (e.g., the City conditions the approval of the Project to prohibit hauling/grading on Saturdays), the conclusions contained in this Supplemental Traffic Analysis will not change. For instance, if hauling/grading is prohibited on Saturdays, the total length of the hauling/grading phase will extend from approximately 161 days to 193 days, a 32-day increase. In such circumstances, the number of trucks per hour during permitted days of hauling would not change beyond the assumptions analyzed herein. Since traffic impacts are evaluated based on the number of peak hour trips at the study intersections, the potential lengthening of the hauling/grading period would not alter any of the conclusions.

Finally, Harvard-Westlake has conducted a further detailed review of the number of construction workers expected on-site during the hauling/grading period. It is estimated that 33 workers would be on-site during the hauling/grading phase of construction. These construction workers are expected to typically arrive at the Project Site before 7:00 AM. Departure from the site by construction workers is expected to be dispersed for several hours following the end of hauling at 4:00 PM. For this analysis, it is conservatively estimated that approximately 60% of the workers would depart the site during the 4:00 PM hour.

The revised construction trip generation forecast for the construction grading and material export phase of the Project is summarized in *Table 1*. Comparing this revised trip generation forecast to that of the final grading and structure construction phase provided in Table 8-1 of the 2012 Traffic Study, activities related to the construction grading and materials export phase would generate a higher number of passenger car equivalent (PCE) vehicle trips. Thus, the greatest potential for impact on the nearby street system would occur during the construction grading and material export phase.

The potential traffic impacts due to construction of the Project were evaluated in the 2012 Traffic Study. See, for example, Table 10-1 in the 2012 Traffic Study for a summary of the traffic impact analysis at local study intersections selected for analysis by LADOT. As shown in Table 10-1, the potential traffic impacts due to construction of the Project were determined to be less than significant.

As previously noted, the traffic analysis assumed the removal of 135,000 cubic yards of material related to construction of the Project. It is understood that the revised estimate for material removal is 140,000 cubic yards, or 5,000 cubic yards of additional material.

As a worst case, the analysis of construction impacts as provided in the 2012 Traffic Study assumes construction activity (including the hauling of material) occurring during the commuter peak hours. Since the hours of construction have been modified to limit construction-related trucks from entering and exiting the Project Site during the commuter peak hours, no traffic volumes will be added to the weekday commuter AM and PM peak hours. Instead, to sufficiently and conservatively analyze the impact of the Project on the adjacent local street system, this Supplemental Traffic Analysis assesses the impact of the added traffic volumes on the following periods:

- Weekday 9:00 to 10:00 AM hour;
- Weekday 2:00 to 3:00 PM hour;
- Weekday 3:00 to 4:00 PM hour;
- Weekday 4:00 to 5:00 PM hour; and
- Saturday Mid-day peak hour.

In a following section, the traffic impact analysis related to construction of the Project using the modified trip generation methodology described above is updated based on the revised build-out year of 2019.

### Updated Manual Traffic Counts

Manual traffic counts of vehicular turning movements were conducted at the five study intersections during the weekday AM and PM commuter periods to determine the peak hour traffic volumes. In addition, traffic counts were conducted on a Saturday for use in the Saturday midday peak hour traffic analysis, which was not evaluated in the 2012 Traffic Study.

The weekday traffic counts were conducted on Tuesday, February 10, 2015. The Saturday traffic counts were conducted on Saturday, July 11, 2015. It is noted that during the time of the 2015 traffic counts, there was continuing construction of the City Trunk Line project on Coldwater Canyon Avenue and Moorpark Street by the Department of Water and Power. The City Trunk Line project has been on-going in the project vicinity since 2012 and will not be completed until late 2015/early 2016<sup>5</sup>.

The updated weekday commuter AM and PM peak period manual counts of vehicle movements at the study intersections are summarized in **Table 2**. As shown in **Table 2**, from the morning counts, the peak hour of traffic was determined to vary by intersection, ranging from 7:30 – 8:30 AM at the Coldwater Canyon Avenue/Harvard-Westlake Drive intersection, to 8:15 – 9:15 AM at the Coldwater Canyon Avenue/U.S. 101 Northbound Ramps intersection. Similarly, based on the afternoon traffic count data, the peak hour of traffic generally occurred during the 4:45 – 5:45 PM period, except at the Coldwater Canyon Avenue/U.S. 101 Southbound Ramps intersection, where the peak hour was determined to occur from 5:00 to 6:00 PM.

The 2015 existing traffic volumes at the five study intersections during the weekday commuter AM and PM peak hours are shown in **Figures 1** and **2**, respectively. Summary data worksheets of the manual traffic counts at the study intersections are contained in **Appendix B**.

---

<sup>5</sup> The traffic counts utilized for the 2012 Traffic Study were conducted in 2011, prior to the start of construction of the City Trunk Line project.

The 2011 traffic counts conducted for the 2012 Traffic Study were compared to the 2015 peak hour traffic counts at the Coldwater Canyon Avenue/Ventura Boulevard intersection as shown in **Table 3** below. *Table 3* provides the full intersection (i.e., Coldwater Canyon Avenue and Ventura Boulevard) peak hour traffic volumes counted in both years. Also, in recognition that traffic volumes on Coldwater Canyon Avenue in 2015 may have been affected by the City Trunk Line construction project, *Table 3* also provides a comparison for traffic flow on Ventura Boulevard only (as measured at Coldwater Canyon) which would have been less affected by the City Trunk Line construction project.

**Table 3**  
**Traffic Count Comparison**  
**Coldwater Canyon Avenue/Ventura Boulevard**

Peak Hour	2011 counts		2015 counts		% Difference	
	Full Intersection	Ventura Blvd Only	Full Intersection	Ventura Blvd Only	Full Intersection	Ventura Blvd Only
AM	3,946	2,425	3,356	2,288	(15%)	(6%)
PM	5,314	3,043	4,529	2,577	(15%)	(15%)

As noted above in *Table 3*, existing peak hour traffic counts have *declined* at the Coldwater Canyon Avenue/Ventura Boulevard intersection in comparing the 2011 to 2015 traffic count data. As shown in *Table 3*, in both comparisons (i.e., full intersection and Ventura Boulevard volumes only), the peak hour traffic counts in 2015 are less than the 2011 corresponding traffic counts.

It is noted that the 2012 Traffic Study – as required by LADOT – utilized a 2% annual ambient traffic growth factor (compounded) to estimate future traffic growth not associated with the Project or the known related projects (to be described in a following section). Therefore, the 2012 Traffic Study was highly conservative in anticipating traffic volume growth (e.g., approximately 8% for the four-year period between 2011 and 2015) when in fact traffic volumes have decreased (e.g. a 15% reduction at the Coldwater Canyon Avenue/Ventura Boulevard intersection).

In order to provide a conservative analysis, this Supplemental Traffic Analysis, in lieu of using the more recent 2015 intersection traffic count data, used the 2011 traffic counts for purposes of preparing the updated traffic impact assessment. In addition, the 2011 peak hour traffic volumes have been increased using the LADOT-required 2% annual ambient traffic growth factor (compounded), with a build-out date of 2019

(or three additional years of annual traffic growth beyond the assumed 2016 build-out year utilized in the 2012 Traffic Study). The 2011 manual traffic counts can be found in the 2012 Traffic Study.

For example, the total intersection traffic volumes at the Coldwater Canyon Avenue/Ventura Boulevard intersection have been increased in this Supplemental Traffic Analysis from the trips counted in 2011 to projected 2019 trips (build-out year) due to growth from ambient traffic, and prior to consideration of traffic from the Project or the known related projects. **Table 4**, below, identifies this analysis at the Coldwater Canyon Avenue/Ventura Boulevard intersection. As shown in **Table 4**, it is highly more conservative to utilize the 2011 traffic counts (increased by the 2% annual growth rate over eight years to 2019) in the traffic analysis as compared to the 2015 traffic counts (increased by the 2% annual growth rate over four years to 2019).

**Table 4**  
**Traffic Count Comparison Including Build-Out Year**  
**Coldwater Canyon Avenue/Ventura Boulevard**

Peak Hour	Actual Traffic Volume		Projected 2019 Traffic Volume <sup>4</sup>		Extra Volume (Conservative) Using 2011 Counts
	2011 Counts	2015 Counts	2011 Base Counts	2015 Base Counts	
AM	3,946	3,356	4,623	3,633	990
PM	5,314	4,529	6,226	4,902	1,324

<sup>4</sup> Year 2019 traffic volume projections in this example based on increasing 2011 and 2015 counted AM and PM peak hour traffic volumes by a 2% annual ambient traffic growth rate (compounded).

## Related Projects Update

The 2012 Traffic Study included a forecast of on-street traffic conditions prior to occupancy of the Project through incorporation of the potential trips associated with other known development projects (related projects) in the area. With this information, the potential impact of the Project was evaluated within the context of the cumulative impact of all ongoing development. The list of related projects (including the forecast trip generation associated with the related projects) is provided on Table 7-1 of the 2012 Traffic Study. The location of the analyzed related projects is shown on Figure 7-1 therein.

In conjunction with this Supplemental Traffic Analysis, LADOT was contacted in February 2015 to obtain an updated list of related projects. The updated information provided by LADOT did not include any new development projects as compared to the related projects list prepared for the 2012 traffic study. Furthermore, two of the related projects have since been removed from the related projects list on file at LADOT.

It is noted that in addition to the list of development projects provided by LADOT, the proposed redevelopment of the Sportsmen's Lodge was included in the cumulative traffic analysis prepared in this Supplemental Traffic Analysis. The LADOT traffic assessment letter<sup>5</sup> for the Sportsmen's Lodge project was obtained for purposes of estimating the number of vehicle trips that may be added through the study intersections evaluated in this Supplemental Traffic Analysis. In summary, to provide a conservative assessment of traffic impacts, this Supplemental Traffic Analysis: 1) utilizes the same list of related projects as that of the 2012 Traffic Study (even though two related projects have been removed); and 2) includes the traffic estimated for the proposed Sportsmen's Lodge Project.

The revised list of related projects and forecast trip generation associated with these projects is provided in **Table 5**. The related projects data obtained from LADOT in February 2015, as well as LADOT's traffic assessment letter for the Sportsmen's Lodge are provided in **Appendix C**.

---

<sup>5</sup> *Revised Traffic Assessment for the Proposed New Commercial Development Located at the Sportsmen's Lodge Event Center at 12833 Ventura Boulevard, Sergio D. Valdez, March 18, 2014.*

## Updated Level of Service Analysis

The five study intersections evaluated in the 2012 Traffic Study were re-evaluated as part of the supplemental analysis for the Project. Consistent with the 2012 Traffic Study, the five study intersections were prepared for the following analysis scenarios in accordance with the LADOT's traffic study guidelines:

- (a) Existing (2012) conditions.<sup>6</sup>
- (b) Condition (a) with completion and occupancy of the Project.
- (c) Condition (b) with implementation of Project mitigation measures where necessary.
- (d) Condition (a) with two percent (2.0%) annual ambient traffic growth compounded through year 2019 and with completion and occupancy of the related projects, including the Sportsmen's Lodge project (i.e., future cumulative baseline).
- (e) Condition (d) with completion and occupancy of the Project.
- (f) Condition (e) with implementation of Project mitigation measures where necessary.

## City of Los Angeles Impact Criteria and Thresholds

The study intersections were evaluated using the Critical Movement Analysis (CMA) method of analysis that determines Volume-to-Capacity ( $v/c$ ) ratios on a critical lane basis. The overall intersection  $v/c$  ratio is subsequently assigned a Level of Service (LOS) value to describe intersection operations. Level of Service varies from LOS A (free flow) to LOS F (jammed condition). A description of the CMA method and corresponding Level of Service is provided in *Appendix D*.

The relative impact of the added traffic volumes to be generated by construction of the Project during the weekday and Saturday analyzed peak hours was evaluated based on analysis of existing and future operating conditions at the five study intersections. The significance of the potential impacts of Project-generated traffic was identified using the traffic impact criteria set forth in the LADOT's *Traffic Study Policies and Procedures* manual, which is provided for reference on Table 9-1 within the 2012 Traffic Study.

---

<sup>6</sup> In the 2012 Traffic Study, the 2011 traffic counts were increased by the 2% annual ambient growth rate to represent year 2012 conditions, which was considered "existing" at the time the traffic study was submitted to LADOT for review and approval

## Traffic Impact Analysis

The traffic impact analysis prepared for the five study intersections using the Critical Movement Analysis (CMA) methodology and application of the City of Los Angeles significant traffic impact criteria is summarized in **Table 6**. The CMA data worksheets for the analyzed intersections during the weekday and Saturday analyzed peak hours are contained in **Appendix D-1**.

### *Existing + Project Conditions*

Column [1] of **Table 6** presents the existing v/c ratios and LOS at the five study intersections during the weekday and Saturday analyzed peak hours based on the 2011 traffic counts.

As presented in column [2] of **Table 6**, application of the City's threshold criteria to the "Existing With Construction" scenario indicates that the construction phase of the Project is not anticipated to create a significant impact at any of the study intersections under existing conditions. Thus, no direct project mitigation measures are necessary.

### *Future + Project Conditions*

Column [3] of **Table 6** provides the forecast future without Project traffic conditions at the five intersections based on application of the City's highly conservative 2% annual ambient growth traffic factor to year 2019, plus the forecast traffic associated with the related projects.

As presented in column [4] of **Table 6**, application of the City's threshold criteria to the "Future With Construction" scenario indicates that construction of the Project is not anticipated to create a significant impact at any of the study intersections under future conditions. Thus, no direct Project mitigation measures are necessary.

### *Project Occupancy Traffic Analysis*

**Table 7** provides the analysis of operations at the future intersection of Coldwater Canyon Avenue and the Harvard-Westlake Main Driveway following completion of the Project. The analysis updates the prior evaluation provided in 2012 Traffic Study to: 1) extend the build-out year from 2016 to 2019 (i.e., three additional years of ambient traffic growth); and 2) add the forecast traffic from the Sportsmen's Lodge related project. As shown on **Table 7**, the impact of the Project following completion of construction is determined to be less than significant, which is consistent with the findings of the 2012 Traffic Study. The CMA data worksheets for the Harvard-Westlake Main Driveway intersection during the weekday commuter AM and PM peak hours are contained in **Appendix D-2**.

### *Adequacy of Proposed Turn Lanes*

As noted in the 2012 Traffic Study, the Project-related improvements on Coldwater Canyon Avenue at the Harvard-Westlake Main Driveway to serve the proposed parking structure include a new northbound left-turn and a new southbound right-turn lane. As conceptually designed, the northbound left-turn lane on Coldwater Canyon Avenue is proposed to be approximately 300 feet in length, while the southbound right-turn lane is proposed to be 200 feet in length. The final design of the improvements would be determined by City of Los Angeles (e.g., the Bureau of Engineering and Department of Transportation).

Typically, the length of vehicle turn lanes is based on the forecast 95<sup>th</sup> percentile vehicle queue. That is, during the peak hours, the turn lane would accommodate vehicles queued in the lane 95% of the hour. The *Highway Capacity Software* (HCS) was used to calculate the forecast 95<sup>th</sup> percentile vehicle queue for the proposed northbound left-turn lane and southbound right-turn lane on Coldwater Canyon Avenue at the Main Driveway intersection during the AM and PM peak hours at Project build-out. The HCS calculations are contained in **Appendix D-3**.

As shown in *Appendix D-3*, the HCS estimates the 95<sup>th</sup> vehicle queues for the respective turn lanes. Conservatively assuming that queued cars occupy 25 feet of roadway per vehicle, the following 95<sup>th</sup> percentile queue lengths are estimated:

- AM Peak Hour:
  - Northbound Left-Turn: 220 feet
  - Southbound Right-Turn: 57.5 feet
  
- PM Peak Hour:
  - Northbound Left-Turn: 0 feet
  - Southbound Right-Turn: 0 feet

In summary, the northbound left-turn and southbound right-turn vehicle turn lanes proposed for Coldwater Canyon Avenue at the Main Driveway intersection are calculated to be adequate in length to accommodate the peak Project turn volumes.

## **Conclusion**

The conclusions of this Supplement Traffic Analysis do not alter the findings of the 2012 Traffic Study which concluded that the forecast construction traffic associated with the Project would not result in any significant traffic impacts at the five study intersections. Incremental but not significant impacts are noted at the study intersections evaluated in this analysis. As no significant traffic impacts are expected due to the construction of the Project, no traffic mitigation measures are required or recommended for the study locations.

Please feel free to contact us should you have any questions or comments regarding this Supplemental Traffic Analysis.

## **Attachments**

cc: [File](#)

Table 1  
CONSTRUCTION TRIP GENERATION [1]

29-Sep-15

PHASE	DAILY TRIP ENDS VOLUMES	AM PEAK HOUR VOLUMES [2]			2PM PEAK HOUR VOLUMES [3]			3PM PEAK HOUR VOLUMES [2]			4PM PEAK HOUR VOLUMES [4]			SAT DAILY TRIP ENDS VOLUMES	SAT PEAK HOUR VOLUMES [5]		
		IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL	IN	OUT	TOTAL		IN	OUT	TOTAL
<b>Construction Grading and Material</b>																	
<b>Export Phase</b>																	
Construction Workers [6]	66	0	0	0	0	0	0	0	0	0	0	20	20	66	0	0	0
Trucks	160	6	6	12	12	12	24	6	6	12	0	0	0	160	14	14	28
PCE (2.0) Adjusted [7]	320	12	12	24	24	24	48	12	12	24	0	0	0	320	28	28	56
<b>Phase Subtotal (PCE Adjusted)</b>	<b>386</b>	<b>12</b>	<b>12</b>	<b>24</b>	<b>24</b>	<b>24</b>	<b>48</b>	<b>12</b>	<b>12</b>	<b>24</b>	<b>0</b>	<b>20</b>	<b>20</b>	<b>386</b>	<b>28</b>	<b>28</b>	<b>56</b>

[1] Source: Harvard-Westlake School.

[2] Analyzed weekday peak hours are 9:00-10:00 AM and 3:00-4:00PM.

[3] The 2:00 PM hour was also analyzed due to a higher estimated number of truck trips between the hours of 10:00 AM to 3:00 PM.

[4] The 4:00 PM hour was also analyzed to account for the number of construction workers estimated to depart the construction site during the 4:00 PM hour.

[5] Analyzed Saturday midday peak hour coincides with the highest observed peak hour of traffic at each study intersection.

[6] All construction workers are assumed to be on-site prior to 7:00 AM. Departure from the site is expected to be dispersed for several hours following the end of hauling at 4:00PM.

[7] A Passenger Car Equivalent (PCE) factor of 2.0 was applied to all trucks based on standard traffic engineering practice to conservatively estimate the equivalent number of vehicles associated with the trucks.

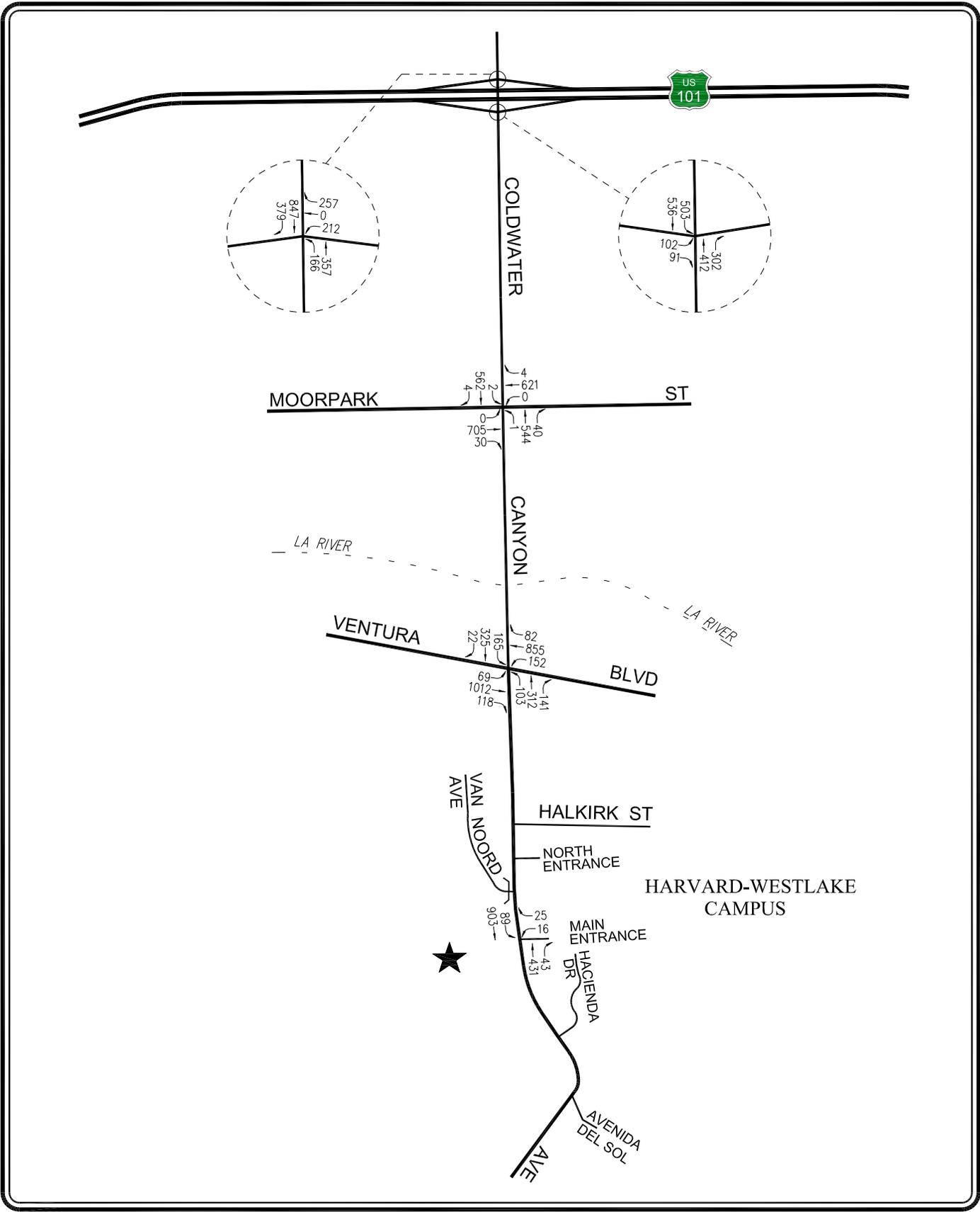
Table 2  
EXISTING TRAFFIC VOLUMES [1]  
Commuter Peak Hours

17-Jul-2015

NO.	INTERSECTION	DATE	DIR	AM PEAK HOUR		PM PEAK HOUR	
				BEGAN	VOLUME	BEGAN	VOLUME
1	Coldwater Canyon Avenue/ US-101 Freeway NB Ramps	02/10/2015	NB SB EB WB	8:15	523 1,226 0 469	4:45	1,042 855 0 641
2	Coldwater Canyon Avenue/ US-101 Freeway SB Ramps	02/10/2015	NB SB EB WB	8:00	714 1,039 193 0	5:00	840 913 654 0
3	Coldwater Canyon Avenue/ Moorpark Street	02/10/2015	NB SB EB WB	7:45	585 568 735 625	4:45	759 684 619 548
4	Coldwater Canyon Avenue/ Ventura Boulevard	02/10/2015	NB SB EB WB	8:00	556 512 1,199 1,089	4:45	1,206 746 1,221 1,356
5	Coldwater Canyon Avenue/ Harvard-Westlake Driveway	02/10/2015	NB SB EB WB	7:30	474 992 0 41	4:45	1,142 720 0 151

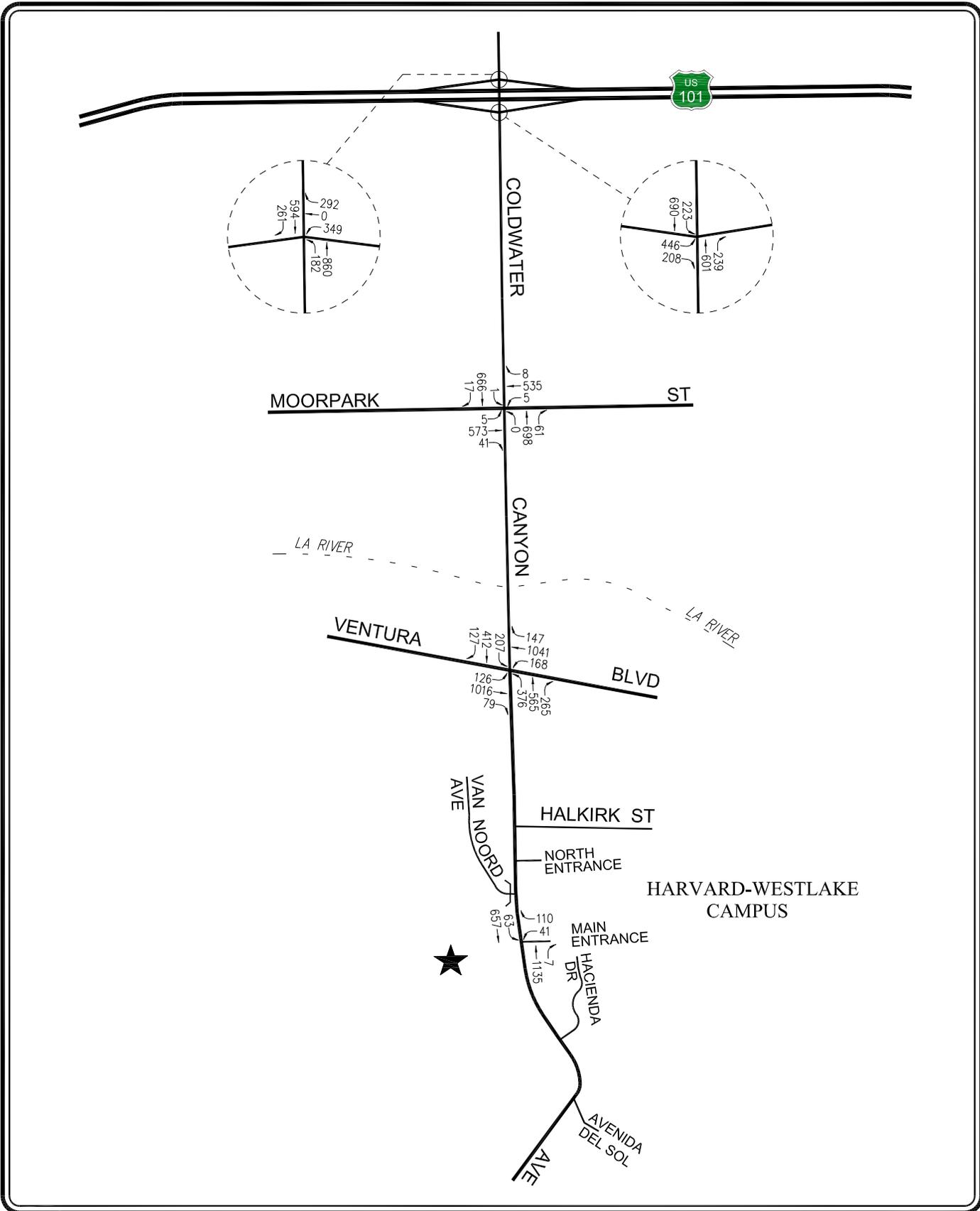
[1] Counts conducted by The Traffic Solution.

o:\3744-2\addendum\dwg\fig-1.dwg 03/04/2015 14:00:18 gutierrez lg exhibits color.ctb



**FIGURE 1**  
**2015 TRAFFIC VOLUMES**  
**COMMUTER AM PEAK HOUR**

o:\3744-2\oddendum\dwg\fig-2.dwg 03/04/2015 14:00:43 gutierrez lg exhibits color.ctb



**FIGURE 2**  
**2015 TRAFFIC VOLUMES**  
**COMMUTER PM PEAK HOUR**

Table 5  
RELATED PROJECTS LIST AND TRIP GENERATION [1]

MAP NO.	PROJECT STATUS	PROJECT NAME/NUMBER ADDRESS/LOCATION	ADDRESS/ LOCATION	LAND USE DATA		DAILY TRIP ENDS [2] VOLUMES	AM PEAK HOUR VOLUMES [2]			PM PEAK HOUR VOLUMES [2]		
				LAND-USE	SIZE		IN	OUT	TOTAL	IN	OUT	TOTAL
City of Los Angeles												
1	Proposed	VEN-2010-020	12548 Ventura Boulevard	Apartment	62 DU	412	6	26	32	25	13	38
				Retail	10,747 GLSF	476	8	6	14	13	16	29
				Other	1,925 GSF	245	11	11	22	12	9	21
				Existing Retail	(3,000) GLSF	(133)	(2)	(2)	(4)	(4)	(4)	(8)
2	Proposed	CBS Radford Studios	4200 Radford Avenue	Master Plan Expansion	161,885 GSF	1,634	102	13	115	42	70	112
3	Proposed	Buckley School	3900 Stansbury Avenue	Private School (K-12)	80 Students	329	42	33	75	22	25	47
4	Under Construction	Sherman Village SFV-2006-130	12629 Riverside Drive	Condominium	260 DU	1,850	28	112	140	111	60	171
				TV programme production		(230)	(44)	(8)	(52)	(18)	(24)	(42)
5	Approved	Merdinian Evangelical School SFV-2006-044	13330 Riverside Drive	Private High School	383 Seats	856	191	100	291	11	17	28
6	Inactive	VEN-2004-008	11617 Ventura Boulevard	Apartment	391 DU	2,628	40	159	199	157	85	242
				Less Existing Office	(7,793) GSF	(86)	(11)	(1)	(12)	(2)	(10)	(12)
				Less Existing Retail	(12,663) GLSF	(465)	7	11	18	(19)	(13)	(32)
7	Under Construction	Ralphs Supermarket VEN-2009-014	14049 Ventura Boulevard	Supermarket Expansion [3]	27,389 GLSF	2,800	54	35	89	146	140	286
8	Under Construction	Camino Real Mixed-Use Project VEN-2004-005	14121 Ventura Boulevard	Condominium	88 DU	516	7	32	39	31	15	46
				Retail (Less 10% Pass-by)	6,000 GLSF	239	4	3	7	6	8	14
				Fast-Food without Drive-Through (Less 50% Pass-by)	3,500 GSF	1,253	46	31	77	24	23	47
9	Inactive	Westfield Sherman Oaks Fashion Square [4] SFV-2005-278	14006 Riverside Drive	Retail	220,000 GLSF	4,964	58	37	95	229	247	476
10	Proposed	Studio City Senior Living Center Project [5] SFV-2011-08	4141 Whittsett Avenue	Senior Housing	200 DU	624	0	59	59	37	1	38
				Golf Driving Range	21 Tees							
				Golf Course	9 Holes							
				Golf Driving Range	(24) Tees							
				Golf Course	(9) Holes							
				Tennis Courts	(16) Courts							
11	Proposed	Sportmen's Lodge Event Center [6] VEN-10-005	12833 Ventura Boulevard	Quality Restaurant	17,514 GSF	2,001	50	54	104	68	68	136
				High-Turnover Restaurant	9,154 GSF							
				Retail	35,101 GLSF							
				Health Club	30,000 GSF							
				Less Banquet Facility	(47,400) GSF							
				Less Restaurant	(3,500) GSF							
<b>TOTAL</b>						19,913	597	711	1,308	891	746	1,637

[1] Source: City of Los Angeles Department of Transportation Related Projects List, except as noted below. Trip generation for the related projects are based on ITE "Trip Generation", 8th Edition, 2008.

[2] Trips are one-way traffic movements, entering or leaving.

[3] Daily trips based on ITE Land Use Code 850 (Supermarket) trip generation average rates.

[4] Source: "Traffic Impact, Parking, and Site Access Study for the Westfield Fashion Square Expansion Project", prepared by LLG Engineers, August 2008.

[5] Source: "Traffic Impact Study for the Studio City Senior Living Center Project", prepared by LLG Engineers, February 2012.

[6] Source: LADOT Determination Letter for the Sportmen's Lodge Event Center, dated March 18, 2014.

Table 6  
SUMMARY OF VOLUME TO CAPACITY RATIOS  
AND LEVELS OF SERVICE  
WEEKDAY AM AND PM, SATURDAY MID-DAY PEAK HOURS  
CONSTRUCTION TRAFFIC

NO.	INTERSECTION	PEAK HOUR	[1]		[2]				[3]		[4]			
			YEAR 2012 EXISTING		YEAR 2012 EXISTING W/ CONSTR.		CHANGE V/C [(2)-(1)]	SIGNIF. IMPACT	YEAR 2019 FUTURE BASELINE		YEAR 2019 FUTURE WITH CONSTRUCTION		CHANGE V/C [(4)-(3)]	SIGNIF. IMPACT
			V/C	LOS	V/C	LOS			V/C	LOS	V/C	LOS		
1	Coldwater Canyon Avenue/ US-101 Freeway NB Ramps	AM	0.411	A	0.414	A	0.003	NO	0.527	A	0.529	A	0.002	NO
		2PM	0.536	A	0.542	A	0.006	NO	0.656	B	0.661	B	0.005	NO
		3PM	0.548	A	0.551	A	0.003	NO	0.670	B	0.673	B	0.003	NO
		4PM	0.515	A	0.520	A	0.005	NO	0.631	B	0.635	B	0.004	NO
		SAT	0.453	A	0.460	A	0.007	NO	0.522	A	0.530	A	0.008	NO
2	Coldwater Canyon Avenue/ US-101 Freeway SB Ramps	AM	0.431	A	0.439	A	0.008	NO	0.530	A	0.539	A	0.009	NO
		2PM	0.546	A	0.551	A	0.005	NO	0.671	B	0.676	B	0.005	NO
		3PM	0.579	A	0.582	A	0.003	NO	0.709	C	0.712	C	0.003	NO
		4PM	0.544	A	0.547	A	0.003	NO	0.668	B	0.671	B	0.003	NO
		SAT	0.455	A	0.461	A	0.006	NO	0.530	A	0.536	A	0.006	NO
3	Coldwater Canyon Avenue/ Moorpark Street	AM	0.573	A	0.577	A	0.004	NO	0.701	C	0.705	C	0.004	NO
		2PM	0.664	B	0.672	B	0.008	NO	0.813	D	0.821	D	0.008	NO
		3PM	0.821	D	0.825	D	0.004	NO	0.993	E	0.997	E	0.004	NO
		4PM	0.851	D	0.856	D	0.005	NO	1.029	F	1.033	F	0.004	NO
		SAT	0.593	A	0.602	B	0.009	NO	0.685	B	0.695	B	0.010	NO
4	Coldwater Canyon Avenue/ Ventura Boulevard	AM	0.731	C	0.735	C	0.004	NO	0.886	D	0.891	D	0.005	NO
		2PM	0.749	C	0.758	C	0.009	NO	0.923	E	0.932	E	0.009	NO
		3PM	0.872	D	0.876	D	0.004	NO	1.060	F	1.064	F	0.004	NO
		4PM	0.885	D	0.891	D	0.006	NO	1.073	F	1.078	F	0.005	NO
		SAT	0.711	C	0.721	C	0.010	NO	0.802	D	0.812	D	0.010	NO
5	Coldwater Canyon Avenue/ Harvard-Westlake Driveway	AM	0.683	B	0.699	B	0.016	NO	0.802	D	0.818	D	0.016	NO
		2PM	0.745	C	0.761	C	0.016	NO	0.873	D	0.889	D	0.016	NO
		3PM	0.911	E	0.919	E	0.008	NO	1.063	F	1.071	F	0.008	NO
		4PM	0.969	E	0.978	E	0.009	NO	1.130	F	1.139	F	0.009	NO
		SAT	0.505	A	0.524	A	0.019	NO	0.565	A	0.583	A	0.018	NO

(A) According to LADOT's "Traffic Study Policies and Procedures," August 2014, a transportation impact on an intersection shall be deemed significant in accordance with the following table:

<u>Final v/c</u>	<u>LOS</u>	<u>Project Related Increase in v/c</u>
> 0.701 - 0.800	C	equal to or greater than 0.040
> 0.801 - 0.900	D	equal to or greater than 0.020
> 0.901	E,F	equal to or greater than 0.010

Table 7  
SUMMARY OF VOLUME TO CAPACITY RATIOS  
AND LEVELS OF SERVICE  
AM AND PM (B) PEAK HOURS  
PROJECT OCCUPANCY

NO.	INTERSECTION	PEAK HOUR	[1]		[2]				[3]		[4]			
			YEAR 2012 EXISTING		YEAR 2012 EXISTING W/ PROJ. OCC.		CHANGE V/C	SIGNIF. IMPACT	YEAR 2019 FUTURE W/O PROJECT OCC.		YEAR 2019 FUTURE WITH PROJECT OCC.		CHANGE V/C	SIGNIF. IMPACT
			V/C	LOS	V/C	LOS	[(2)-(1)]		V/C	LOS	V/C	LOS	[(4)-(3)]	
5	Coldwater Canyon Avenue/ Harvard-Westlake Driveway	AM	0.761	C	0.377	A	-0.384	NO	0.892	D	0.449	A	-0.443	NO
		PM	0.901	E	0.876	D	-0.025	NO	1.051	F	1.038	F	-0.013	NO

(A) According to LADOT's "Traffic Study Policies and Procedures, " August 2014, a transportation impact on an intersection shall be deemed significant in accordance with the following table:

<u>Final v/c</u>	<u>LOS</u>	<u>Project Related Increase in v/c</u>
> 0.701 - 0.800	C	equal to or greater than 0.040
> 0.801 - 0.900	D	equal to or greater than 0.020
> 0.901	E,F	equal to or greater than 0.010

(B) PM peak hour analysis based on peak hour of traffic on Coldwater Canyon Avenue (2:45 PM to 3:45 PM) coinciding with student dismissal period at Harvard-Westlake.

## APPENDIX A

### LADOT ASSESSMENT LETTER – HARVARD-WESTLAKE PARKING IMPROVEMENT PLAN

**CITY OF LOS ANGELES  
INTER-DEPARTMENTAL CORRESPONDENCE**

3700-3701 Coldwater Canyon Avenue  
DOT Case No. SFV-11-072

Date: March 26, 2013

To: Nicholas Hendricks, City Planner  
Department of City Planning



From: Sergio D. Valdez, Transportation Engineer  
Department of Transportation

Subject: **TRAFFIC ASSESSMENT FOR THE PROPOSED HARVARD-WESTLAKE SCHOOL PARKING IMPROVEMENT PLAN AT 3701 COLDWATER CANYON AVENUE**

The Department of Transportation (DOT) has completed the traffic impact assessment for the proposed Harvard-Westlake School Parking Improvement Plan located at 3701 Coldwater Canyon Avenue in the Studio City area of the City of Los Angeles. This traffic assessment is based on a traffic study prepared by Linscott Law & Greenspan Engineers on October 30, 2012. DOT has determined that the traffic study adequately describes all projected transportation impacts associated with the construction of the proposed development that fall within the City of Los Angeles.

**DISCUSSION AND FINDINGS**

The proposed project consists of a new three-story parking structure consisting of 750 parking spaces, a rooftop athletic practice field and a pedestrian bridge for the existing Harvard-Westlake School Campus located at 3700 Coldwater Canyon Avenue. This new bridge will connect the existing school campus to the proposed parking structure. Currently the school has a total of 568 parking spaces. No increase in student enrollment or faculty is being proposed as part of this project. DOT does not typically comment on construction related project impacts since they are considered temporarily impacts. During construction the proposed project will generate 13 AM Peak hour trips and 13 PM Peak hour trips as shown in Table 1 below. The build-out year for the project is expected to be in the year 2016.

**Table 1: Project Construction Trip Generation Estimates**

Phase	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
		IN	OUT	TOTAL	IN	OUT	TOTAL
<b>Export Phase</b>							
Construction Workers	40	2	0	2	0	2	2
Trucks	100	5	5	10	5	5	10
PCE (2.0)	200	10	10	20	10	10	20
<b>Construction Phase</b>							
Construction Workers	90	5	0	5	0	5	5
Trucks	44	2	2	4	2	2	4
PCE (2.0)	88	4	4	8	4	4	8
<b>Phase Subtotal (PCE Adjusted)</b>	<b>178</b>	<b>9</b>	<b>4</b>	<b>13</b>	<b>4</b>	<b>9</b>	<b>13</b>

The traffic study reviewed five intersections for traffic impacts during construction. DOT's policy on significant transportation impact thresholds is summarized in Table 2 below. DOT has concluded that the proposed project will not produce a significant transportation impact at any of the studied intersections during construction. These findings are summarized in Table 3, which shows the existing, projected, and project-related volume-to-capacity ratios and levels of service at the study intersections.

**Table 2: Significant Transportation Impact Thresholds**

Level of Service (LOS)	Projected Volume to Capacity Ratio (V/C), including Project	Project-Related Increase in V/C
C	between 0.701 and 0.800	≥ 0.040
D	between 0.801 and 0.900	≥ 0.020
E and F	≥ 0.901	≥ 0.010

The Department of Transportation recommends that the following Project Requirements be adopted as conditions of project approval:

## PROJECT REQUIREMENTS

### A. Construction Impacts

DOT recommends that a construction work site traffic control plan be submitted to DOT's East Valley District Office for review and approval prior to the start of any construction work. The plan should show the location of any roadway or sidewalk closures, traffic detours, haul routes, hours of operation, warning signs and access to abutting properties. DOT also recommends that all construction related traffic be restricted to off-peak hours.

### B. Highway Dedications and Improvements

*Coldwater Canyon Avenue* is designated as a Secondary Highway in the Street and Highways Element of the City's General Plan. The standard cross-section for a Secondary Street is a 35-foot half roadway on a 45-foot half right-of-way. Currently, Coldwater Canyon Avenue consists of a 24-foot half roadway and a 30-foot half-right-of-way along the west side of Coldwater Canyon Avenue. Therefore, an 11-foot widening, a 15-foot dedication and a 10-foot sidewalk are required along the entire project frontage to bring the roadway up to the standard required by the General Plan.

The applicant should contact the Bureau of Engineering (BOE) to determine the exact dedication and widening standards that are applicable, and to ensure full compliance with these requirements, along with any other required improvements specified by the Los Angeles Municipal Code (LAMC) and City ordinances. Any street dedication shall be completed through Quyen Phan in the Department of Public Works, Bureau of Engineering, Land Development Group, (213) 202-3488, before the issuance of any building permit for this project.

Required improvements within existing or designated roadways shall be guaranteed through the B-permit process of BOE before the issuance of any building permit for this project, and shall be completed to the satisfaction of DOT and BOE prior to the issuance of any certificate of occupancy.

In addition to the above highway widening and dedication, the school has offered to provide the following voluntary roadway striping improvement:

Add a second southbound lane on Coldwater Canyon Avenue from Ventura Boulevard to the northerly edge of the school. By restricting street parking between 7-10AM on Coldwater Canyon Avenue between Ventura Boulevard and Van Noord Avenue, the southbound curb lane would be available as a second through lane connecting with the two southbound lanes proposed at the project site. This voluntary improvement is not required to be implemented as part of this project. DOT's East Valley District Office has reviewed the proposed improvement and has initially concluded that some widening would be required in order to provide two southbound lanes but keeping the parking lane. Parking restrictions during morning peak hours is not a viable option. A full size plan must be submitted to Mike Naini from DOT's B-Permit Section, (213) 928-9668 for further review and approval.

### **C. Site Access and Internal Circulation**

Vehicular access to the existing campus is presently provided via three driveways on the east side of Coldwater Canyon Avenue. The middle driveway is considered the main driveway and it is currently signalized. Vehicular access to the proposed parking structure will be provided via two driveways on the west side of Coldwater Canyon Avenue. The proposed parking improvement plan includes the relocation of the existing main entrance approximately 37 feet south of its current location. This new driveway will be controlled by a new traffic signal with protective only phasing for both northbound and southbound directions as recommended by DOT's East Valley District Office.

This determination does not constitute final DOT approval of the project's driveways, internal circulation, and parking scheme per LAMC Section 12.21. All loading/unloading of students shall be accomplished on site and shown clearly on a site plan. The applicant should ensure that final site access plans conform to DOT's criteria for driveway designs as published in DOT Manual of Policies and Procedures, Section 321.

### **DOT CLEARANCE GUIDELINES**

Final DOT approval is normally required prior to the issuance of any associated building permits. Approval is given when DOT receives an acceptable site and access plan, verification that all enumerated conditions of approval are satisfied, guaranteed or not applicable, and payment of all applicable application fees. For the fastest possible final review and approval process, plans should be submitted to DOT Valley Development Review, 6262 Van Nuys Blvd., Suite 320, Van Nuys 91401, prior to plan check submission to the Department of Building and Safety.

Pursuant to City Ordinance 180542, effective March 27, 2009, application fees are required for all DOT-related condition clearances and permit issuance activities for private development projects within the city, and must be received by DOT prior to the issuance of any approval, clearance or sign-off. A copy of this ordinance is available upon request.

If you have any questions, you may contact me or Vicente Cordero of my staff at 818-374-4697.

c: Fourth Council District  
Brian Gallagher, DOT East Valley District  
John Varghese, DOT Signal Design  
Mike Naini, B-Permit Section  
Ali Nahass, BOE Valley District  
Quyen Phan, BOE Land Development  
David S. Shender, P.E., Linscott, Law & Greenspan, Engineers

**Table 3: Summary of Volume to Capacity Ratios (v/c) and Levels of Service (LOS)**

Harvard-Westlake School, Parking Improvement Plan  
3701 Coldwater Canyon Avenue

Intersection	Peak Hour	Year 2012 Existing		Year 2016 without Project		Year 2016 with Project		Project Impact
		v/c	LOS	v/c	LOS	v/c	LOS	Δ v/c
Coldwater Cyn. Av/ US 101 NB Ramps	AM	0.504	A	0.589	A	0.592	A	0.003
	PM	0.492	A	0.552	A	0.554	A	0.002
Coldwater Cyn. Av/ US 101 SB Ramps	AM	0.562	A	0.628	B	0.635	B	0.007
	PM	0.576	A	0.645	B	0.648	B	0.003
Coldwater Cyn. Av/ Moorpark St.	AM	0.689	B	0.767	C	0.770	C	0.003
	PM	0.880	D	0.982	E	0.986	E	0.004
Coldwater Cyn. Av/ Ventura Bl.	AM	0.776	C	0.874	D	0.878	D	0.004
	PM	0.877	D	0.984	E	0.988	E	0.004
Coldwater Cyn. Av/ Harvard-Westlake Dwy	AM	0.761	C	0.863	D	0.851	D	0.015
	PM	0.951	E	1.040	F	1.048	F	0.008

**APPENDIX B**  
**MANUAL TRAFFIC COUNT DATA**

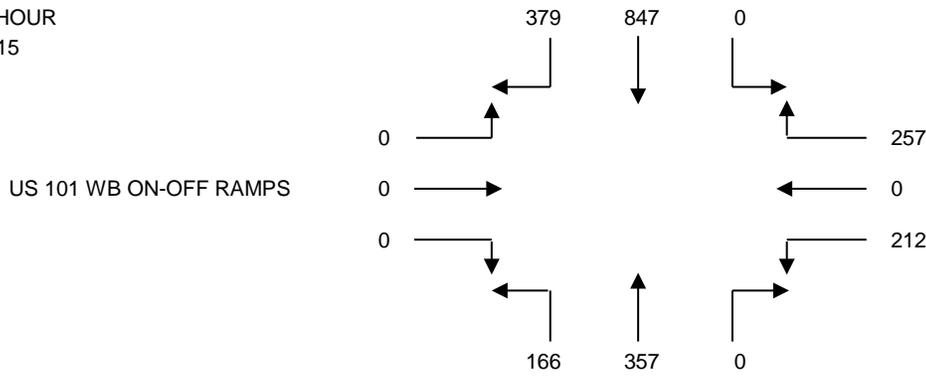
# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - WOODLAND HILLS  
 PROJECT: STUDIO CITY  
 DATE: TUESDAY, FEBRUARY 10, 2015  
 PERIOD: 07:00 AM TO 10:00 AM  
 INTERSECTION N/S COLDWATER CANYON AVENUE  
 E/W US 101 WB ON-OFF RAMP  
 FILE NUMBER: 1-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	122	139	0	36	0	40	0	60	38	0	0	0
0715-0730	155	165	0	39	0	41	0	73	50	0	0	0
0730-0745	166	173	0	56	0	30	0	76	45	0	0	0
0745-0800	122	200	0	61	0	38	0	77	39	0	0	0
0800-0815	98	201	0	46	0	39	0	83	52	0	0	0
0815-0830	92	237	0	47	0	53	0	72	47	0	0	0
0830-0845	97	196	0	57	0	51	0	106	30	0	0	0
0845-0900	99	187	0	67	0	51	0	90	52	0	0	0
0900-0915	91	227	0	86	0	57	0	89	37	0	0	0
0915-0930	105	195	0	68	0	51	0	82	45	0	0	0
0930-0945	100	170	0	77	0	52	0	79	49	0	0	0
0945-1000	115	157	0	65	0	50	0	73	42	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	565	677	0	192	0	149	0	286	172	0	0	0	2041
0715-0815	541	739	0	202	0	148	0	309	186	0	0	0	2125
0730-0830	478	811	0	210	0	160	0	308	183	0	0	0	2150
0745-0845	409	834	0	211	0	181	0	338	168	0	0	0	2141
0800-0900	386	821	0	217	0	194	0	351	181	0	0	0	2150
0815-0915	379	847	0	257	0	212	0	357	166	0	0	0	2218
0830-0930	392	805	0	278	0	210	0	367	164	0	0	0	2216
0845-0945	395	779	0	298	0	211	0	340	183	0	0	0	2206
0900-1000	411	749	0	296	0	210	0	323	173	0	0	0	2162

A.M. PEAK HOUR  
0815-0915



DATA PROVIDED BY:

THE TRAFFIC SOLUTION  
 329 DIAMOND STREET  
 ARCADIA, CALIFORNIA 91005  
 PH: 626-446-7978  
 FAX: 626-446-2877

COLDWATER CANYON AVENUE

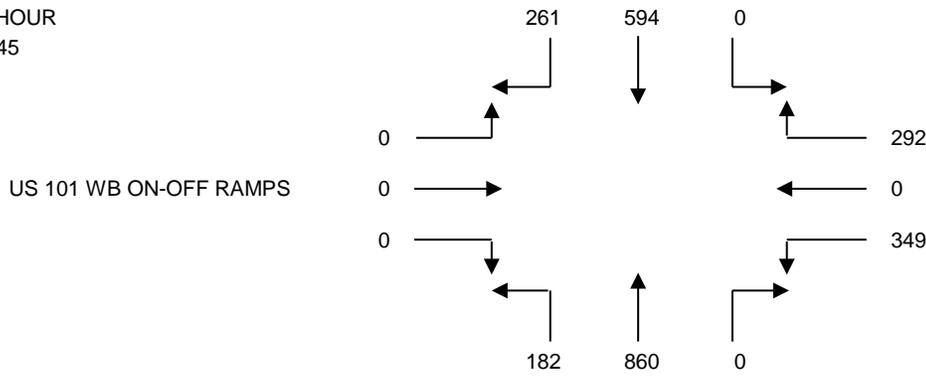
# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - WOODLAND HILLS  
 PROJECT: STUDIO CITY  
 DATE: TUESDAY, FEBRUARY 10, 2015  
 PERIOD: 03:00 PM TO 06:00 PM  
 INTERSECTION N/S COLDWATER CANYON AVENUE  
 E/W US 101 WB ON-OFF RAMPS  
 FILE NUMBER: 1-PM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0300-0315	83	148	0	80	0	87	0	163	61	0	0	0
0315-0330	85	142	0	88	0	73	0	176	61	0	0	0
0330-0345	88	164	0	89	0	90	0	164	58	0	0	0
0345-0400	69	159	0	99	0	87	0	169	51	0	0	0
0400-0415	62	140	0	64	0	106	0	157	61	0	0	0
0415-0430	61	138	0	72	0	90	0	181	51	0	0	0
0430-0445	62	152	0	76	0	85	0	197	40	0	0	0
0445-0500	75	142	0	74	0	85	0	188	41	0	0	0
0500-0515	67	133	0	71	0	90	0	200	50	0	0	0
0515-0530	68	148	0	83	0	87	0	221	46	0	0	0
0530-0545	51	171	0	64	0	87	0	251	45	0	0	0
0545-0600	54	148	0	71	0	63	0	208	45	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0300-0400	325	613	0	356	0	337	0	672	231	0	0	0	2534
0315-0415	304	605	0	340	0	356	0	666	231	0	0	0	2502
0330-0430	280	601	0	324	0	373	0	671	221	0	0	0	2470
0345-0445	254	589	0	311	0	368	0	704	203	0	0	0	2429
0400-0500	260	572	0	286	0	366	0	723	193	0	0	0	2400
0415-0515	265	565	0	293	0	350	0	766	182	0	0	0	2421
0430-0530	272	575	0	304	0	347	0	806	177	0	0	0	2481
0445-0545	261	594	0	292	0	349	0	860	182	0	0	0	2538
0500-0600	240	600	0	289	0	327	0	880	186	0	0	0	2522

P.M. PEAK HOUR  
0445-0545



DATA PROVIDED BY:

THE TRAFFIC SOLUTION  
 329 DIAMOND STREET  
 ARCADIA, CALIFORNIA 91005  
 PH: 626-446-7978  
 FAX: 626-446-2877

COLDWATER CANYON AVENUE

# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

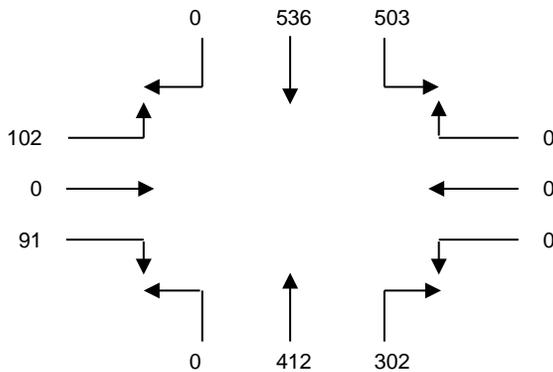
CLIENT: LLG - WOODLAND HILLS  
 PROJECT: STUDIO CITY  
 DATE: TUESDAY, FEBRUARY 10, 2015  
 PERIOD: 07:00 AM TO 10:00 AM  
 INTERSECTION N/S COLDWATER CANYON AVENUE  
 E/W US 101 EB ON - OFF RAMP  
 FILE NUMBER: 2-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	0	108	76	0	0	0	53	65	0	30	0	24
0715-0730	0	124	89	0	0	0	66	89	0	32	0	34
0730-0745	0	101	110	0	0	0	67	84	0	38	0	21
0745-0800	0	100	145	0	0	0	69	92	0	20	0	28
0800-0815	0	113	131	0	0	0	77	100	0	22	0	33
0815-0830	0	159	135	0	0	0	66	97	0	20	0	20
0830-0845	0	130	128	0	0	0	78	98	0	28	0	26
0845-0900	0	134	109	0	0	0	81	117	0	21	0	23
0900-0915	0	148	108	0	0	0	61	105	0	21	0	24
0915-0930	0	123	125	0	0	0	62	103	0	25	0	24
0930-0945	0	116	110	0	0	0	59	89	0	30	0	33
0945-1000	0	108	107	0	0	0	44	76	0	41	0	33

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	0	433	420	0	0	0	255	330	0	120	0	107	1665
0715-0815	0	438	475	0	0	0	279	365	0	112	0	116	1785
0730-0830	0	473	521	0	0	0	279	373	0	100	0	102	1848
0745-0845	0	502	539	0	0	0	290	387	0	90	0	107	1915
0800-0900	0	536	503	0	0	0	302	412	0	91	0	102	1946
0815-0915	0	571	480	0	0	0	286	417	0	90	0	93	1937
0830-0930	0	535	470	0	0	0	282	423	0	95	0	97	1902
0845-0945	0	521	452	0	0	0	263	414	0	97	0	104	1851
0900-1000	0	495	450	0	0	0	226	373	0	117	0	114	1775

A.M. PEAK HOUR  
0800-0900

US 101 EB ON - OFF RAMP



DATA PROVIDED BY:

THE TRAFFIC SOLUTION  
 329 DIAMOND STREET  
 ARCADIA, CALIFORNIA 91005  
 PH: 626-446-7978  
 FAX: 626-446-2877

COLDWATER CANYON AVENUE

# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

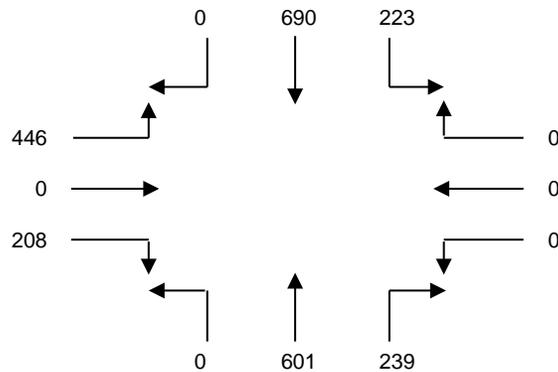
CLIENT: LLG - WOODLAND HILLS  
 PROJECT: STUDIO CITY  
 DATE: TUESDAY, FEBRUARY 10, 2015  
 PERIOD: 03:00 PM TO 06:00 PM  
 INTERSECTION N/S COLDWATER CANYON AVENUE  
 E/W US 101 EB ON - OFF RAMP  
 FILE NUMBER: 2-PM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0300-0315	0	174	58	0	0	0	73	160	0	62	0	88
0315-0330	0	141	61	0	0	0	67	154	0	74	0	89
0330-0345	0	183	69	0	0	0	95	116	0	54	0	97
0345-0400	0	185	50	0	0	0	75	150	0	48	0	78
0400-0415	0	190	58	0	0	0	70	148	0	64	0	80
0415-0430	0	167	45	0	0	0	60	156	0	46	0	88
0430-0445	0	175	57	0	0	0	60	136	0	54	0	94
0445-0500	0	179	38	0	0	0	74	144	0	55	0	102
0500-0515	0	164	52	0	0	0	56	133	0	45	0	106
0515-0530	0	176	63	0	0	0	57	149	0	50	0	101
0530-0545	0	187	59	0	0	0	54	164	0	52	0	124
0545-0600	0	163	49	0	0	0	72	155	0	61	0	115

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0300-0400	0	683	238	0	0	0	310	580	0	238	0	352	2401
0315-0415	0	699	238	0	0	0	307	568	0	240	0	344	2396
0330-0430	0	725	222	0	0	0	300	570	0	212	0	343	2372
0345-0445	0	717	210	0	0	0	265	590	0	212	0	340	2334
0400-0500	0	711	198	0	0	0	264	584	0	219	0	364	2340
0415-0515	0	685	192	0	0	0	250	569	0	200	0	390	2286
0430-0530	0	694	210	0	0	0	247	562	0	204	0	403	2320
0445-0545	0	706	212	0	0	0	241	590	0	202	0	433	2384
0500-0600	0	690	223	0	0	0	239	601	0	208	0	446	2407

P.M. PEAK HOUR  
0500-0600

US 101 EB ON - OFF RAMP



DATA PROVIDED BY:

THE TRAFFIC SOLUTION  
 329 DIAMOND STREET  
 ARCADIA, CALIFORNIA 91005  
 PH: 626-446-7978  
 FAX: 626-446-2877

COLDWATER CANYON AVENUE

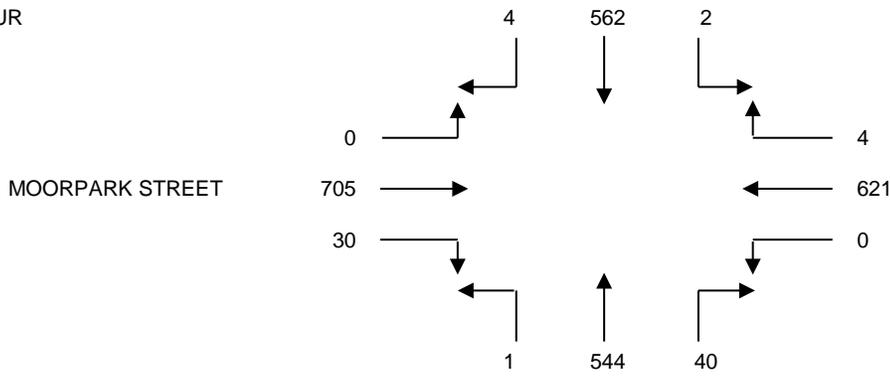
# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - WOODLAND HILLS  
 PROJECT: STUDIO CITY  
 DATE: TUESDAY, FEBRUARY 10, 2015  
 PERIOD: 07:00 AM TO 10:00 AM  
 INTERSECTION N/S COLDWATER CANYON AVENUE  
 E/W MOORPARK STREET  
 FILE NUMBER: 3-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	2	120	0	1	91	1	3	77	0	4	100	0
0715-0730	0	137	0	0	102	0	5	142	1	5	136	0
0730-0745	2	116	0	0	168	0	10	114	0	6	174	0
0745-0800	2	119	0	1	173	0	10	111	0	10	186	0
0800-0815	1	125	1	2	166	0	16	132	0	7	160	0
0815-0830	0	146	1	0	140	0	8	128	1	8	181	0
0830-0845	1	172	0	1	142	0	6	173	0	5	178	0
0845-0900	2	134	1	5	130	0	14	151	0	8	153	1
0900-0915	2	147	0	3	135	1	12	121	0	7	160	0
0915-0930	3	140	0	0	107	1	15	119	0	6	147	0
0930-0945	2	136	0	2	99	0	16	110	0	7	138	0
0945-1000	0	131	0	0	85	0	14	115	0	5	128	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	6	492	0	2	534	1	28	444	1	25	596	0	2129
0715-0815	5	497	1	3	609	0	41	499	1	28	656	0	2340
0730-0830	5	506	2	3	647	0	44	485	1	31	701	0	2425
0745-0845	4	562	2	4	621	0	40	544	1	30	705	0	2513
0800-0900	4	577	3	8	578	0	44	584	1	28	672	1	2500
0815-0915	5	599	2	9	547	1	40	573	1	28	672	1	2478
0830-0930	8	593	1	9	514	2	47	564	0	26	638	1	2403
0845-0945	9	557	1	10	471	2	57	501	0	28	598	1	2235
0900-1000	7	554	0	5	426	2	57	465	0	25	573	0	2114

A.M. PEAK HOUR  
0745-0845



DATA PROVIDED BY:

THE TRAFFIC SOLUTION  
 329 DIAMOND STREET  
 ARCADIA, CALIFORNIA 91005  
 PH: 626-446-7978  
 FAX: 626-446-2877

COLDWATER CANYON AVENUE

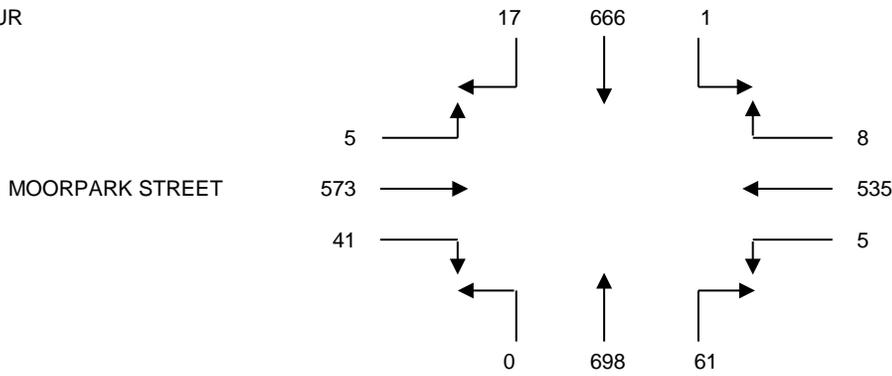
# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - WOODLAND HILLS  
 PROJECT: STUDIO CITY  
 DATE: TUESDAY, FEBRUARY 10, 2015  
 PERIOD: 03:00 PM TO 06:00 PM  
 INTERSECTION N/S COLDWATER CANYON AVENUE  
 E/W MOORPARK STREET  
 FILE NUMBER: 3-PM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0300-0315	2	124	0	1	98	0	8	137	0	3	105	0
0315-0330	1	137	0	0	110	0	10	152	0	5	118	1
0330-0345	2	153	1	2	127	1	9	165	0	8	132	0
0345-0400	3	149	0	1	121	0	11	163	0	5	128	1
0400-0415	4	151	0	1	118	1	14	157	0	6	151	0
0415-0430	2	189	0	3	135	1	11	192	0	10	128	1
0430-0445	3	152	0	1	105	0	16	140	0	6	161	0
0445-0500	4	182	0	2	109	0	13	194	0	5	130	1
0500-0515	7	161	1	1	151	1	19	178	0	8	144	1
0515-0530	4	159	0	4	132	4	13	168	0	13	143	3
0530-0545	2	164	0	1	143	0	16	158	0	15	156	0
0545-0600	4	150	0	0	120	2	20	158	0	5	114	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0300-0400	8	563	1	4	456	1	38	617	0	21	483	2	2194
0315-0415	10	590	1	4	476	2	44	637	0	24	529	2	2319
0330-0430	11	642	1	7	501	3	45	677	0	29	539	2	2457
0345-0445	12	641	0	6	479	2	52	652	0	27	568	2	2441
0400-0500	13	674	0	7	467	2	54	683	0	27	570	2	2499
0415-0515	16	684	1	7	500	2	59	704	0	29	563	3	2568
0430-0530	18	654	1	8	497	5	61	680	0	32	578	5	2539
0445-0545	17	666	1	8	535	5	61	698	0	41	573	5	2610
0500-0600	17	634	1	6	546	7	68	662	0	41	557	4	2543

P.M. PEAK HOUR  
0445-0545



DATA PROVIDED BY:

THE TRAFFIC SOLUTION  
 329 DIAMOND STREET  
 ARCADIA, CALIFORNIA 91005  
 PH: 626-446-7978  
 FAX: 626-446-2877

COLDWATER CANYON AVENUE

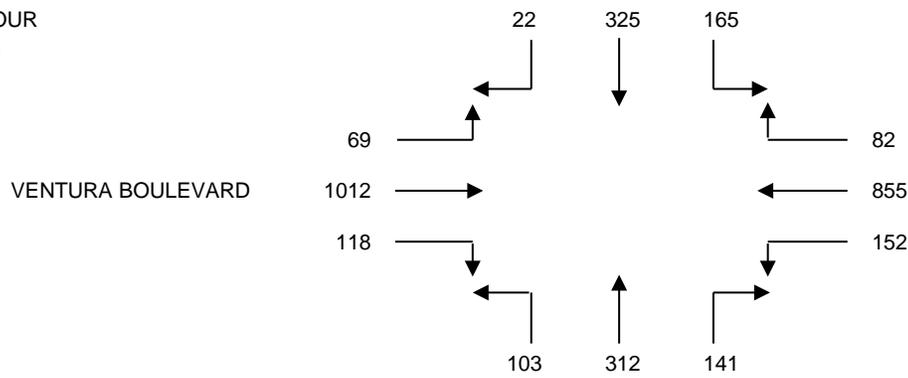
# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - WOODLAND HILLS  
 PROJECT: STUDIO CITY  
 DATE: TUESDAY, FEBRUARY 10, 2015  
 PERIOD: 07:00 AM TO 10:00 AM  
 INTERSECTION N/S COLDWATER CANYON AVENUE  
 E/W VENTURA BOULEVARD  
 FILE NUMBER: 4-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	4	84	15	12	134	34	10	36	10	28	151	15
0715-0730	4	79	20	14	141	36	18	48	20	22	182	12
0730-0745	8	72	20	16	175	35	27	64	37	17	187	13
0745-0800	7	74	30	17	207	40	42	79	32	15	225	17
0800-0815	5	86	36	20	216	37	37	76	34	20	233	10
0815-0830	4	78	49	21	238	31	33	81	26	38	297	15
0830-0845	5	73	39	21	219	39	30	71	20	32	237	24
0845-0900	8	88	41	20	182	45	41	84	23	28	245	20
0900-0915	12	85	45	27	176	44	32	75	20	28	224	16
0915-0930	14	80	37	20	155	27	44	60	31	36	276	21
0930-0945	13	71	45	24	161	32	27	69	25	30	295	26
0945-1000	15	69	35	30	160	54	29	55	23	31	265	31

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	23	309	85	59	657	145	97	227	99	82	745	57	2585
0715-0815	24	311	106	67	739	148	124	267	123	74	827	52	2862
0730-0830	24	310	135	74	836	143	139	300	129	90	942	55	3177
0745-0845	21	311	154	79	880	147	142	307	112	105	992	66	3316
0800-0900	22	325	165	82	855	152	141	312	103	118	1012	69	3356
0815-0915	29	324	174	89	815	159	136	311	89	126	1003	75	3330
0830-0930	39	326	162	88	732	155	147	290	94	124	982	81	3220
0845-0945	47	324	168	91	674	148	144	288	99	122	1040	83	3228
0900-1000	54	305	162	101	652	157	132	259	99	125	1060	94	3200

A.M. PEAK HOUR  
0800-0900



DATA PROVIDED BY:

THE TRAFFIC SOLUTION  
 329 DIAMOND STREET  
 ARCADIA, CALIFORNIA 91005  
 PH: 626-446-7978  
 FAX: 626-446-2877

COLDWATER CANYON AVENUE

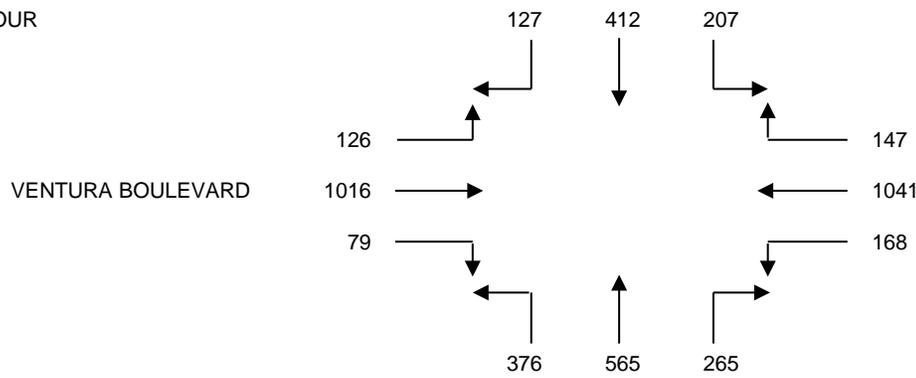
# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - WOODLAND HILLS  
 PROJECT: STUDIO CITY  
 DATE: TUESDAY, FEBRUARY 10, 2015  
 PERIOD: 03:00 PM TO 06:00 PM  
 INTERSECTION N/S COLDWATER CANYON AVENUE  
 E/W VENTURA BOULEVARD  
 FILE NUMBER: 4-PM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0300-0315	37	63	45	36	222	43	57	118	51	25	261	27
0315-0330	44	73	50	39	223	30	68	123	57	23	289	38
0330-0345	48	77	63	43	257	48	76	124	54	29	280	35
0345-0400	38	81	48	26	202	37	69	129	69	21	277	36
0400-0415	29	93	51	43	237	30	67	123	86	27	284	40
0415-0430	39	91	57	40	241	51	67	132	70	20	270	26
0430-0445	36	98	44	39	234	45	56	135	68	25	253	27
0445-0500	43	110	45	37	261	37	60	140	90	21	294	36
0500-0515	30	99	56	38	247	46	75	147	83	19	258	33
0515-0530	26	88	55	42	270	39	75	148	107	21	241	25
0530-0545	28	115	51	30	263	46	55	130	96	18	223	32
0545-0600	29	96	39	43	247	50	50	127	75	20	207	25

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0300-0400	167	294	206	144	904	158	270	494	231	98	1107	136	4209
0315-0415	159	324	212	151	919	145	280	499	266	100	1130	149	4334
0330-0430	154	342	219	152	937	166	279	508	279	97	1111	137	4381
0345-0445	142	363	200	148	914	163	259	519	293	93	1084	129	4307
0400-0500	147	392	197	159	973	163	250	530	314	93	1101	129	4448
0415-0515	148	398	202	154	983	179	258	554	311	85	1075	122	4469
0430-0530	135	395	200	156	1012	167	266	570	348	86	1046	121	4502
0445-0545	127	412	207	147	1041	168	265	565	376	79	1016	126	4529
0500-0600	113	398	201	153	1027	181	255	552	361	78	929	115	4363

P.M. PEAK HOUR  
0445-0545



DATA PROVIDED BY:

THE TRAFFIC SOLUTION  
 329 DIAMOND STREET  
 ARCADIA, CALIFORNIA 91005  
 PH: 626-446-7978  
 FAX: 626-446-2877

COLDWATER CANYON AVENUE

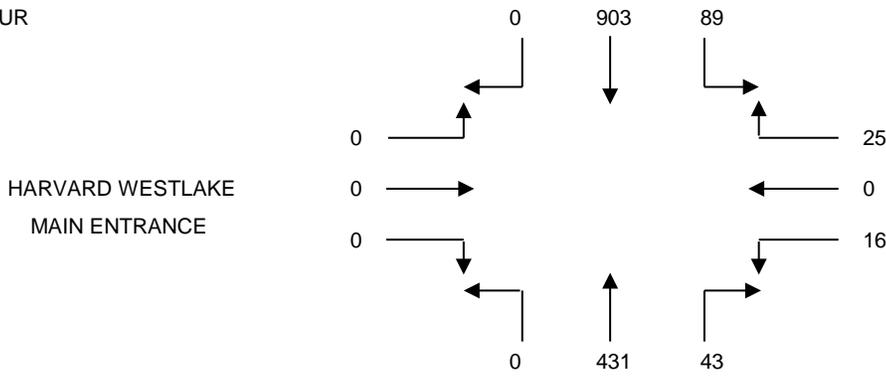
# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - WOODLAND HILLS  
 PROJECT: STUDIO CITY  
 DATE: TUESDAY, FEBRUARY 10, 2015  
 PERIOD: 07:00 AM TO 10:00 AM  
 INTERSECTION N/S COLDWATER CANYON AVENUE  
 E/W HARVARD WESTLAKE MAIN ENTRANCE  
 FILE NUMBER: 5-AM

15 MINUTE TOTALS	1	2	3	4	5	6	7	8	9	10	11	12
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0700-0715	0	263	12	2	0	2	2	47	0	0	0	0
0715-0730	0	233	27	2	0	2	5	68	0	0	0	0
0730-0745	0	224	37	7	0	7	12	101	0	0	0	0
0745-0800	0	214	24	11	0	7	22	107	0	0	0	0
0800-0815	0	220	18	5	0	2	7	112	0	0	0	0
0815-0830	0	245	10	2	0	0	2	111	0	0	0	0
0830-0845	0	239	9	2	0	0	3	120	0	0	0	0
0845-0900	0	238	7	3	0	0	3	143	0	0	0	0
0900-0915	0	226	2	1	0	0	2	113	0	0	0	0
0915-0930	0	190	3	1	0	0	1	108	0	0	0	0
0930-0945	0	199	4	4	0	0	1	104	0	0	0	0
0945-1000	0	225	5	4	0	0	2	101	0	0	0	0

1 HOUR TOTALS	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	
0700-0800	0	934	100	22	0	18	41	323	0	0	0	0	1438
0715-0815	0	891	106	25	0	18	46	388	0	0	0	0	1474
0730-0830	0	903	89	25	0	16	43	431	0	0	0	0	1507
0745-0845	0	918	61	20	0	9	34	450	0	0	0	0	1492
0800-0900	0	942	44	12	0	2	15	486	0	0	0	0	1501
0815-0915	0	948	28	8	0	0	10	487	0	0	0	0	1481
0830-0930	0	893	21	7	0	0	9	484	0	0	0	0	1414
0845-0945	0	853	16	9	0	0	7	468	0	0	0	0	1353
0900-1000	0	840	14	10	0	0	6	426	0	0	0	0	1296

A.M. PEAK HOUR  
0730-0830



DATA PROVIDED BY:

THE TRAFFIC SOLUTION  
 329 DIAMOND STREET  
 ARCADIA, CALIFORNIA 91005  
 PH: 626-446-7978  
 FAX: 626-446-2877

COLDWATER CANYON AVENUE

# INTERSECTION TURNING MOVEMENT COUNT SUMMARY

CLIENT: LLG - WOODLAND HILLS  
 PROJECT: STUDIO CITY  
 DATE: TUESDAY, FEBRUARY 10, 2015  
 PERIOD: 02:00 PM TO 06:00 PM  
 INTERSECTION N/S COLDWATER CANYON AVENUE  
 E/W HARVARD WESTLAKE MAIN ENTRANCE  
 FILE NUMBER: 5-PM

15 MINUTE	1	2	3	4	5	6	7	8	9	10	11	12
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT
0200-0215	0	174	4	13	0	4	0	213	0	0	0	0
0215-0230	0	177	6	13	0	5	1	258	0	0	0	0
0230-0245	0	185	6	7	0	3	0	210	0	0	0	0
0245-0300	0	130	13	15	0	17	0	246	0	0	0	0
0300-0315	0	134	18	29	0	22	0	251	0	0	0	0
0315-0330	0	141	15	16	0	10	2	257	0	0	0	0
0330-0345	0	153	14	5	0	2	1	248	0	0	0	0
0345-0400	0	151	12	11	0	5	1	262	0	0	0	0
0400-0415	0	150	10	10	0	1	2	280	0	0	0	0
0415-0430	0	164	10	14	0	3	0	282	0	0	0	0
0430-0445	0	157	6	7	0	2	1	255	0	0	0	0
0445-0500	0	178	14	17	0	7	0	269	0	0	0	0
0500-0515	0	159	22	29	0	5	1	310	0	0	0	0
0515-0530	0	155	17	37	0	15	3	289	0	0	0	0
0530-0545	0	165	10	27	0	14	3	267	0	0	0	0
0545-0600	0	129	18	21	0	6	1	248	0	0	0	0

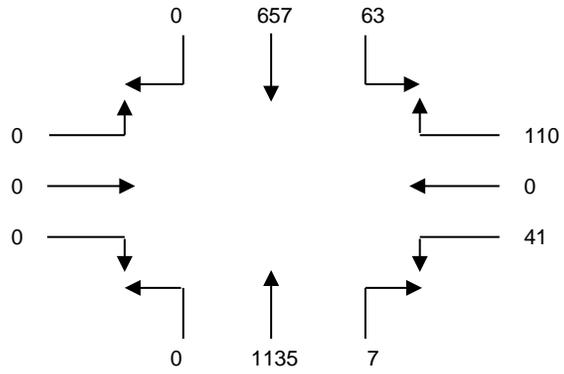
1 HOUR	1	2	3	4	5	6	7	8	9	10	11	12	TOTALS
TOTALS	SBRT	SBTH	SBLT	WBRT	WBTH	WBLT	NBRT	NBTH	NBLT	EBRT	EBTH	EBLT	TOTALS
0200-0300	0	666	29	48	0	29	1	927	0	0	0	0	1700
0215-0315	0	626	43	64	0	47	1	965	0	0	0	0	1746
0230-0330	0	590	52	67	0	52	2	964	0	0	0	0	1727
0245-0345	0	558	60	65	0	51	3	1002	0	0	0	0	1739
0300-0400	0	579	59	61	0	39	4	1018	0	0	0	0	1760
0315-0415	0	595	51	42	0	18	6	1047	0	0	0	0	1759
0330-0430	0	618	46	40	0	11	4	1072	0	0	0	0	1791
0345-0445	0	622	38	42	0	11	4	1079	0	0	0	0	1796
0400-0500	0	649	40	48	0	13	3	1086	0	0	0	0	1839
0415-0515	0	658	52	67	0	17	2	1116	0	0	0	0	1912
0430-0530	0	649	59	90	0	29	5	1123	0	0	0	0	1955
0445-0545	0	657	63	110	0	41	7	1135	0	0	0	0	2013
0500-0600	0	608	67	114	0	40	8	1114	0	0	0	0	1951

DATA PROVIDED BY:

THE TRAFFIC SOLUTION  
 329 DIAMOND STREET  
 ARCADIA, CALIFORNIA 91005  
 PH: 626-446-7978  
 FAX: 626-446-2877

P.M. PEAK HOUR  
0445-0545

HARVARD WESTLAKE  
MAIN ENTRANCE



COLDWATER CANYON AVENUE

DATA PROVIDED BY:

THE TRAFFIC SOLUTION  
329 DIAMOND STREET  
ARCADIA, CALIFORNIA 91005  
PH: 626-446-7978  
FAX: 626-446-2877

# CITY TRAFFIC COUNTERS

www.ctcounters.com

File Name : ColdwaterCyn\_101WBRamps

Site Code : 00000000

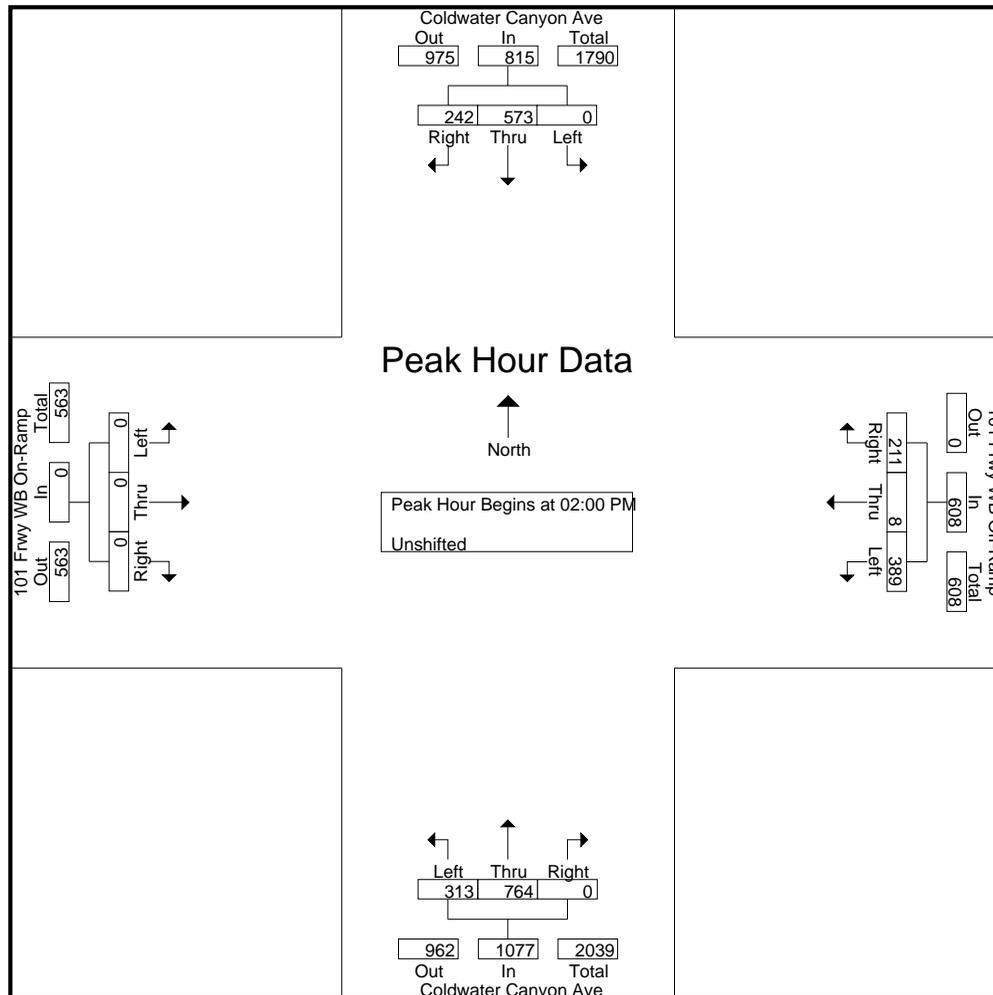
Start Date : 7/11/2015

Page No : 1

### Groups Printed- Unshifted

Start Time	Coldwater Canyon Ave Southbound			101 Frwy WB Off-Ramp Westbound			Coldwater Canyon Ave Northbound			101 Frwy WB On-Ramp Eastbound			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
01:00 PM	0	134	72	78	3	41	92	171	0	0	0	0	591
01:15 PM	0	159	68	99	2	36	81	149	0	0	0	0	594
01:30 PM	0	139	65	98	0	52	75	163	0	0	0	0	592
01:45 PM	0	157	41	75	0	38	84	172	0	0	0	0	567
Total	0	589	246	350	5	167	332	655	0	0	0	0	2344
02:00 PM	0	127	63	76	2	43	71	167	0	0	0	0	549
02:15 PM	0	144	62	116	2	34	87	208	0	0	0	0	653
02:30 PM	0	157	62	92	3	49	82	199	0	0	0	0	644
02:45 PM	0	145	55	105	1	85	73	190	0	0	0	0	654
Total	0	573	242	389	8	211	313	764	0	0	0	0	2500
Grand Total	0	1162	488	739	13	378	645	1419	0	0	0	0	4844
Apprch %	0	70.4	29.6	65.4	1.2	33.5	31.2	68.8	0	0	0	0	
Total %	0	24	10.1	15.3	0.3	7.8	13.3	29.3	0	0	0	0	

Start Time	Coldwater Canyon Ave Southbound				101 Frwy WB Off-Ramp Westbound				Coldwater Canyon Ave Northbound				101 Frwy WB On-Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 01:00 PM to 02:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:00 PM																	
02:00 PM	0	127	63	190	76	2	43	121	71	167	0	238	0	0	0	0	549
02:15 PM	0	144	62	206	116	2	34	152	87	208	0	295	0	0	0	0	653
02:30 PM	0	157	62	219	92	3	49	144	82	199	0	281	0	0	0	0	644
02:45 PM	0	145	55	200	105	1	85	191	73	190	0	263	0	0	0	0	654
Total Volume	0	573	242	815	389	8	211	608	313	764	0	1077	0	0	0	0	2500
% App. Total	0	70.3	29.7		64	1.3	34.7		29.1	70.9	0		0	0	0		
PHF	.000	.912	.960	.930	.838	.667	.621	.796	.899	.918	.000	.913	.000	.000	.000	.000	.956



# CITY TRAFFIC COUNTERS

www.ctcounters.com

File Name : coldwatercyn\_101ebramps

Site Code : 00000000

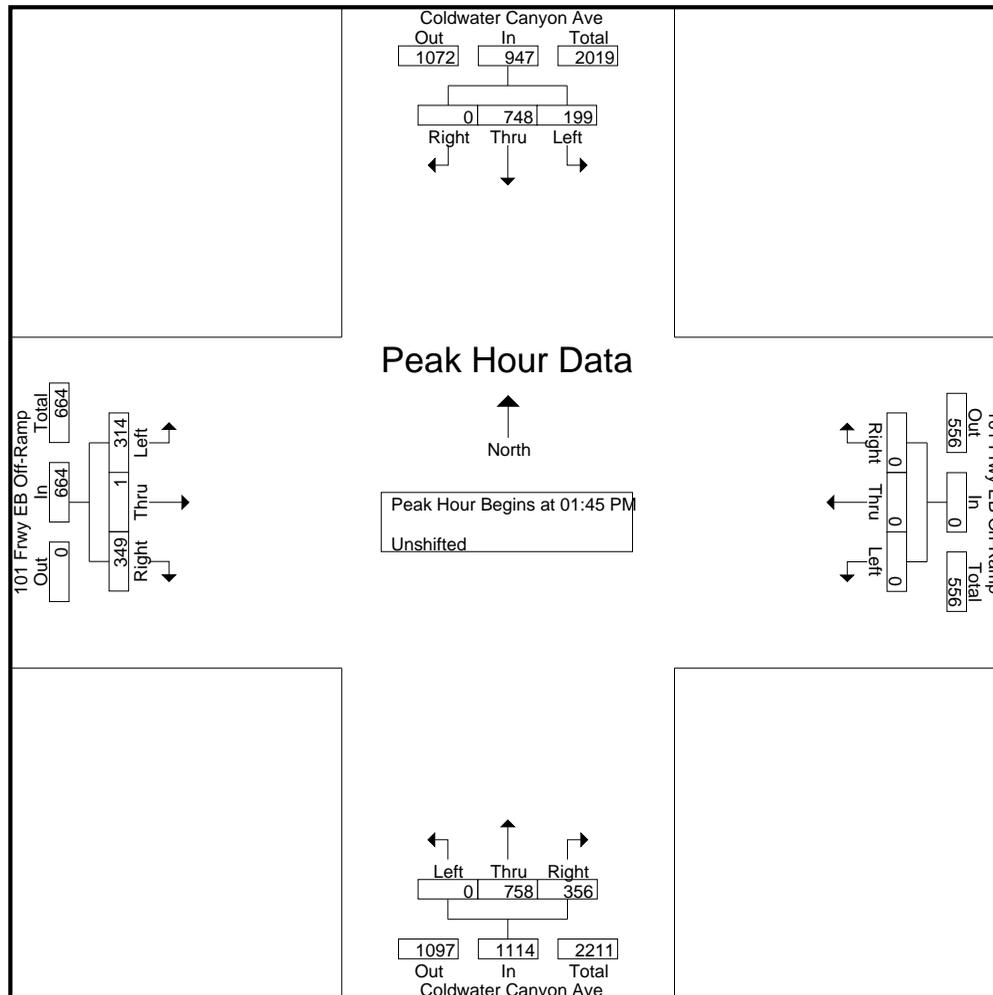
Start Date : 7/11/2015

Page No : 1

## Groups Printed- Unshifted

Start Time	Coldwater Canyon Ave Southbound			101 Frwy EB On-Ramp Westbound			Coldwater Canyon Ave Northbound			101 Frwy EB Off-Ramp Eastbound			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
01:00 PM	48	163	0	0	0	0	0	196	88	68	1	88	652
01:15 PM	49	188	0	0	0	0	0	178	90	53	0	74	632
01:30 PM	47	189	0	0	0	0	0	174	76	64	0	86	636
01:45 PM	54	178	0	0	0	0	0	178	98	78	0	100	686
Total	198	718	0	0	0	0	0	726	352	263	1	348	2606
02:00 PM	38	165	0	0	0	0	0	173	68	65	1	76	586
02:15 PM	52	210	0	0	0	0	0	205	87	91	0	83	728
02:30 PM	55	195	0	0	0	0	0	202	103	80	0	90	725
02:45 PM	53	195	0	0	0	0	0	171	78	92	0	96	685
Total	198	765	0	0	0	0	0	751	336	328	1	345	2724
Grand Total	396	1483	0	0	0	0	0	1477	688	591	2	693	5330
Apprch %	21.1	78.9	0	0	0	0	0	68.2	31.8	46	0.2	53.9	
Total %	7.4	27.8	0	0	0	0	0	27.7	12.9	11.1	0	13	

Start Time	Coldwater Canyon Ave Southbound				101 Frwy EB On-Ramp Westbound				Coldwater Canyon Ave Northbound				101 Frwy EB Off-Ramp Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 01:00 PM to 02:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 01:45 PM																	
01:45 PM	54	178	0	232	0	0	0	0	0	178	98	276	78	0	<b>100</b>	<b>178</b>	686
02:00 PM	38	165	0	203	0	0	0	0	0	173	68	241	65	<b>1</b>	76	142	586
02:15 PM	52	<b>210</b>	0	<b>262</b>	0	0	0	0	0	<b>205</b>	87	292	<b>91</b>	0	83	174	<b>728</b>
02:30 PM	<b>55</b>	195	0	250	0	0	0	0	0	202	<b>103</b>	<b>305</b>	80	0	90	170	725
Total Volume	199	748	0	947	0	0	0	0	0	758	356	1114	314	1	349	664	2725
% App. Total	21	79	0		0	0	0			68	32		47.3	0.2	52.6		
PHF	.905	.890	.000	.904	.000	.000	.000	.000	.000	.924	.864	.913	.863	.250	.873	.933	.936



# CITY TRAFFIC COUNTERS

www.ctcounters.com

File Name : coldwatercyn\_moorpark

Site Code : 00000000

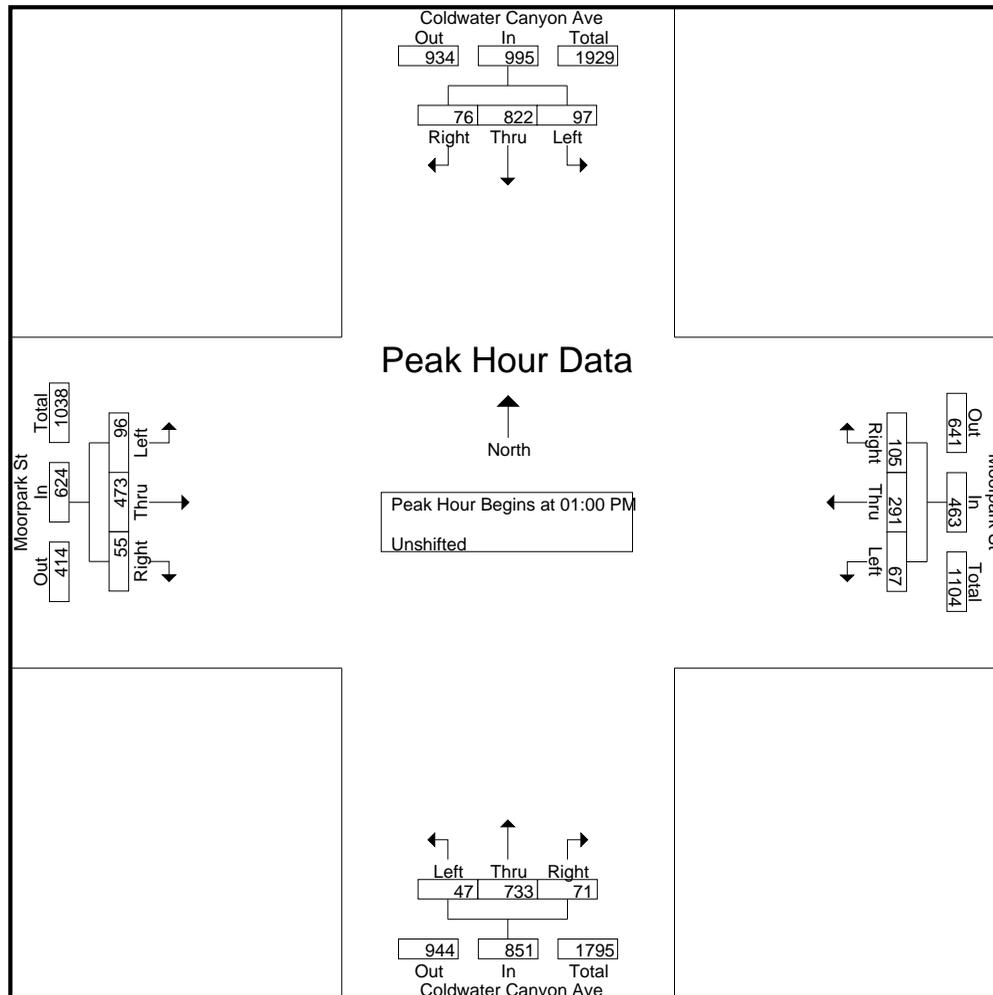
Start Date : 7/11/2015

Page No : 1

### Groups Printed- Unshifted

Start Time	Coldwater Canyon Ave Southbound			Moorpark St Westbound			Coldwater Canyon Ave Northbound			Moorpark St Eastbound			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
01:00 PM	21	193	16	23	82	35	17	179	19	16	131	10	742
01:15 PM	21	201	18	19	64	24	8	200	14	22	116	16	723
01:30 PM	26	205	14	14	77	27	9	153	22	27	114	17	705
01:45 PM	29	223	28	11	68	19	13	201	16	31	112	12	763
Total	97	822	76	67	291	105	47	733	71	96	473	55	2933
02:00 PM	20	161	28	19	72	20	14	158	15	24	87	16	634
02:15 PM	36	191	31	16	64	22	13	202	20	25	92	14	726
02:30 PM	39	197	15	9	79	25	13	233	14	24	93	20	761
02:45 PM	28	214	32	17	74	20	5	202	20	31	89	13	745
Total	123	763	106	61	289	87	45	795	69	104	361	63	2866
<b>Grand Total</b>	<b>220</b>	<b>1585</b>	<b>182</b>	<b>128</b>	<b>580</b>	<b>192</b>	<b>92</b>	<b>1528</b>	<b>140</b>	<b>200</b>	<b>834</b>	<b>118</b>	<b>5799</b>
Approch %	11.1	79.8	9.2	14.2	64.4	21.3	5.2	86.8	8	17.4	72.4	10.2	
Total %	3.8	27.3	3.1	2.2	10	3.3	1.6	26.3	2.4	3.4	14.4	2	

Start Time	Coldwater Canyon Ave Southbound				Moorpark St Westbound				Coldwater Canyon Ave Northbound				Moorpark St Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 01:00 PM to 02:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 01:00 PM																	
01:00 PM	21	193	16	230	23	82	35	140	17	179	19	215	16	131	10	157	742
01:15 PM	21	201	18	240	19	64	24	107	8	200	14	222	22	116	16	154	723
01:30 PM	26	205	14	245	14	77	27	118	9	153	22	184	27	114	17	158	705
01:45 PM	29	223	28	280	11	68	19	98	13	201	16	230	31	112	12	155	763
Total Volume	97	822	76	995	67	291	105	463	47	733	71	851	96	473	55	624	2933
% App. Total	9.7	82.6	7.6		14.5	62.9	22.7		5.5	86.1	8.3		15.4	75.8	8.8		
PHF	.836	.922	.679	.888	.728	.887	.750	.827	.691	.912	.807	.925	.774	.903	.809	.987	.961



# CITY TRAFFIC COUNTERS

www.ctcounters.com

File Name : coldwatercyn\_ventura

Site Code : 00000000

Start Date : 7/11/2015

Page No : 1

## Groups Printed- Unshifted

Start Time	Coldwater Canyon Ave Southbound			Ventura Blvd Westbound			Coldwater Canyon Ave Northbound			Ventura Blvd Eastbound			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
01:00 PM	80	104	47	28	248	95	27	82	15	54	225	41	1046
01:15 PM	77	101	53	47	251	62	33	102	32	53	220	31	1062
01:30 PM	78	122	45	31	214	41	35	120	36	38	230	35	1025
01:45 PM	75	116	39	34	256	54	32	100	17	44	239	40	1046
Total	310	443	184	140	969	252	127	404	100	189	914	147	4179
02:00 PM	66	99	38	40	221	52	32	87	21	52	211	43	962
02:15 PM	67	112	44	35	237	70	40	133	27	58	216	32	1071
02:30 PM	77	100	53	24	239	61	38	135	23	39	244	31	1064
02:45 PM	89	94	58	21	223	57	39	136	25	36	194	41	1013
Total	299	405	193	120	920	240	149	491	96	185	865	147	4110
Grand Total	609	848	377	260	1889	492	276	895	196	374	1779	294	8289
Apprch %	33.2	46.2	20.6	9.8	71.5	18.6	20.2	65.5	14.3	15.3	72.7	12	
Total %	7.3	10.2	4.5	3.1	22.8	5.9	3.3	10.8	2.4	4.5	21.5	3.5	

# CITY TRAFFIC COUNTERS

www.ctcounters.com

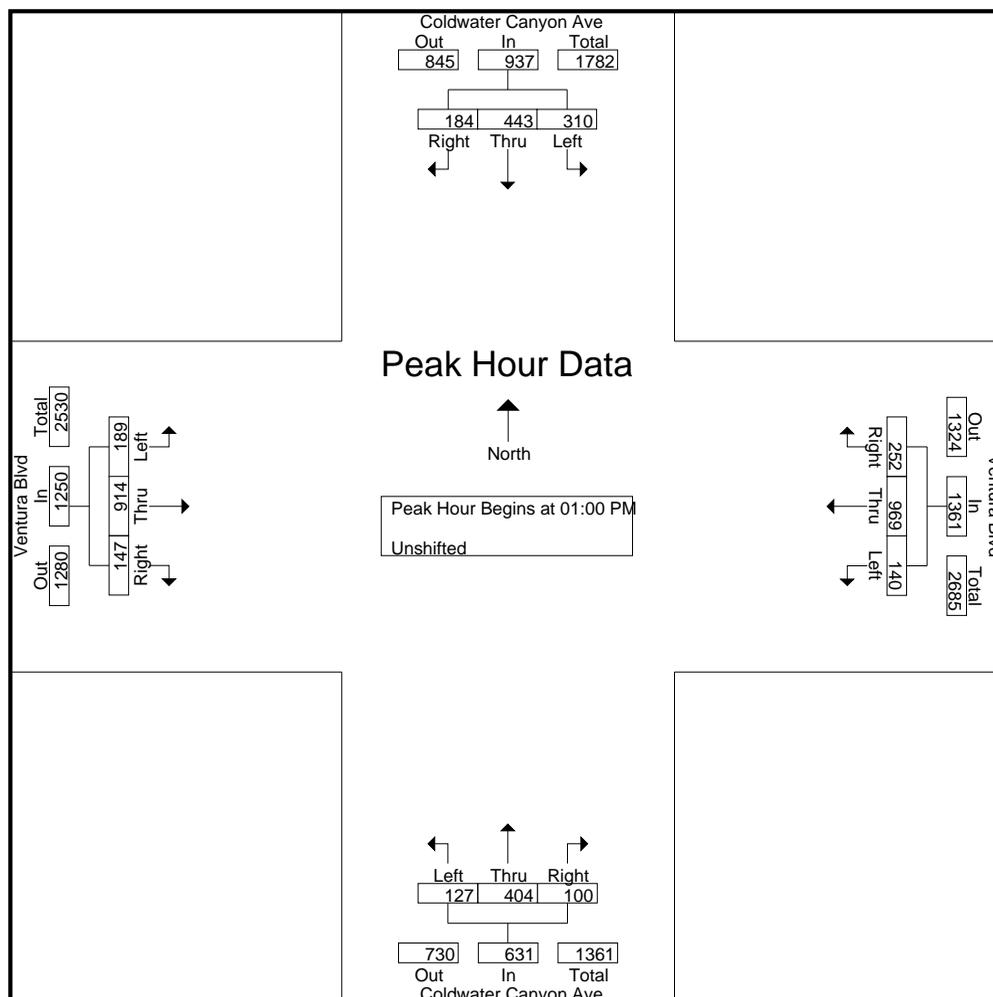
File Name : coldwatercyn\_ventura

Site Code : 00000000

Start Date : 7/11/2015

Page No : 2

Start Time	Coldwater Canyon Ave Southbound				Ventura Blvd Westbound				Coldwater Canyon Ave Northbound				Ventura Blvd Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 01:00 PM to 02:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 01:00 PM																	
01:00 PM	80	104	47	231	28	248	95	371	27	82	15	124	54	225	41	320	1046
01:15 PM	77	101	53	231	47	251	62	360	33	102	32	167	53	220	31	304	1062
01:30 PM	78	122	45	245	31	214	41	286	35	120	36	191	38	230	35	303	1025
01:45 PM	75	116	39	230	34	256	54	344	32	100	17	149	44	239	40	323	1046
Total Volume	310	443	184	937	140	969	252	1361	127	404	100	631	189	914	147	1250	4179
% App. Total	33.1	47.3	19.6		10.3	71.2	18.5		20.1	64	15.8		15.1	73.1	11.8		
PHF	.969	.908	.868	.956	.745	.946	.663	.917	.907	.842	.694	.826	.875	.956	.896	.967	.984



# CITY TRAFFIC COUNTERS

www.ctcounters.com

File Name : coldwatercyn\_harvard-westlakedrwy

Site Code : 00000000

Start Date : 7/11/2015

Page No : 1

### Groups Printed- Unshifted

Start Time	Coldwater Canyon Ave Southbound			Harvard-Westlake Driveway Westbound			Coldwater Canyon Ave Northbound			Eastbound			Int. Total
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
01:00 PM	7	156	0	0	0	4	0	126	1	0	0	0	294
01:15 PM	5	183	0	0	0	6	0	180	2	0	0	0	376
01:30 PM	11	161	0	0	0	4	0	161	0	0	0	0	337
01:45 PM	7	172	0	0	0	2	0	130	1	0	0	0	312
Total	30	672	0	0	0	16	0	597	4	0	0	0	1319
02:00 PM	6	166	0	0	0	8	0	156	1	0	0	0	337
02:15 PM	7	172	0	0	0	8	0	210	0	0	0	0	397
02:30 PM	3	155	0	1	0	5	0	176	0	0	0	0	340
02:45 PM	4	143	0	1	0	3	0	182	0	0	0	0	333
Total	20	636	0	2	0	24	0	724	1	0	0	0	1407
Grand Total	50	1308	0	2	0	40	0	1321	5	0	0	0	2726
Apprch %	3.7	96.3	0	4.8	0	95.2	0	99.6	0.4	0	0	0	
Total %	1.8	48	0	0.1	0	1.5	0	48.5	0.2	0	0	0	

# CITY TRAFFIC COUNTERS

www.ctcounters.com

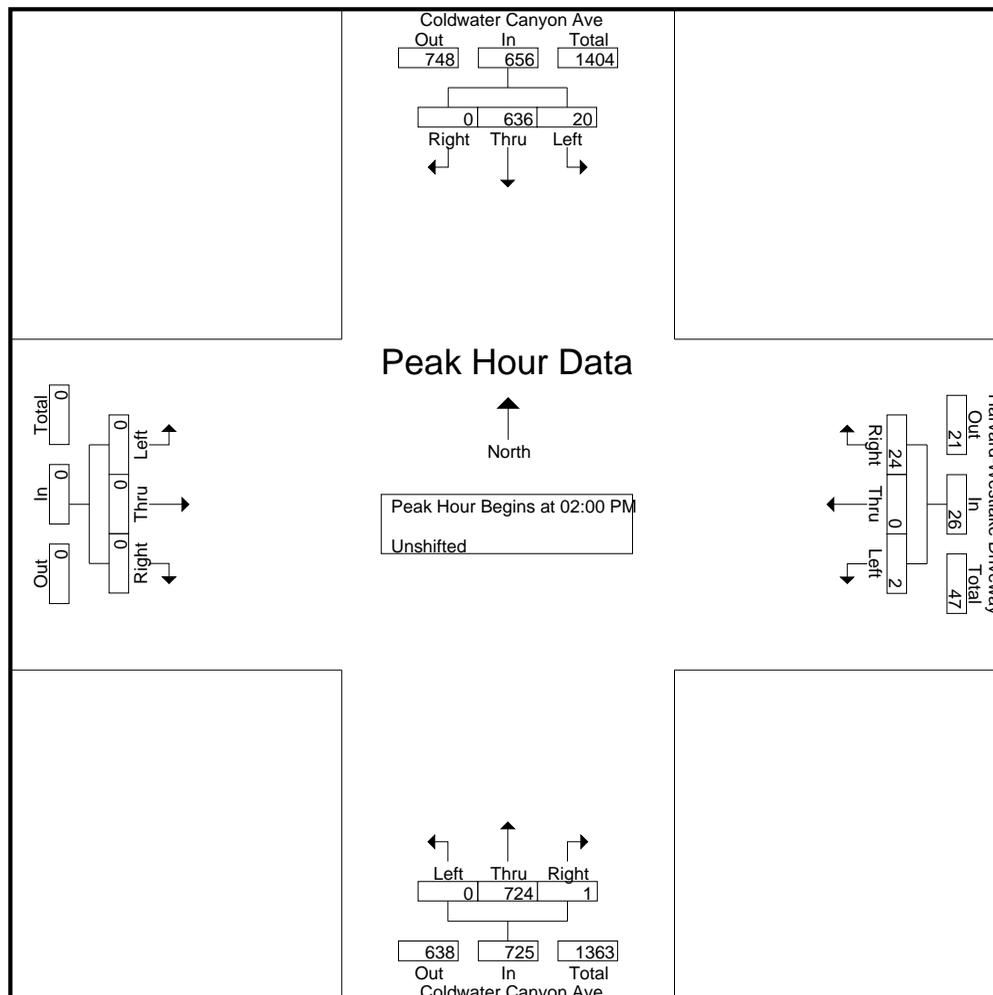
File Name : coldwatercyn\_harvard-westlakedrwy

Site Code : 00000000

Start Date : 7/11/2015

Page No : 2

Start Time	Coldwater Canyon Ave Southbound				Harvard-Westlake Driveway Westbound				Coldwater Canyon Ave Northbound				Eastbound				Int. Total
	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	Left	Thru	Right	App. Total	
Peak Hour Analysis From 01:00 PM to 02:45 PM - Peak 1 of 1																	
Peak Hour for Entire Intersection Begins at 02:00 PM																	
02:00 PM	6	166	0	172	0	0	8	8	0	156	1	157	0	0	0	0	337
02:15 PM	7	172	0	179	0	0	8	8	0	210	0	210	0	0	0	0	397
02:30 PM	3	155	0	158	1	0	5	6	0	176	0	176	0	0	0	0	340
02:45 PM	4	143	0	147	1	0	3	4	0	182	0	182	0	0	0	0	333
Total Volume	20	636	0	656	2	0	24	26	0	724	1	725	0	0	0	0	1407
% App. Total	3	97	0		7.7	0	92.3		0	99.9	0.1		0	0	0		
PHF	.714	.924	.000	.916	.500	.000	.750	.813	.000	.862	.250	.863	.000	.000	.000	.000	.886



## APPENDIX C

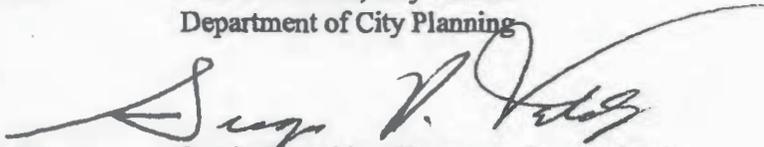
### LADOT ASSESSMENT LETTER – SPORTSMEN'S LODGE

**CITY OF LOS ANGELES**  
INTER-DEPARTMENTAL CORRESPONDENCE

12833 Ventura Boulevard  
DOT Case No. Ven 10-005

Date: March 18, 2014

To: Dan O'Donnell, City Planner  
Department of City Planning

  
From: Sergio D. Valdez, Transportation Engineer  
Department of Transportation

Subject: **REVISED TRAFFIC ASSESSMENT FOR THE PROPOSED NEW COMMERCIAL DEVELOPMENT LOCATED AT THE SPORTSMEN'S LODGE EVENT CENTER AT 12833 VENTURA BOULEVARD**

The Department of Transportation (DOT) has completed the traffic assessment for a proposed health club and the reconfiguration of the event center for the sportsmen's lodge at 12833 Ventura Boulevard in the community of Studio City. This traffic assessment is based on a traffic study prepared by Overland Traffic Consultants, Inc. dated February 2014. This traffic assessment supersedes the previous DOT's assessment letters dated March 2010. After a careful review of the pertinent data, DOT has determined that the traffic study adequately describes the project-related traffic impacts of the proposed development.

**DISCUSSION AND FINDINGS**

The proposed project will construct and re-use the existing Sportsmen's Hotel and Event Center which consists of a restaurant and a banquet facility and a 196-room hotel. The proposed project will remove the event center and construct a 17,514 square-foot quality restaurant, a 9,154 square-foot high turn-over restaurant, a 35,101 square-foot retail, and a 30,000 square-foot health club. The proposed project will generate 2,001 daily new trips with 104 new trips in the a.m. peak hour and 136 new trips in the p.m. peak hour as shown below. The trip generation estimates are based on formulas published by the Institute of Transportation Engineers (ITE) Trip Generation, 9th Edition, 2012.

Land Use	Size	Daily Trips	AM Peak Hour Trips			PM Peak Hour Trips		
			In	Out	Total	In	Out	Total
<b>Proposed Project</b>								
Hotel (310)	196 rm	1,601	61	43	104	60	58	118
Quality Restaurant (931)	17,514 sf	1,575	50	32	82	28	46	74
Pass-By Trip Reduction	10%	-158	-5	-3	-8	-3	-4	-7
High-Turnover Restaurant (932)	9,154 sf	1,164	54	45	99	54	36	90
Pass-By Trip Reduction	20%	-233	-11	-9	-20	-11	-7	-18
Retail (931)	35,101 sf	1,499	21	13	34	62	68	130
Pass-By Trip Reduction	50%	-750	-10	-7	-17	-31	-34	-65

Health Club (492)	30,000 sf	988	21	21	42	60	46	106
Pass-By Trip Reduction	20%	-750	-4	-4	-8	-12	-9	-21
<b>Total Proposed Trips</b>		<b>5,488</b>	<b>177</b>	<b>131</b>	<b>308</b>	<b>207</b>	<b>200</b>	<b>407</b>
<b>Existing Land Use</b>								
Hotel (310)	196 rm	1,601	61	43	104	60	58	118
Restaurant (931)	3,500 sf	315	2	1	3	17	9	26
Pass-By Trip Reduction	10%	-32	-	-	-	-2	-1	-3
Banquet Facility (495)	47,400 sf	1,603	64	33	97	64	66	130
<b>Total Existing Trips</b>		<b>3,487</b>	<b>127</b>	<b>77</b>	<b>204</b>	<b>139</b>	<b>132</b>	<b>271</b>
<b>Total Net Trips</b>		<b>2,001</b>	<b>50</b>	<b>54</b>	<b>104</b>	<b>68</b>	<b>68</b>	<b>136</b>

After a review of the pertinent data, DOT has determined that the proposed project will have a significant traffic impact at the intersections of Coldwater Canyon Avenue and Ventura Boulevard, and Whitsett Avenue and Ventura Boulevard.

Attachment A summarizes the volume-to-capacity ratios and levels of service at the studied intersections.

The Department of Transportation recommends that the following project requirements be adopted as conditions of project approval.

**A. Mitigation Measure for Coldwater Canyon Boulevard & Ventura Boulevard**

The proposed project will significantly impact the intersection of Coldwater Canyon Avenue and Ventura Boulevard, which will be mitigated to a level of insignificance by widening 5 feet along the north side of Ventura Boulevard east of Coldwater Canyon Avenue for approximately 150 feet to install an exclusive westbound right-turn-only lane. Restripe south of Ventura Boulevard east of Coldwater Canyon Avenue for approximately 100 feet to allow for the installation of eastbound right-turn only lane.

Relocate and modify any existing street lighting, signal, striping, power poles, trees, signs, curbs, gutter, utilities, etc. as required.

**B. Mitigation Measure for Whitsett Avenue & Ventura Boulevard**

The proposed project will significantly impact the intersection of Whitsett Avenue and Ventura Boulevard, which will be mitigated to a level of insignificance by widening 5 feet along the north side of Ventura Boulevard east of Whitsett Avenue for approximately 150 feet to install an exclusive westbound right-turn-only lane.

Relocate and modify any existing street lighting, signal, striping, power poles, trees, signs, curbs, gutter, utilities, etc. as required.

**C. Highway Dedication and Improvements:**

Pursuant to Section 10 of the Specific Plan, the applicant shall make certain street and highway dedications and improvements to the satisfaction of DOT and the Department of

Public Works, Bureau of Engineering. The dedications and improvements, as indicated below, are required of this project.

Ventura Boulevard is a designated Major Highway—Class II in the Street and Highways Element of the City's General Plan. The north side of Ventura Boulevard currently consists of a 50-foot half right-of-way with a 35-foot half roadway and a 15-foot sidewalk. The standard cross section for a major highway in the Specific Plan is a 57-foot half right-of-way with a 45-foot half roadway and a 12-foot sidewalk. The applicant shall dedicate 7 feet of land on Ventura Boulevard from the most west corner of the property on Ventura Boulevard (about 140 feet of frontage), excluding the portion of the existing building that is at the property line, and dedicate 2 feet of land for the remaining portion of the property on Ventura Boulevard to bring the right-of-way up to the standard required by the Specific Plan. Also the applicant shall widen Ventura Boulevard about 5 feet for the installation of an exclusive right-turn-only lane.

Coldwater Canyon Avenue is a designated Secondary Highway in the Street and Highways Element of the City's General Plan. The east side of Coldwater Canyon Avenue currently consists of a 43-foot half right-of-way with variable half roadway and sidewalk. The standard cross section for a secondary highway is a 45-foot half right-of-way with a 35-foot half roadway and a 10-foot sidewalk. The applicant shall dedicate 2 feet of land for the most north portion of the property on the Coldwater Canyon Boulevard (about 165 feet of frontage) to bring the right-of-way up to the standard required by the standard plan.

The above transportation improvements shall be guaranteed through the B-permit process of the Bureau of Engineering, Department of Public Works. Any improvements shall be constructed and completed before the issuance of the final certificate of occupancy, to the satisfaction of DOT and the Bureau of Engineering. Prior to setting the bond amount, the Bureau of Engineering shall require that the developer's engineer or contractor to contact DOT's B-Permit Coordinator at (213) 928-9663, to arrange a pre-design meeting to finalize the design for the required transportation improvements.

Additional street improvements may be required. The applicant should contact the Bureau of Engineering, Department of Public Works, to determine any other requirements. Any street dedication shall be completed through Quyen Phan in the Department of Public Works, Bureau of Engineering, Land Development Group, (213) 977-6955, before the issuance of any building permit for this project. Since the dedication procedure may be lengthy, the process should be commenced as soon as possible.

**D. Project Impact Assessment (PIA) Fee:**

Pursuant to Section 11 of the Specific Plan, the applicant shall pay or guarantee to pay a PIA Fee to DOT before the issuance of any building permit. The gross PIA Fee for this project is calculated below and can be paid in either a single payment or through a deferred payment plan. The gross PIA Fee has been reduced based upon evidence provided by the applicant that a legally permitted use existed for a minimum of one year between November 9, 1985 and the date of this letter. The PIA Fee shall be indexed annually, therefore, the PIA Fee may change depending on the actual date when payment is made.

**Proposed Project:**

Quality Restaurant Floor Area	=	17,514 square-feet
PIA Fee Rate (Category D in Studio City)	=	\$4.89 per square-foot of floor area
Proposed Project PIA Fee	=	17,514 x \$4.89
	=	\$85,643.46
 High-Turnover Restaurant Floor Area	=	 9,154 square-feet
PIA Fee Rate (Category D in Studio City)	=	\$4.89 per square-foot of floor area
Proposed Project PIA Fee	=	9,154 x \$4.89
	=	\$44,763.06
 Retail Floor Area	=	 35,101 square-feet
PIA Fee Rate (Category C in Studio City)	=	\$4.32 per square-foot of floor area
Proposed Project PIA Fee	=	35,101 x \$4.32
	=	\$151,636.32
 Health Club Floor Area	=	 30,000 square-feet
PIA Fee Rate (Category D in Studio City)	=	\$4.89 per square-foot of floor area
Proposed Project PIA Fee	=	30,000 x \$4.89
	=	\$146,700.00
 <b>Proposed PIA Fee Subtotal</b>	<b>=</b>	<b>\$428,742.84</b>
 <b>Existing Use:</b>		
Quality Restaurant Floor Area	=	3,500 square-feet
PIA Fee Rate (Category D in Studio City)	=	\$4.89 per square-foot of floor area
PIA Fee Credit	=	3,500 x \$4.89
	=	\$17,115.00
 Banquet Facility Floor Area	=	 47,400 square-feet
PIA Fee Rate (Category D in Studio City)	=	\$4.89 per square-foot of floor area
PIA Fee Credit	=	47,400 x \$4.89
	=	\$231,786.00
 <b>Existing PIA Fee Subtotal</b>	<b>=</b>	<b>\$248,901.00</b>
 <b>Net PIA Fee</b>	<b>=</b>	<b>\$428,742.84 - \$248,901.00</b>
	<b>=</b>	<b>\$179,841.84</b>

**E. Site Access and Internal Circulation:**

This determination does not include approval of the project's driveways, internal circulation, or parking scheme. Final DOT approval shall be obtained prior to issuance of any building permits. This should be accomplished by submitting detailed site and driveway plans with a minimum scale of 1"=40', to DOT's Valley Development Review Section at 6262 Van Nuys Boulevard, Suite 320, Van Nuys, CA 91401.

If you have any further questions, you may contact Albert Isagulian of my staff at (818) 374-4699.

**Attachments**

SV:AI c:12833VenturaRevision.wpd

- c: **Second Council District**  
**Brian Gallagher, DOT East Valley District**  
**B. J. Soni, DOT Accounting**  
**Tim Conger, DOT Geometric Design**  
**John Varghese, DOT Signal Design**  
**Ali Nahass, BOE Valley District**  
**Jerry Overland, Overland Traffic Consultants, Inc.**

**APPENDIX D**  
**CMA AND LEVELS OF SERVICE EXPLANATION**

## CRITICAL MOVEMENT ANALYSIS (CMA) DESCRIPTION

Level of Service is a term used to describe prevailing conditions and their effect on traffic. Broadly interpreted, the Level of Service concept denotes any one of a number of differing combinations of operating conditions which may take place as a roadway is accommodating various traffic volumes. Level of Service is a qualitative measure of the effect of such factors as travel speed, travel time, interruptions, freedom to maneuver, safety, driving comfort and convenience.

Six Levels of Service, A through F, have been defined in the 1965 *Highway Capacity Manual*. Level of Service A describes a condition of free flow, with low traffic volumes and relatively high speeds, while Level of Service F describes forced traffic flow at low speeds with jammed conditions and queues which cannot clear during the green phases.

Critical Movement Analysis (CMA) is a procedure which provides a capacity and level of service geometry and traffic signal operation and results in a level of service determination for the intersection as a whole operating unit.

The per lane volume for each movement in the intersection is determined and the per lane intersection capacity based on the Transportation Research Board (TRB) Report 212 (*Interim Materials on Highway Capacity*). The resulting CMA represents the ratio of the intersection's cumulative volume over its respective capacity (V/C ratio). Critical Movement Analysis takes into account lane widths, bus and truck operations, pedestrian activity and parking activity, as well as number of lanes and geometrics.

The Level of Service (abbreviated from the *Highway Capacity Manual*) are listed here with their corresponding CMA and Load Factor equivalents. Load Factor is that proportion of the signal cycles during the peak hour which are fully loaded; i.e. when all of the vehicles waiting at the beginning of green are not able to clear on that green phase.

Critical Movement Analysis Characteristics		
Level of Service	Load Factor	Equivalent CMA
A (free flow)	0.0	0.00 - 0.60
B (rural design)	0.0 - 0.1	0.61 - 0.70
C (urban design)	0.1 - 0.3	0.71 - 0.80
D (maximum urban design)	0.3 - 0.7	0.81 - 0.90
E (capacity)	0.7 - 1.0	0.91 - 1.00
F (force flow)	Not Applicable	Not Applicable

### SERVICE LEVEL A

There are no loaded cycles and few are even close to loaded at this service level. No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication.

### SERVICE LEVEL B

This level represents stable operation where an occasional approach phase is fully utilized and a substantial number are approaching full use. Many drivers begin to feel restricted within platoons of vehicles.

### SERVICE LEVEL C

At this level stable operation continues. Loading is still intermittent but more frequent than at Level B. Occasionally drivers may have to wait through more one red signal indication and backups may develop behind turning vehicles. Most drivers feel somewhat restricted, but not objectionably so.

### SERVICE LEVEL D

This level encompasses a zone of increasing restriction approaching instability at the intersection. Delays to approaching vehicles may be substantial during short peaks within the peak hour, but enough cycles with lower demand occur to permit periodic clearance of queues, thus preventing excessive backups. Drivers frequently have to wait through more than one red signal. This level is the lower limit of acceptable operation to most drivers.

### SERVICE LEVEL E

This represents near capacity and capacity operation. At capacity (CMA = 1.0) it represents the most vehicles that the particular intersection can accommodate. However, full utilization of every signal cycle is seldom attained no matter how great the demand. At this level all drivers wait through more than one red signal, and frequently through several.

### SERVICE LEVEL F

Jammed conditions. Traffic backed up from a downstream location on one of the street restricts or prevents movement of traffic through the intersection under consideration.

## APPENDIX D-1

### CMA DATA WORKSHEETS – COMMUTER WEEKDAY AND SATURDAY PEAK HOURS

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/29/2015									
CMA1	East-West Street:	US-101 Freeway NB Ramps	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0										
Override Capacity		2	2		2		2		2										
		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	1	216	0	216	216	25	273	1	273	0	273	1	273	0	273	1	273	
	Left-Through	0							0				0				0		
	Through	2	249	0	498	249	4	576	2	288	0	576	2	288	0	576	2	288	
	Through-Right	0							0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Through-Right	0								0				0				0		
Left-Right	0								0				0				0		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through	0							0				0				0		
	Through	2	353	0	722	353	32	861	2	425	0	861	2	425	0	861	2	425	
	Through-Right	1							1				1				1		
	Right	0	337	0	337	337	26	413	0	413	0	413	0	413	0	413	0	413	
Left-Through-Right	0								0				0				0		
Left-Right	0								0				0				0		
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through	0							0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through-Right	0							0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
Left-Through-Right	0								0				0				0		
Left-Right	0								0				0				0		
WESTBOUND	Left	1	159	12	295	163	10	335	1	195	12	347	1	199	0	347	1	199	
	Left-Through	0							0				0				0		
	Through	0	159	0	2	163	0	2	0	195	0	2	0	199	0	2	0	199	
	Through-Right	0							0				0				0		
	Right	1	0	0	191	0	29	248	1	0	0	248	1	0	0	248	1	0	
Left-Through-Right	1								1				1				1		
Left-Right	0								0				0				0		
CRITICAL VOLUMES		North-South: 569 East-West: 159 SUM: 728	North-South: 569 East-West: 163 SUM: 732	North-South: 698 East-West: 195 SUM: 893	North-South: 698 East-West: 199 SUM: 897	North-South: 698 East-West: 199 SUM: 897													
VOLUME/CAPACITY (V/C) RATIO:		0.511		0.514		0.627		0.629		0.629		0.629		0.629		0.629		0.629	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.411		0.414		0.527		0.529		0.529		0.529		0.529		0.529		0.529	
LEVEL OF SERVICE (LOS):		A		A		A		A		A		A		A		A		A	

REMARKS:

Version: 1i Beta; 8/4/2011

### PROJECT IMPACT

Change in v/c due to project:	0.002	Δv/c after mitigation:	0.002
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue		Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/29/2015								
	CMA1	East-West Street:	US-101 Freeway NB Ramps		Projection Year:	2019	Peak Hour:	2PM	Reviewed by:		Project:	Harvard-Westlake Upper School I							
No. of Phases		3		3		3		3		3									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0								
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0								
Override Capacity		2		2		2		2		2									
		0		0		0		0		0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	392	1	392	0	392	392	21	471	1	471	0	471	1	471	0	471	1	471
	Left-Through		0							0				0				0	
	Through	946	2	473	0	946	473	43	1129	2	565	0	1129	2	565	0	1129	2	565
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0								0				0				0
Left-Right		0								0				0				0	
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	625	2	312	0	625	312	19	737	2	367	0	737	2	367	0	737	2	367
	Through-Right		1							1				1				1	
	Right	310	0	310	0	310	310	9	365	0	365	0	365	0	365	0	365	0	365
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
WESTBOUND	Left	346	1	203	24	370	211	14	411	1	239	24	435	1	247	0	435	1	247
	Left-Through		0							0				0				0	
	Through	2	0	203	0	2	211	0	2	0	239	0	2	0	247	0	2	0	247
	Through-Right		0							0				0				0	
	Right	262	1	0	0	262	0	2	303	1	0	0	303	1	0	0	303	1	0
	Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South:	704	North-South:	704	North-South:	838	North-South:	838	North-South:	838	North-South:	838	North-South:	838	North-South:	838	North-South:	838
		East-West:	203	East-West:	211	East-West:	239	East-West:	239	East-West:	247	East-West:	247	East-West:	247	East-West:	247	East-West:	247
		SUM:	907	SUM:	915	SUM:	1077	SUM:	1085	SUM:	1085	SUM:	1085	SUM:	1085	SUM:	1085	SUM:	1085
VOLUME/CAPACITY (V/C) RATIO:		0.636		0.642		0.756		0.761		0.761		0.761		0.761		0.761		0.761	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.536		0.542		0.656		0.661		0.661		0.661		0.661		0.661		0.661	
LEVEL OF SERVICE (LOS):		A		A		B		B		B		B		B		B		B	

REMARKS:

Version: 1i Beta; 8/4/2011

**PROJECT IMPACT**

Change in v/c due to project:	0.005	Δv/c after mitigation:	0.005
Significant impacted?	NO	Fully mitigated?	N/A



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/29/2015									
CMA1	East-West Street:	US-101 Freeway NB Ramps	Projection Year:	2019	Peak Hour:	4PM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases				3				3		3									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?				0				0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0		0 0		NB-- 0 SB-- 0		0 0		0 0									
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0		0 0		EB-- 0 WB-- 0		0 0		0 0									
Override Capacity		2		2		2		2		2									
		0		0		0		0		0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	374	1	374	7	381	381	21	450	1	450	7	457	1	457	0	457	1	457
	Left-Through		0						0				0				0		
	Through	1205	2	603	0	1205	603	43	1427	2	714	0	1427	2	714	0	1427	2	714
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0					0				0	
Left-Right		0						0					0				0		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0						0				0				0		
	Through	718	2	311	0	718	311	19	844	2	366	0	844	2	366	0	844	2	366
	Through-Right		1						1				1				1		
	Right	214	0	214	0	214	214	9	255	0	255	0	255	0	255	0	255	0	255
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0						0				0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0						0				0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0						0				0				0		
Left-Right		0						0				0				0			
WESTBOUND	Left	298	1	191	0	298	191	14	356	1	225	0	356	1	225	0	356	1	225
	Left-Through		0						0				0				0		
	Through	0	0	191	0	0	191	0	0	0	225	0	0	0	225	0	0	0	225
	Through-Right		0						0				0				0		
	Right	275	1	0	0	275	0	2	318	1	0	0	318	1	0	0	318	1	0
	Left-Through-Right		1						1				1				1		
Left-Right		0						0				0				0			
CRITICAL VOLUMES		North-South: 685		North-South: 692		North-South: 816		North-South: 823		North-South: 823		North-South: 823		North-South: 823		North-South: 823		North-South: 823	
		East-West: 191		East-West: 191		East-West: 225		East-West: 225		East-West: 225		East-West: 225		East-West: 225		East-West: 225		East-West: 225	
		SUM: 876		SUM: 883		SUM: 1041		SUM: 1048		SUM: 1048		SUM: 1048		SUM: 1048		SUM: 1048		SUM: 1048	
VOLUME/CAPACITY (V/C) RATIO:				0.615		0.620		0.731		0.735		0.735		0.735		0.735		0.735	
V/C LESS ATSAC/ATCS ADJUSTMENT:				0.515		0.520		0.631		0.635		0.635		0.635		0.635		0.635	
LEVEL OF SERVICE (LOS):				A		A		B		B		B		B		B		B	

REMARKS:

Version: 1i Beta; 8/4/2011

**PROJECT IMPACT**

Change in v/c due to project:	0.004	Δv/c after mitigation:	0.004
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2015	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/29/2015								
CMA1	East-West Street:	US-101 Freeway NB Ramps	Projection Year:	2019	Peak Hour:	SAT	Reviewed by:		Project:	Harvard-Westlake Upper School I								
No. of Phases		3		3		3		3		3								
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0								
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0								
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2								
Override Capacity		0		0		0		0		0								
		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0								
		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0								
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	1	313	0	313	313	21	359	1	359	0	359	1	359	0	359	1	359
	Left-Through	0							0				0				0	
	Through	2	382	0	764	382	43	870	2	435	0	870	2	435	0	870	2	435
	Through-Right	0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right	0							0				0				0	
Left-Right	0							0				0				0		
SOUTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through	0							0				0				0	
	Through	2	272	0	573	272	19	639	2	303	0	639	2	303	0	639	2	303
	Through-Right	1							1				1				1	
	Right	0	242	0	242	242	9	271	0	271	0	271	0	271	0	271	0	271
	Left-Through-Right	0							0				0				0	
Left-Right	0							0				0				0		
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through	0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right	0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right	0							0				0				0	
Left-Right	0							0				0				0		
WESTBOUND	Left	1	203	28	417	213	14	435	1	225	28	463	1	236	0	463	1	236
	Left-Through	0							0				0				0	
	Through	0	203	0	8	213	0	9	0	225	0	9	0	236	0	9	0	236
	Through-Right	0							0				0				0	
	Right	1	0	0	211	211	2	230	1	0	0	230	1	230	0	230	1	230
	Left-Through-Right	1							1				1				1	
Left-Right	0							0				0				0		
CRITICAL VOLUMES		North-South: 585	East-West: 203	SUM: 788	North-South: 585	East-West: 213	SUM: 798	North-South: 662	East-West: 225	SUM: 887	North-South: 662	East-West: 236	SUM: 898	North-South: 662	East-West: 236	SUM: 898		
VOLUME/CAPACITY (V/C) RATIO:		0.553		0.560		0.622		0.630										
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.453		0.460		0.522		0.530										
LEVEL OF SERVICE (LOS):		A		A		A		A										

REMARKS:

Version: 1i Beta; 8/4/2011

### PROJECT IMPACT

Change in v/c due to project:	0.008	Δv/c after mitigation:	0.008
Significant impacted?	NO	Fully mitigated?	N/A



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/29/2015									
CMA2	East-West Street:	US-101 Freeway SB Ramps	Projection Year:	2019	Peak Hour:	2PM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases		3		3		3		3		3									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0									
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0									
Override Capacity		2		2		2		2		2									
		0		0		0		0		0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through																		
	Through	1005	2	483	0	1005	491	53	1207	2	577	0	1207	2	585	0	1207	2	585
	Through-Right																		
	Right	445	0	445	24	469	469	14	525	0	525	24	549	0	549	0	549	0	549
	Left-Through-Right																		
Left-Right																			
SOUTHBOUND	Left	218	1	218	0	218	218	3	253	1	253	0	253	1	253	0	253	1	253
	Left-Through																		
	Through	764	2	382	24	788	394	29	907	2	454	24	931	2	466	0	931	2	466
	Through-Right																		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right																		
Left-Right																			
EASTBOUND	Left	351	1	219	0	351	219	23	426	1	268	0	426	1	268	0	426	1	268
	Left-Through																		
	Through	4	0	219	0	4	219	0	5	0	268	0	5	0	268	0	5	0	268
	Through-Right																		
	Right	303	1	0	0	303	0	26	374	1	0	0	374	1	0	0	374	1	0
	Left-Through-Right																		
Left-Right																			
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through																		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right																		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right																		
Left-Right																			
CRITICAL VOLUMES		North-South: 701	North-South: 709		North-South: 830		North-South: 838		North-South: 838		North-South: 838		North-South: 838		North-South: 838		North-South: 838		
		East-West: 219	East-West: 219		East-West: 268		East-West: 268		East-West: 268		East-West: 268		East-West: 268		East-West: 268		East-West: 268		
		SUM: 920	SUM: 928		SUM: 1098		SUM: 1106		SUM: 1106		SUM: 1106		SUM: 1106		SUM: 1106		SUM: 1106		
VOLUME/CAPACITY (V/C) RATIO:		0.646		0.651		0.771		0.776		0.776		0.776		0.776		0.776		0.776	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.546		0.551		0.671		0.676		0.676		0.676		0.676		0.676		0.676	
LEVEL OF SERVICE (LOS):		A		A		B		B		B		B		B		B		B	

REMARKS:

Version: 1i Beta; 8/4/2011

### PROJECT IMPACT

Change in v/c due to project:	0.005	Δv/c after mitigation:	0.005
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/29/2015									
CMA2	East-West Street:	US-101 Freeway SB Ramps	Projection Year:	2019	Peak Hour:	3PM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0										
Override Capacity		2	2		2		2		2										
		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through																		
	Through	1227	2	574	0	1227	578	53	1462	2	682	0	1462	2	686	0	1462	2	686
	Through-Right		1							1				1				1	
	Right	496	0	496	12	508	508	14	583	0	583	12	595	0	595	0	595	0	595
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	197	1	197	0	197	197	3	229	1	229	0	229	1	229	0	229	1	229
	Left-Through		0							0				0				0	
	Through	829	2	415	12	841	421	29	982	2	491	12	994	2	497	0	994	2	497
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	306	1	197	0	306	197	23	374	1	242	0	374	1	242	0	374	1	242
	Left-Through		0							0				0				0	
	Through	1	0	197	0	1	197	0	1	0	242	0	1	0	242	0	1	0	242
	Through-Right		0							0				0				0	
	Right	283	1	0	0	283	0	26	351	1	0	0	351	1	0	0	351	1	0
	Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0		
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 771		771	North-South: 775		775	North-South: 911		911	North-South: 915		915	North-South: 915		915	North-South: 915		915
		East-West: 197		197	East-West: 197		197	East-West: 242		242	East-West: 242		242	East-West: 242		242	East-West: 242		242
		SUM: 968		968	SUM: 972		972	SUM: 1153		1153	SUM: 1157		1157	SUM: 1157		1157	SUM: 1157		1157
VOLUME/CAPACITY (V/C) RATIO:			0.679		0.682		0.809		0.812		0.812		0.812		0.812		0.812		0.812
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.579		0.582		0.709		0.712		0.712		0.712		0.712		0.712		0.712
LEVEL OF SERVICE (LOS):			A		A		C		C		C		C		C		C		C

REMARKS:

Version: 1i Beta; 8/4/2011

### PROJECT IMPACT

Change in v/c due to project:	0.003	Δv/c after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/29/2015									
CMA2	East-West Street:	US-101 Freeway SB Ramps	Projection Year:	2019	Peak Hour:	4PM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases		3	3		3		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		EB-- 0 WB-- 0	EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		2	2		2		2		2										
Override Capacity		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through																		
	Through	1245	2	564	7	1252	569	53	1483	2	670	7	1490	2	675	0	1490	2	675
	Through-Right		1							1				1				1	
	Right	448	0	448	7	455	455	14	528	0	528	7	535	0	535	0	535	0	535
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	158	1	158	0	158	158	3	184	1	184	0	184	1	184	0	184	1	184
	Left-Through		0							0			0				0		
	Through	845	2	423	0	845	423	29	1000	2	500	0	1000	2	500	0	1000	2	500
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	321	1	195	0	321	195	23	392	1	240	0	392	1	240	0	392	1	240
	Left-Through		0							0				0				0	
	Through	1	0	195	0	1	195	0	1	0	240	0	1	0	240	0	1	0	240
	Through-Right		0							0				0				0	
	Right	263	1	0	0	263	0	26	328	1	0	0	328	1	0	0	328	1	0
	Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0		
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0				0				0	
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0				0				0	
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 722 East-West: 195 SUM: 917	North-South: 727 East-West: 195 SUM: 922	North-South: 854 East-West: 240 SUM: 1094	North-South: 859 East-West: 240 SUM: 1099	North-South: 859 East-West: 240 SUM: 1099													
VOLUME/CAPACITY (V/C) RATIO:		0.644	0.647	0.768	0.771	0.771													
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.544	0.547	0.668	0.671	0.671													
LEVEL OF SERVICE (LOS):		A	A	B	B	B													

REMARKS:

Version: 1i Beta; 8/4/2011

### PROJECT IMPACT

Change in v/c due to project:	0.003	Δv/c after mitigation:	0.003
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2015	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/29/2015									
CMA2	East-West Street:	US-101 Freeway SB Ramps	Projection Year:	2019	Peak Hour:	SAT	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases		3		3		3		3		3									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		0		0		0		0		0									
ATSAC-1 or ATSAC+ATCS-2?		2		2		2		2		2									
Override Capacity		0		0		0		0		0									
		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0									
		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Left-Through																		
	Through	758	2	371	0	758	379	53	873	2	424	0	873	2	432	0	873	2	432
	Through-Right		1							1				1				1	
	Right	356	0	356	24	380	380	14	399	0	399	24	423	0	423	0	423	0	423
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
SOUTHBOUND	Left	199	1	199	0	199	199	3	218	1	218	0	218	1	218	0	218	1	218
	Left-Through		0							0			0				0		
	Through	748	2	374	28	776	388	29	839	2	420	28	867	2	434	0	867	2	434
	Through-Right		0							0			0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
EASTBOUND	Left	314	1	221	0	314	221	23	363	1	256	0	363	1	256	0	363	1	256
	Left-Through		0							0			0				0		
	Through	1	0	221	0	1	221	0	1	0	256	0	1	0	256	0	1	0	256
	Through-Right		0							0			0				0		
	Right	349	1	0	0	349	0	26	403	1	0	0	403	1	0	0	403	1	0
	Left-Through-Right		1							1				1				1	
Left-Right		0							0				0				0		
WESTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through		0							0			0				0		
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through-Right		0							0			0				0		
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right		0							0				0				0	
Left-Right		0							0				0				0		
CRITICAL VOLUMES		North-South: 570			North-South: 579			North-South: 642			North-South: 650			North-South: 650			North-South: 650		
		East-West: 221			East-West: 221			East-West: 256			East-West: 256			East-West: 256			East-West: 256		
		SUM: 791			SUM: 800			SUM: 898			SUM: 906			SUM: 906			SUM: 906		
VOLUME/CAPACITY (V/C) RATIO:			0.555		0.561			0.630			0.636			0.636			0.636		
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.455		0.461			0.530			0.536			0.536			0.536		
LEVEL OF SERVICE (LOS):			A		A			A			A			A			A		

REMARKS:

Version: 1i Beta; 8/4/2011

**PROJECT IMPACT**

Change in v/c due to project:	0.006	Δv/c after mitigation:	0.006
Significant impacted?	NO	Fully mitigated?	N/A



# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/29/2015										
CMA3	East-West Street:	Moorpark Street	Projection Year:	2019	Peak Hour:	2PM	Reviewed by:		Project:	Harvard-Westlake Upper School I										
No. of Phases		2		2		2		2		2										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0										
Override Capacity		2		2		2		2		2										
		0		0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION					
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume		
NORTHBOUND	↔	Left	81	1	81	0	81	81	3	96	1	96	0	96	1	96	0	96	1	96
	↔	Left-Through		0						0					0				0	
	↔	Through	1118	1	603	24	1142	615	49	1333	1	719	24	1357	1	731	0	1357	1	731
	↔	Through-Right		1						1					1				1	
	↔	Right	88	0	88	0	88	88	3	104	0	104	0	104	0	104	0	104	0	104
	↔	Left-Through-Right		0						0					0				0	
	↔	Left-Right		0						0					0				0	
SOUTHBOUND	↔	Left	89	1	89	0	89	89	3	105	1	105	0	105	1	105	0	105	1	105
	↔	Left-Through		0						0					0				0	
	↔	Through	792	1	437	24	816	449	51	961	1	529	24	985	1	541	0	985	1	541
	↔	Through-Right		1						1					1				1	
	↔	Right	82	0	82	0	82	82	2	96	0	96	0	96	0	96	0	96	0	96
	↔	Left-Through-Right		0						0					0				0	
	↔	Left-Right		0						0					0				0	
EASTBOUND	↔	Left	109	1	109	0	109	109	5	130	1	130	0	130	1	130	0	130	1	130
	↔	Left-Through		0						0					0				0	
	↔	Through	360	1	360	0	360	360	21	435	1	435	0	435	1	435	0	435	1	435
	↔	Through-Right		0						0					0				0	
	↔	Right	81	1	41	0	81	41	3	96	1	48	0	96	1	48	0	96	1	48
	↔	Left-Through-Right		0						0					0				0	
	↔	Left-Right		0						0					0				0	
WESTBOUND	↔	Left	94	1	94	0	94	94	3	111	1	111	0	111	1	111	0	111	1	111
	↔	Left-Through		0						0					0				0	
	↔	Through	252	1	252	0	252	252	18	307	1	307	0	307	1	307	0	307	1	307
	↔	Through-Right		0						0					0				0	
	↔	Right	75	1	31	0	75	31	0	86	1	34	0	86	1	34	0	86	1	34
	↔	Left-Through-Right		0						0					0				0	
	↔	Left-Right		0						0					0				0	
CRITICAL VOLUMES		North-South:	692		North-South:	704		North-South:	824		North-South:	836		North-South:	836		North-South:	836		836
		East-West:	454		East-West:	454		East-West:	546		East-West:	546		East-West:	546		East-West:	546		546
		SUM:	1146		SUM:	1158		SUM:	1370		SUM:	1382		SUM:	1382		SUM:	1382		1382
VOLUME/CAPACITY (V/C) RATIO:			0.764		0.772		0.913		0.921		0.921		0.921		0.921		0.921		0.921	
V/C LESS ATSAC/ATCS ADJUSTMENT:			0.664		0.672		0.813		0.821		0.821		0.821		0.821		0.821		0.821	
LEVEL OF SERVICE (LOS):			B		B		D		D		D		D		D		D		D	

REMARKS:

Version: 1i Beta; 8/4/2011

### PROJECT IMPACT

Change in v/c due to project:	0.008	Δv/c after mitigation:	0.008
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/29/2015									
CMA3	East-West Street:	Moorpark Street	Projection Year:	2019	Peak Hour:	3PM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases		2	2		2		2		2										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0										
Override Capacity		2	2		2		2		2										
		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	103	1	103	0	103	103	3	122	1	122	0	122	1	122	0	122	1	122
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	1283	1	704	12	1295	710	49	1523	1	835	12	1535	1	841	0	1535	1	841
	Through-Right	1	1	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1	1
	Right	124	0	124	0	124	124	3	146	0	146	0	146	0	146	0	146	0	146
SOUTHBOUND	Left	104	1	104	0	104	104	3	122	1	122	0	122	1	122	0	122	1	122
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	832	1	469	12	844	475	51	1007	1	565	12	1019	1	571	0	1019	1	571
	Through-Right	1	1	1	0	1	1	0	1	1	1	0	1	1	1	0	1	1	1
	Right	105	0	105	0	105	105	2	123	0	123	0	123	0	123	0	123	0	123
EASTBOUND	Left	146	1	146	0	146	146	5	173	1	173	0	173	1	173	0	173	1	173
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	466	1	466	0	466	466	21	556	1	556	0	556	1	556	0	556	1	556
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	60	1	9	0	60	9	3	72	1	11	0	72	1	11	0	72	1	11
WESTBOUND	Left	107	1	107	0	107	107	3	126	1	126	0	126	1	126	0	126	1	126
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	274	1	274	0	274	274	18	333	1	333	0	333	1	333	0	333	1	333
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	82	1	30	0	82	30	0	94	1	33	0	94	1	33	0	94	1	33
CRITICAL VOLUMES		North-South: 808	808		North-South: 814	814		North-South: 957	957		North-South: 963	963		North-South: 963	963		East-West: 573	573	
		East-West: 573	573		East-West: 573	573		East-West: 682	682		East-West: 682	682		East-West: 682	682		East-West: 682	682	
		SUM: 1381	1381		SUM: 1387	1387		SUM: 1639	1639		SUM: 1645	1645		SUM: 1645	1645		SUM: 1645	1645	
VOLUME/CAPACITY (V/C) RATIO:		0.921		0.925		1.093		1.097		1.097		1.097		1.097		1.097		1.097	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.821		0.825		0.993		0.997		0.997		0.997		0.997		0.997		0.997	
LEVEL OF SERVICE (LOS):		D		D		E		E		E		E		E		E		E	

REMARKS:

Version: 1i Beta; 8/4/2011

### PROJECT IMPACT

Change in v/c due to project:	0.004	Δv/c after mitigation:	0.004
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/29/2015																					
CMA3	East-West Street:	Moorpark Street	Projection Year:	2019	Peak Hour:	4PM	Reviewed by:		Project:	Harvard-Westlake Upper School I																					
No. of Phases		2	2		2		2		2																						
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0																						
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0																					
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0																					
Override Capacity		2	2		2		2		2																						
		0	0		0		0		0																						
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION																
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume													
NORTHBOUND	↔	Left	98	1	98	0	98	98	3	116	1	116	0	116	1	116	0	116	1	116											
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
	↔	Through	1301	1	715	14	1315	722	49	1543	1	848	14	1557	1	855	0	1557	1	855											
	↔	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0										
	↔	Right	129	0	129	0	129	129	3	152	0	152	0	152	0	152	0	152	0	152	0	152									
SOUTHBOUND	↔	Left	110	1	110	0	110	110	3	129	1	129	0	129	1	129	0	129	1	129											
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
	↔	Through	823	1	461	0	823	461	51	996	1	556	0	996	1	556	0	996	1	556											
	↔	Through-Right	0	1	0	0	0	0	0	0	1	0	0	0	1	0	0	0	1	0	0										
	↔	Right	99	0	99	0	99	99	2	116	0	116	0	116	0	116	0	116	0	116	0	116									
EASTBOUND	↔	Left	116	1	116	0	116	116	5	138	1	138	0	138	1	138	0	138	1	138											
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
	↔	Through	500	1	500	0	500	500	21	595	1	595	0	595	1	595	0	595	1	595											
	↔	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
	↔	Right	57	1	8	0	57	8	3	69	1	11	0	69	1	11	0	69	1	11											
WESTBOUND	↔	Left	102	1	102	0	102	102	3	121	1	121	0	121	1	121	0	121	1	121											
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
	↔	Through	347	1	347	0	347	347	18	417	1	417	0	417	1	417	0	417	1	417											
	↔	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0											
	↔	Right	105	1	50	0	105	50	0	121	1	57	0	121	1	57	0	121	1	57											
CRITICAL VOLUMES		North-South: 825	825		North-South: 832	832		North-South: 977	977		North-South: 984	984		North-South: 984	984		East-West: 602	602		East-West: 716	716		East-West: 716	716		East-West: 716	716		East-West: 716	716	
		East-West: 602	602		East-West: 602	602		East-West: 716	716		East-West: 716	716		East-West: 716	716		East-West: 716	716		East-West: 716	716		East-West: 716	716		East-West: 716	716		East-West: 716	716	
		SUM: 1427	1427		SUM: 1434	1434		SUM: 1693	1693		SUM: 1700	1700		SUM: 1700	1700		SUM: 1700	1700		SUM: 1700	1700		SUM: 1700	1700		SUM: 1700	1700		SUM: 1700	1700	
VOLUME/CAPACITY (V/C) RATIO:		0.951		0.956		1.129		1.133		1.133		1.133		1.133		1.133		0.851		0.856		1.029		1.033		1.033		1.033			
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.851		0.856		1.029		1.033		1.033		1.033		1.033		1.033		0.851		0.856		1.029		1.033		1.033		1.033			
LEVEL OF SERVICE (LOS):		D		D		F		F		F		F		F		F		D		D		F		F		F		F			

REMARKS:

Version: 1i Beta; 8/4/2011

**PROJECT IMPACT**

Change in v/c due to project:	0.004	Δv/c after mitigation:	0.004
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Coldwater Canyon Avenue</b>	<b>Year of Count:</b>	<b>2015</b>	<b>Ambient Growth: (%):</b>	<b>2.0</b>	<b>Conducted by:</b>	<b>The Traffic Solution</b>	<b>Date:</b>	<b>9/29/2015</b>									
<b>CMA3</b>	<b>East-West Street:</b>	<b>Moorpark Street</b>	<b>Projection Year:</b>	<b>2019</b>	<b>Peak Hour:</b>	<b>SAT</b>	<b>Reviewed by:</b>		<b>Project:</b>	<b>Harvard-Westlake Upper School I</b>									
<b>No. of Phases</b>				<b>2</b>		<b>2</b>		<b>2</b>		<b>2</b>									
<b>Opposed Ø'ing: N/S-1, E/W-2 or Both-3?</b>				<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>									
<b>Right Turns: FREE-1, NRTOR-2 or OLA-3?</b>		<b>NB--</b>	<b>0</b>	<b>SB--</b>	<b>0</b>	<b>NB--</b>	<b>0</b>	<b>SB--</b>	<b>0</b>	<b>NB--</b>	<b>0</b>	<b>SB--</b>	<b>0</b>						
		<b>EB--</b>	<b>0</b>	<b>WB--</b>	<b>0</b>	<b>EB--</b>	<b>0</b>	<b>WB--</b>	<b>0</b>	<b>EB--</b>	<b>0</b>	<b>WB--</b>	<b>0</b>						
<b>ATSAC-1 or ATSAC+ATCS-2?</b>				<b>2</b>		<b>2</b>		<b>2</b>		<b>2</b>									
<b>Override Capacity</b>				<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	1	47	0	47	47	3	54	1	54	0	54	1	54	0	54	1	54	
	Left-Through	0							0				0				0		
	Through	1	402	28	761	416	49	842	1	461	28	870	1	475	0	870	1	475	
	Through-Right	1							1				1				1		
	Right	0	71	0	71	71	3	80	0	80	0	80	0	80	0	80	0	80	
SOUTHBOUND	Left	1	97	0	97	97	3	108	1	108	0	108	1	108	0	108	1	108	
	Left-Through	0							0				0				0		
	Through	1	449	28	850	463	51	941	1	513	28	969	1	527	0	969	1	527	
	Through-Right	1							1				1				1		
	Right	0	76	0	76	76	2	84	0	84	0	84	0	84	0	84	0	84	
EASTBOUND	Left	1	96	0	96	96	5	109	1	109	0	109	1	109	0	109	1	109	
	Left-Through	0							0				0				0		
	Through	1	473	0	473	473	21	533	1	533	0	533	1	533	0	533	1	533	
	Through-Right	0							0				0				0		
	Right	1	32	0	55	32	3	63	1	36	0	63	1	36	0	63	1	36	
WESTBOUND	Left	1	67	0	67	67	3	76	1	76	0	76	1	76	0	76	1	76	
	Left-Through	0							0				0				0		
	Through	1	291	0	291	291	18	333	1	333	0	333	1	333	0	333	1	333	
	Through-Right	0							0				0				0		
	Right	1	57	0	105	57	0	114	1	60	0	114	1	60	0	114	1	60	
<b>CRITICAL VOLUMES</b>		<b>North-South:</b>	499	<b>North-South:</b>	513	<b>North-South:</b>	569	<b>North-South:</b>	583	<b>North-South:</b>	583	<b>North-South:</b>	583	<b>North-South:</b>	583	<b>North-South:</b>	583	<b>North-South:</b>	583
		<b>East-West:</b>	540	<b>East-West:</b>	540	<b>East-West:</b>	609	<b>East-West:</b>	609	<b>East-West:</b>	609	<b>East-West:</b>	609	<b>East-West:</b>	609	<b>East-West:</b>	609	<b>East-West:</b>	609
		<b>SUM:</b>	1039	<b>SUM:</b>	1053	<b>SUM:</b>	1178	<b>SUM:</b>	1192	<b>SUM:</b>	1192	<b>SUM:</b>	1192	<b>SUM:</b>	1192	<b>SUM:</b>	1192	<b>SUM:</b>	1192
<b>VOLUME/CAPACITY (V/C) RATIO:</b>			0.693		0.702		0.785		0.795		0.795		0.795		0.795		0.795		0.795
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>			<b>0.593</b>		<b>0.602</b>		<b>0.685</b>		<b>0.695</b>		<b>0.695</b>		<b>0.695</b>		<b>0.695</b>		<b>0.695</b>		<b>0.695</b>
<b>LEVEL OF SERVICE (LOS):</b>			<b>A</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>		<b>B</b>

REMARKS:

Version: 1i Beta; 8/4/2011

**PROJECT IMPACT**

Change in v/c due to project:	<b>0.010</b>	Δv/c after mitigation:	<b>0.010</b>
Significant impacted?	<b>NO</b>	Fully mitigated?	<b>N/A</b>

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Coldwater Canyon Avenue</b>	<b>Year of Count:</b>	<b>2012</b>	<b>Ambient Growth: (%):</b>	<b>2.0</b>	<b>Conducted by:</b>	<b>The Traffic Solution</b>	<b>Date:</b>	<b>9/29/2015</b>								
<b>CMA4</b>	<b>East-West Street:</b>	<b>Ventura Boulevard</b>	<b>Projection Year:</b>	<b>2019</b>	<b>Peak Hour:</b>	<b>AM</b>	<b>Reviewed by:</b>		<b>Project:</b>	<b>Harvard-Westlake Upper School I</b>								
<b>No. of Phases</b>		<b>4</b>	<b>4</b>		<b>4</b>		<b>4</b>		<b>4</b>									
<b>Opposed Ø'ing: N/S-1, E/W-2 or Both-3?</b>		<b>0</b>	<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>									
<b>Right Turns: FREE-1, NRTOR-2 or OLA-3?</b>		<b>NB-- 0 SB-- 0</b>	<b>NB-- 0 SB-- 0</b>		<b>NB-- 0 SB-- 0</b>		<b>NB-- 0 SB-- 0</b>		<b>NB-- 0 SB-- 0</b>									
<b>ATSAC-1 or ATSAC+ATCS-2?</b>		<b>EB-- 0 WB-- 0</b>	<b>EB-- 0 WB-- 0</b>		<b>EB-- 0 WB-- 0</b>		<b>EB-- 0 WB-- 0</b>		<b>EB-- 0 WB-- 0</b>									
<b>Override Capacity</b>		<b>2</b>	<b>2</b>		<b>2</b>		<b>2</b>		<b>2</b>									
		<b>0</b>	<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	1	104	0	104	104	12	131	1	131	0	131	1	131	0	131	1	131
	Left-Through	0							0				0				0	
	Through	2	145	12	302	151	4	337	2	169	12	349	2	175	0	349	2	175
	Through-Right	0							0				0				0	
	Right	1	33	0	103	33	9	127	1	39	0	127	1	39	0	127	1	39
Left-Through-Right	0							0				0				0		
Left-Right	0							0				0				0		
SOUTHBOUND	Left	2	130	0	237	130	27	299	2	164	0	299	2	164	0	299	2	164
	Left-Through	0							0				0				0	
	Through	1	371	12	642	377	5	729	1	429	12	741	1	435	0	741	1	435
	Through-Right	1							1				1				1	
	Right	0	112	0	112	112	0	129	0	129	0	129	0	129	0	129	0	129
Left-Through-Right	0							0				0				0		
Left-Right	0							0				0				0		
EASTBOUND	Left	1	143	0	143	143	3	167	1	167	0	167	1	167	0	167	1	167
	Left-Through	0							0				0				0	
	Through	2	526	0	1051	526	33	1240	2	620	0	1240	2	620	0	1240	2	620
	Through-Right	0							0				0				0	
	Right	1	144	0	196	144	7	232	1	167	0	232	1	167	0	232	1	167
Left-Through-Right	0							0				0				0		
Left-Right	0							0				0				0		
WESTBOUND	Left	1	141	0	141	141	14	176	1	176	0	176	1	176	0	176	1	176
	Left-Through	0							0				0				0	
	Through	2	360	0	720	360	50	877	2	439	0	877	2	439	0	877	2	439
	Through-Right	0							0				0				0	
	Right	1	73	0	138	73	13	172	1	90	0	172	1	90	0	172	1	90
Left-Through-Right	0							0				0				0		
Left-Right	0							0				0				0		
<b>CRITICAL VOLUMES</b>		<b>North-South: 475</b>	<b>North-South: 481</b>		<b>North-South: 560</b>		<b>North-South: 566</b>		<b>North-South: 566</b>		<b>North-South: 566</b>		<b>North-South: 566</b>		<b>North-South: 566</b>		<b>North-South: 566</b>	
		<b>East-West: 667</b>	<b>East-West: 667</b>		<b>East-West: 796</b>		<b>East-West: 796</b>		<b>East-West: 796</b>		<b>East-West: 796</b>		<b>East-West: 796</b>		<b>East-West: 796</b>		<b>East-West: 796</b>	
		<b>SUM: 1142</b>	<b>SUM: 1148</b>		<b>SUM: 1356</b>		<b>SUM: 1362</b>		<b>SUM: 1362</b>		<b>SUM: 1362</b>		<b>SUM: 1362</b>		<b>SUM: 1362</b>		<b>SUM: 1362</b>	
<b>VOLUME/CAPACITY (V/C) RATIO:</b>			<b>0.831</b>		<b>0.835</b>		<b>0.986</b>		<b>0.991</b>		<b>0.991</b>		<b>0.991</b>		<b>0.991</b>		<b>0.991</b>	
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>			<b>0.731</b>		<b>0.735</b>		<b>0.886</b>		<b>0.891</b>		<b>0.891</b>		<b>0.891</b>		<b>0.891</b>		<b>0.891</b>	
<b>LEVEL OF SERVICE (LOS):</b>			<b>C</b>		<b>C</b>		<b>D</b>		<b>D</b>		<b>D</b>		<b>D</b>		<b>D</b>		<b>D</b>	

REMARKS:

Version: 1i Beta; 8/4/2011

**PROJECT IMPACT**

Change in v/c due to project:	<b>0.005</b>	Δv/c after mitigation:	<b>0.005</b>
Significant impacted?	<b>NO</b>	Fully mitigated?	<b>N/A</b>

# Level of Service Worksheet (Circular 212 Method)



<b>I/S #:</b>	<b>North-South Street:</b>	<b>Coldwater Canyon Avenue</b>	<b>Year of Count:</b>	<b>2012</b>	<b>Ambient Growth: (%):</b>	<b>2.0</b>	<b>Conducted by:</b>	<b>The Traffic Solution</b>	<b>Date:</b>	<b>9/29/2015</b>									
<b>CMA4</b>	<b>East-West Street:</b>	<b>Ventura Boulevard</b>	<b>Projection Year:</b>	<b>2019</b>	<b>Peak Hour:</b>	<b>2PM</b>	<b>Reviewed by:</b>		<b>Project:</b>	<b>Harvard-Westlake Upper School I</b>									
<b>No. of Phases</b>				<b>4</b>		<b>4</b>		<b>4</b>		<b>4</b>									
<b>Opposed Ø'ing: N/S-1, E/W-2 or Both-3?</b>				<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>									
<b>Right Turns: FREE-1, NRTOR-2 or OLA-3?</b>		<b>NB--</b>	<b>0</b>	<b>SB--</b>	<b>0</b>	<b>NB--</b>	<b>0</b>	<b>SB--</b>	<b>0</b>	<b>NB--</b>	<b>0</b>	<b>SB--</b>	<b>0</b>						
		<b>EB--</b>	<b>0</b>	<b>WB--</b>	<b>0</b>	<b>EB--</b>	<b>0</b>	<b>WB--</b>	<b>0</b>	<b>EB--</b>	<b>0</b>	<b>WB--</b>	<b>0</b>						
<b>ATSAC-1 or ATSAC+ATCS-2?</b>				<b>2</b>		<b>2</b>		<b>2</b>		<b>2</b>									
<b>Override Capacity</b>				<b>0</b>		<b>0</b>		<b>0</b>		<b>0</b>									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	1	189	0	189	189	5	222	1	222	0	222	1	222	0	222	1	222	
	Left-Through	0							0				0				0		
	Through	2	362	24	748	374	12	843	2	422	24	867	2	434	0	867	2	434	
	Through-Right	0							0				0				0		
	Right	1	125	0	192	125	9	230	1	145	0	230	1	145	0	230	1	145	
Left-Through-Right	0							0				0				0			
Left-Right	0							0				0				0			
SOUTHBOUND	Left	2	142	0	258	142	42	339	2	186	0	339	2	186	0	339	2	186	
	Left-Through	0							0				0				0		
	Through	1	290	24	433	302	2	472	1	334	24	496	1	346	0	496	1	346	
	Through-Right	1							1				1				1		
	Right	0	170	0	170	170	0	195	0	195	0	195	0	195	0	195	0	195	
Left-Through-Right	0							0				0				0			
Left-Right	0							0				0				0			
EASTBOUND	Left	1	193	0	193	193	3	225	1	225	0	225	1	225	0	225	1	225	
	Left-Through	0							0				0				0		
	Through	2	523	0	1046	523	54	1256	2	628	0	1256	2	628	0	1256	2	628	
	Through-Right	0							0				0				0		
	Right	1	65	0	159	65	5	188	1	77	0	188	1	77	0	188	1	77	
Left-Through-Right	0							0				0				0			
Left-Right	0							0				0				0			
WESTBOUND	Left	1	135	0	135	135	16	171	1	171	0	171	1	171	0	171	1	171	
	Left-Through	0							0				0				0		
	Through	2	471	0	942	471	48	1130	2	565	0	1130	2	565	0	1130	2	565	
	Through-Right	0							0				0				0		
	Right	1	230	0	301	230	10	356	1	263	0	356	1	263	0	356	1	263	
Left-Through-Right	0							0				0				0			
Left-Right	0							0				0				0			
<b>CRITICAL VOLUMES</b>		<b>North-South:</b>	504	<b>North-South:</b>	516	<b>North-South:</b>	608	<b>North-South:</b>	620	<b>North-South:</b>	620	<b>North-South:</b>	620	<b>North-South:</b>	620	<b>North-South:</b>	620	<b>North-South:</b>	620
		<b>East-West:</b>	664	<b>East-West:</b>	664	<b>East-West:</b>	799	<b>East-West:</b>	799	<b>East-West:</b>	799	<b>East-West:</b>	799	<b>East-West:</b>	799	<b>East-West:</b>	799	<b>East-West:</b>	799
		<b>SUM:</b>	1168	<b>SUM:</b>	1180	<b>SUM:</b>	1407	<b>SUM:</b>	1419	<b>SUM:</b>	1419	<b>SUM:</b>	1419	<b>SUM:</b>	1419	<b>SUM:</b>	1419	<b>SUM:</b>	1419
<b>VOLUME/CAPACITY (V/C) RATIO:</b>			0.849		0.858		1.023		1.032		1.032		1.032		1.032		1.032		1.032
<b>V/C LESS ATSAC/ATCS ADJUSTMENT:</b>			<b>0.749</b>		<b>0.758</b>		<b>0.923</b>		<b>0.932</b>		<b>0.932</b>		<b>0.932</b>		<b>0.932</b>		<b>0.932</b>		<b>0.932</b>
<b>LEVEL OF SERVICE (LOS):</b>			<b>C</b>		<b>C</b>		<b>E</b>		<b>E</b>		<b>E</b>		<b>E</b>		<b>E</b>		<b>E</b>		<b>E</b>

REMARKS:

Version: 1i Beta; 8/4/2011

**PROJECT IMPACT**

Change in v/c due to project:	<b>0.009</b>	Δv/c after mitigation:	<b>0.009</b>
Significant impacted?	<b>NO</b>	Fully mitigated?	<b>N/A</b>

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/29/2015								
CMA4	East-West Street:	Ventura Boulevard	Projection Year:	2019	Peak Hour:	3PM	Reviewed by:		Project:	Harvard-Westlake Upper School I								
No. of Phases		4	4		4		4		4									
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0									
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0													
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0													
Override Capacity		2	2		2		2		2									
		0	0		0		0		0									
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	1	233	0	233	233	5	273	1	273	0	273	1	273	0	273	1	273
	Left-Through	0							0				0				0	
	Through	2	483	12	977	489	12	1120	2	560	12	1132	2	566	0	1132	2	566
	Through-Right	0							0				0				0	
	Right	1	111	0	181	111	9	217	1	128	0	217	1	128	0	217	1	128
SOUTHBOUND	Left	2	144	0	261	144	42	342	2	188	0	342	2	188	0	342	2	188
	Left-Through	0							0				0				0	
	Through	1	293	12	434	299	2	487	1	337	12	499	1	343	0	499	1	343
	Through-Right	1							1				1				1	
	Right	0	163	0	163	163	0	187	0	187	0	187	0	187	0	187	0	187
EASTBOUND	Left	1	193	0	193	193	3	225	1	225	0	225	1	225	0	225	1	225
	Left-Through	0							0				0				0	
	Through	2	559	0	1117	559	54	1337	2	669	0	1337	2	669	0	1337	2	669
	Through-Right	0							0				0				0	
	Right	1	40	0	156	40	5	184	1	48	0	184	1	48	0	184	1	48
WESTBOUND	Left	1	141	0	141	141	16	178	1	178	0	178	1	178	0	178	1	178
	Left-Through	0							0				0				0	
	Through	2	516	0	1032	516	48	1233	2	617	0	1233	2	617	0	1233	2	617
	Through-Right	0							0				0				0	
	Right	1	211	0	283	211	10	335	1	241	0	335	1	241	0	335	1	241
CRITICAL VOLUMES		North-South: 627 East-West: 709 SUM: 1336	North-South: 633 East-West: 709 SUM: 1342	North-South: 748 East-West: 847 SUM: 1595	North-South: 754 East-West: 847 SUM: 1601	North-South: 754 East-West: 847 SUM: 1601												
VOLUME/CAPACITY (V/C) RATIO:		0.972	0.976	1.160	1.164	1.164												
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.872	0.876	1.060	1.064	1.064												
LEVEL OF SERVICE (LOS):		D	D	F	F	F												

REMARKS:

Version: 1i Beta; 8/4/2011

### PROJECT IMPACT

Change in v/c due to project:	0.004	Δv/c after mitigation:	0.004
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



I/S #: CMA4	North-South Street:	Coldwater Canyon Avenue		Year of Count:	2012		Ambient Growth: (%):	2.0		Conducted by:	The Traffic Solution		Date:	9/29/2015					
	East-West Street:	Ventura Boulevard		Projection Year:	2019		Peak Hour:	4PM		Reviewed by:			Project:	Harvard-Westlake Upper School I					
No. of Phases		4		4		4		4		4		4		4		4			
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0		0		0		0		0		0		0		0			
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0	NB-- 0	SB-- 0		
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0	EB-- 0	WB-- 0		
Override Capacity		2		2		2		2		2		2		2		2			
		0		0		0		0		0		0		0		0			
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION			
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NORTHBOUND	Left	235	1	235	0	235	235	5	275	1	275	0	275	1	275	0	275	1	275
	Left-Through																		
	Through	978	2	489	14	992	496	12	1135	2	568	14	1149	2	575	0	1149	2	575
	Through-Right																		
	Right	196	1	132	0	196	132	9	235	1	154	0	235	1	154	0	235	1	154
SOUTHBOUND	Left	255	2	140	0	255	140	42	335	2	184	0	335	2	184	0	335	2	184
	Left-Through																		
	Through	453	1	304	0	453	304	2	522	1	350	0	522	1	350	0	522	1	350
	Through-Right																		
	Right	154	0	154	0	154	154	0	177	0	177	0	177	0	177	0	177	0	177
EASTBOUND	Left	154	1	154	0	154	154	3	180	1	180	0	180	1	180	0	180	1	180
	Left-Through																		
	Through	1122	2	561	0	1122	561	54	1343	2	672	0	1343	2	672	0	1343	2	672
	Through-Right																		
	Right	132	1	15	0	132	15	5	157	1	20	0	157	1	20	0	157	1	20
WESTBOUND	Left	128	1	128	0	128	128	16	163	1	163	0	163	1	163	0	163	1	163
	Left-Through																		
	Through	1144	2	572	0	1144	572	48	1362	2	681	0	1362	2	681	0	1362	2	681
	Through-Right																		
	Right	291	1	221	0	291	221	10	344	1	252	0	344	1	252	0	344	1	252
CRITICAL VOLUMES		North-South: 629		North-South: 636		North-South: 752		North-South: 759		North-South: 759		North-South: 759		North-South: 759		North-South: 759		North-South: 759	
		East-West: 726		East-West: 726		East-West: 861		East-West: 861		East-West: 861		East-West: 861		East-West: 861		East-West: 861		East-West: 861	
		SUM: 1355		SUM: 1362		SUM: 1613		SUM: 1620		SUM: 1620		SUM: 1620		SUM: 1620		SUM: 1620		SUM: 1620	
VOLUME/CAPACITY (V/C) RATIO:		0.985		0.991		1.173		1.178		1.178		1.178		1.178		1.178		1.178	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.885		0.891		1.073		1.078		1.078		1.078		1.078		1.078		1.078	
LEVEL OF SERVICE (LOS):		D		D		F		F		F		F		F		F		F	

REMARKS:

Version: 1i Beta; 8/4/2011

**PROJECT IMPACT**

Change in v/c due to project:	0.005	Δv/c after mitigation:	0.005
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2015	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	9/29/2015									
CMA4	East-West Street:	Ventura Boulevard	Projection Year:	2019	Peak Hour:	SAT	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases		4	4		4		4		4										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0									
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0									
Override Capacity		2	2		2		2		2										
		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	127	1	127	0	127	127	5	142	1	142	0	142	1	142	0	142	1	142
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	404	2	202	28	432	216	12	449	2	225	28	477	2	239	0	477	2	239
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	100	1	30	0	100	30	9	118	1	34	0	118	1	34	0	118	1	34
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTHBOUND	Left	310	2	171	0	310	171	42	378	2	208	0	378	2	208	0	378	2	208
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	443	1	314	28	471	328	2	482	1	341	28	510	1	355	0	510	1	355
	Through-Right	1	1	1	0	1	1	1	1	1	1	0	1	1	1	0	1	1	1
	Right	184	0	184	0	184	184	0	199	0	199	0	199	0	199	0	199	0	199
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EASTBOUND	Left	189	1	189	0	189	189	3	208	1	208	0	208	1	208	0	208	1	208
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	914	2	457	0	914	457	54	1044	2	522	0	1044	2	522	0	1044	2	522
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	147	1	84	0	147	84	5	164	1	93	0	164	1	93	0	164	1	93
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WESTBOUND	Left	140	1	140	0	140	140	16	168	1	168	0	168	1	168	0	168	1	168
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	969	2	485	0	969	485	48	1097	2	549	0	1097	2	549	0	1097	2	549
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	252	1	167	0	252	167	10	283	1	179	0	283	1	179	0	283	1	179
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRITICAL VOLUMES		North-South: 441	441		North-South: 455	455		North-South: 483	483		North-South: 497	497		North-South: 497	497		North-South: 497	497	
		East-West: 674	674		East-West: 674	674		East-West: 757	757		East-West: 757	757		East-West: 757	757		East-West: 757	757	
		SUM: 1115	1115		SUM: 1129	1129		SUM: 1240	1240		SUM: 1254	1254		SUM: 1254	1254		SUM: 1254	1254	
VOLUME/CAPACITY (V/C) RATIO:		0.811		0.821		0.902		0.912		0.912		0.912		0.912		0.912		0.912	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.711		0.721		0.802		0.812		0.812		0.812		0.812		0.812		0.812	
LEVEL OF SERVICE (LOS):		C		C		D		D		D		D		D		D		D	

REMARKS:

Version: 1i Beta; 8/4/2011

### PROJECT IMPACT

Change in v/c due to project:	0.010	Δv/c after mitigation:	0.010
Significant impacted?	NO	Fully mitigated?	N/A











## APPENDIX D-2

### CMA DATA WORKSHEETS – SCHOOL AM AND PM PEAK HOURS

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	7/17/2015									
CMA5	East-West Street:	Harvard-Westlake Main Entrance Drive	Projection Year:	2019	Peak Hour:	AM	Reviewed by:		Project:	Harvard-Westlake Upper School I									
No. of Phases		2	3		2		3		3										
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0										
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0	NB-- 0 SB-- 0										
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0	EB-- 0 WB-- 0										
Override Capacity		0	2		0		2		0										
		0	0		0		0		0										
MOVEMENT	EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
	Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	Left	0	0	0	110	110	0	0	0	0	110	110	1	110	0	110	1	110	
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	Through	417	1	417	-17	400	400	25	504	1	504	-17	487	1	487	0	487	1	487
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	57	1	51	-46	11	7	0	65	1	58	-46	19	1	14	0	19	1	14
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SOUTHBOUND	Left	176	1	176	-141	35	35	0	202	1	202	-141	61	1	61	0	61	1	61
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	1130	1	1130	-30	1100	1100	26	1324	1	1324	-30	1294	2	647	0	1294	2	647
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	0	0	0	170	170	0	0	0	0	0	170	170	1	170	0	170	1	170
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EASTBOUND	Left	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
WESTBOUND	Left	12	1	12	-3	9	9	0	14	1	14	-3	11	1	11	0	11	1	11
	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Through	0	0	0	0	0	0	0	0	0	0	0	0	0	25	0	0	0	25
	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
	Right	33	1	0	-13	20	3	0	38	1	0	-13	25	0	0	0	25	0	0
	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
CRITICAL VOLUMES		North-South: 1130	1100		North-South: 1100	1100		North-South: 1324	1324		North-South: 757	757		North-South: 757	757		North-South: 757	757	
		East-West: 12	9		East-West: 9	9		East-West: 14	14		East-West: 25	25		East-West: 25	25		East-West: 25	25	
		SUM: 1142	1109		SUM: 1109	1109		SUM: 1338	1338		SUM: 782	782		SUM: 782	782		SUM: 782	782	
VOLUME/CAPACITY (V/C) RATIO:		0.761		0.778		0.892		0.549		0.549		0.549		0.549		0.549		0.549	
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.761		0.678		0.892		0.449		0.449		0.449		0.449		0.449		0.449	
LEVEL OF SERVICE (LOS):		C		B		D		A		A		A		A		A		A	

REMARKS:

Version: 1i Beta; 8/4/2011

### PROJECT IMPACT

Change in v/c due to project:	-0.443	Δv/c after mitigation:	-0.443
Significant impacted?	NO	Fully mitigated?	N/A

# Level of Service Worksheet (Circular 212 Method)



I/S #:	North-South Street:	Coldwater Canyon Avenue	Year of Count:	2012	Ambient Growth: (%):	2.0	Conducted by:	The Traffic Solution	Date:	7/17/2015										
	CMA5	East-West Street:	Harvard-Westlake Main Entrance Drive	Projection Year:	2019	Peak Hour:	PM	Reviewed by:	Project:	Harvard-Westlake Upper School I										
No. of Phases		2	3		2		3		3											
Opposed Ø'ing: N/S-1, E/W-2 or Both-3?		0	0		0		0		0											
Right Turns: FREE-1, NRTOR-2 or OLA-3?		NB-- 0 SB-- 0	NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0		NB-- 0 SB-- 0											
ATSAC-1 or ATSAC+ATCS-2?		EB-- 0 WB-- 0	EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0		EB-- 0 WB-- 0											
Override Capacity		0	2		0		2		0											
		0	0		0		0		0											
MOVEMENT		EXISTING CONDITION			EXISTING PLUS PROJECT			FUTURE CONDITION W/O PROJECT				FUTURE CONDITION W/ PROJECT				FUTURE W/ PROJECT W/ MITIGATION				
		Volume	No. of Lanes	Lane Volume	Project Traffic	Total Volume	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	
NORTHBOUND	↔	Left	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0		
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0		
	↔	Through	1237	1	1237	-64	1173	1173	26	1447	1	1447	-64	1383	1	1383	0	1383	1	1383
	↔	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔	Right	7	1	0	-5	2	0	0	8	1	0	-5	3	1	0	0	3	1	0
	↔	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
↔	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
SOUTHBOUND	↔	Left	47	1	47	-2	45	45	0	54	1	54	-2	52	1	52	0	52	1	52
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔	Through	695	1	695	-10	685	685	23	822	1	822	-10	812	2	406	0	812	2	406
	↔	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
	↔	Right	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
	↔	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
↔	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
EASTBOUND	↔	Left	0	0	0	154	154	0	0	0	0	0	154	154	1	154	0	154	1	154
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	15	0	0	0	15
	↔	Through	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
	↔	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↔	Right	0	0	0	15	15	0	0	0	0	0	15	15	0	0	0	15	0	0
	↔	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
↔	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
WESTBOUND	↔	Left	41	1	41	-33	8	8	0	47	1	47	-33	14	1	14	0	14	1	14
	↔	Left-Through	0	0	0	0	0	0	0	0	0	0	0	0	0	32	0	0	0	32
	↔	Through	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1	0
	↔	Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
	↔	Right	90	1	67	-71	19	0	0	103	1	76	-71	32	0	0	0	32	0	0
	↔	Left-Through-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
↔	Left-Right	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	
CRITICAL VOLUMES		North-South: 1284 East-West: 67 SUM: 1351	North-South: 1218 East-West: 8 SUM: 1226	North-South: 1501 East-West: 76 SUM: 1577	North-South: 1435 East-West: 186 SUM: 1621	North-South: 1435 East-West: 186 SUM: 1621														
VOLUME/CAPACITY (V/C) RATIO:		0.901	0.860	1.051	1.138	1.138														
V/C LESS ATSAC/ATCS ADJUSTMENT:		0.901	0.760	1.051	1.038	1.038														
LEVEL OF SERVICE (LOS):		E	C	F	F	F														

REMARKS:

Version: 1i Beta; 8/4/2011

### PROJECT IMPACT

Change in v/c due to project:	-0.013	Δv/c after mitigation:	-0.013
Significant impacted?	NO	Fully mitigated?	N/A

**LINSCOTT, LAW & GREENSPAN, ENGINEERS**  
 20931 Burbank Boulevard, Suite C, Woodland Hills, CA  
 (818) 835-8648 Fax (818) 835-8649

CRITICAL MOVEMENT ANALYSIS

N-S St: Coldwater Canyon Avenue  
 E-W St: Harvard-Westlake Main Entrance Driveway  
 Project: Harvard-Westlake Upper School Infrastructure Project1-08-3744-2  
 File Name: CMA5  
 Counts by: The Traffic Solution

Coldwater Canyon Avenue @ Harvard-Westlake Main Entrance Driveway  
 Peak Hour: AM  
 Annual Growth: 2.0%

Date: 06/19/2015  
 Date of Count: 2012  
 Buildout Year: 2019

**PROJECT FEATURES**

Movement	2012 EXIST. TRAFFIC			2012 EXIST. + PROJECT				2012 EXIST. + PROJ. + MIT				2019 FUTURE BASELINE				2019 FUTURE W/PROJECT				2019 FUTURE W/MITIGATION			
	Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NB Left	0	0	-	110	110	1	110	0	110	1	110	0	0	0	-	110	110	1	110	0	110	1	110
Comb. L-T	0	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-	0	-	-	-	0	-
NB Thru	417	1	417	-17	400	1	400	0	400	1	400	87	504	1	504	-17	487	1	487	0	487	1	487
Comb. T-R	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
NB Right	57	1	57	-46	11	1	11	0	11	1	11	8	66	1	66	-46	20	1	20	0	20	1	20
Comb. L-T-R -	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SB Left	176	1	176	-141	35	1	35	0	35	1	35	26	203	1	203	-141	62	1	62	0	62	1	62
Comb. L-T	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SB Thru	1130	1	1130	-30	1100	2	550	0	1100	2	550	194	1324	1	1324	-30	1294	2	647	0	1294	2	647
Comb. T-R	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
SB Right	0	0	-	170	170	1	170	0	170	1	170	0	0	0	-	170	170	1	170	0	170	1	170
Comb. L-T-R -	0	0	-	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
EB Left	0	0	-	0	0	1	-	0	0	1	-	0	0	0	-	0	0	1	-	0	0	1	-
Comb. L-T	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
EB Thru	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Comb. T-R	0	0	-	0	0	1	0	0	0	1	0	0	0	0	-	0	0	1	0	0	0	1	0
EB Right	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Comb. L-T-R -	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
WB Left	12	1	12	-3	9	1	9	0	9	1	9	2	14	1	14	-3	11	1	11	0	11	1	11
Comb. L-T	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
WB Thru	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Comb. T-R	0	0	-	0	0	1	20	0	0	1	20	0	0	0	-	0	0	1	24	0	24	1	24
WB Right	33	1	33	-13	20	0	-	0	20	0	-	5	37	1	37	-13	24	0	-	0	24	0	-
Comb. L-T-R -	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Crit. Volumes:	N-S:	1130				N-S:	660			N-S:	660			N-S:	1324			N-S:	757			N-S:	757
	E-W:	12				E-W:	20			E-W:	20			E-W:	14			E-W:	24			E-W:	24
	SUM:	1142				SUM:	680			SUM:	680			SUM:	1338			SUM:	782			SUM:	782
No. of Phases:		2					3				3				2				3				3
(N/A=0, ATSAC=1, ATCS=2)		0					2				2				0				2				2
Volume / Capacity:		0.762					0.377				0.377				0.892				0.448				0.448
Level of Service:		C					A				A				D				A				A

Assumptions: Maximum Sum of Critical Volumes (Intersection Capacity): 2 Phase=1500, 3 Phase=1425, 4+ Phase=1375, Unsignalized=1200.  
 For dual turn lanes, 55% of volume is assigned to heavier lane.  
 For one excl. and one opt. turn lane, 70% of volume is assigned to exclusive lane.  
 Right turns on red from excl. lanes = 50% of overlapping left turn.

**LINSCOTT, LAW & GREENSPAN, ENGINEERS**  
 20931 Burbank Boulevard, Suite C, Woodland Hills, CA  
 (818) 835-8648 Fax (818) 835-8649

CRITICAL MOVEMENT ANALYSIS

N-S St: Coldwater Canyon Avenue  
 E-W St: Harvard-Westlake Main Entrance Driveway  
 Project: Harvard-Westlake Upper School Infrastructure Project1-08-3744-2  
 File Name: CMA5  
 Counts by: The Traffic Solution

Coldwater Canyon Avenue @ Harvard-Westlake Main Entrance Driveway  
 Peak Hour: PM  
 Annual Growth: 2.0%

Date: 06/19/2015  
 Date of Count: 2012  
 Buildout Year: 2019

**PROJECT FEATURES**

Movement	2012 EXIST. TRAFFIC			2012 EXIST. + PROJECT				2012 EXIST. + PROJ. + MIT				2019 FUTURE BASELINE				2019 FUTURE W/PROJECT				2019 FUTURE W/MITIGATION			
	Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume	Added Volume	Total Volume	No. of Lanes	Lane Volume
NB Left	0	0	-	0	0	1	-	0	0	1	-	0	0	0	-	0	0	1	-	0	0	1	-
Comb. L-T	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
NB Thru	1237	1	1237	-64	1173	1	1173	0	1173	1	1173	210	1447	1	1447	-64	1383	1	1383	0	1383	1	1383
Comb. T-R	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
NB Right	7	1	7	-5	2	1	2	0	2	1	2	1	8	1	8	-5	3	1	3	0	3	1	3
Comb. L-T-R -	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
SB Left	47	1	47	-2	45	1	45	0	45	1	45	7	54	1	54	-2	52	1	52	0	52	1	52
Comb. L-T	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
SB Thru	695	1	695	-10	685	2	342	0	685	2	342	126	821	1	821	-10	811	2	405	0	811	2	405
Comb. T-R	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
SB Right	0	0	-	0	0	1	0	0	0	1	0	0	0	0	-	0	0	1	0	0	0	1	0
Comb. L-T-R -	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
EB Left	0	0	-	154	154	1	154	0	154	1	154	0	0	0	-	154	154	1	154	0	154	1	154
Comb. L-T	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
EB Thru	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Comb. T-R	0	-	-	0	-	1	15	0	-	1	15	0	-	0	-	0	-	1	15	0	-	1	15
EB Right	0	0	-	15	15	0	-	0	15	0	-	0	0	0	-	15	15	0	-	0	15	0	-
Comb. L-T-R -	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
WB Left	41	1	41	-33	8	1	8	0	8	1	8	6	47	1	47	-33	14	1	14	0	14	1	14
Comb. L-T	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
WB Thru	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-	0	0	0	-
Comb. T-R	0	-	-	0	-	1	19	0	-	1	19	0	-	0	-	0	-	1	19	0	-	1	19
WB Right	90	1	90	-71	19	0	-	0	19	0	-	13	103	1	103	-71	32	0	-	0	32	0	-
Comb. L-T-R -	0	-	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-	0	-
Crit. Volumes:	N-S:	1284				N-S:	1218			N-S:	1218			N-S:	1501			N-S:	1435			N-S:	1435
	E-W:	66				E-W:	173			E-W:	173			E-W:	76			E-W:	186			E-W:	186
	SUM:	1350				SUM:	1391			SUM:	1391			SUM:	1577			SUM:	1621			SUM:	1621
No. of Phases:		2					3				3				2				3				3
(N/A=0, ATSAC=1, ATCS=2)		0					2				2				0				2				2
Volume / Capacity:		0.900					0.876				0.876				1.052				1.038				1.038
Level of Service:		D					D				D				F				F				F

Assumptions: Maximum Sum of Critical Volumes (Intersection Capacity): 2 Phase=1500, 3 Phase=1425, 4+ Phase=1375, Unsignalized=1200.  
 For dual turn lanes, 55% of volume is assigned to heavier lane.  
 For one excl. and one opt. turn lane, 70% of volume is assigned to exclusive lane.  
 Right turns on red from excl. lanes = 50% of overlapping left turn.

**APPENDIX D-3**  
**HCS WORKSHEETS –**  
**VEHICLE QUEUE LENGTH CALCULATIONS**

## BACK-OF-QUEUE WORKSHEET

### General Information

Project Description 5-08-3744-2 Harvard-Westlake

### Average Back of Queue

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Lane Group	<i>L</i>	<i>TR</i>		<i>L</i>	<i>TR</i>		<i>L</i>	<i>T</i>	<i>R</i>	<i>L</i>	<i>T</i>	<i>R</i>
Initial Queue/Lane	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Flow Rate/Lane Group	0	0		11	25		110	479	19	61	1286	170
Satflow/Lane	1900	1900		1900	1615		1805	1900	1615	1805	1900	1615
Capacity/Lane Group	80	34		80	29		108	1499	1274	108	2854	1274
Flow Ratio	0.0	0.0		0.0	0.0		0.1	0.3	0.0	0.0	0.4	0.1
v/c Ratio	0.00	0.00		0.14	0.86		1.02	0.32	0.01	0.56	0.45	0.13
I Factor	1.000	1.000		1.000	1.000		1.000	1.000	1.000	1.000	1.000	1.000
Arrival Type	3	3		3	3		3	3	3	3	3	3
Platoon Ratio	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Q1	0.0	0.0		0.3	0.6		2.8	3.4	0.1	1.5	5.5	1.0
kB	0.1	0.1		0.1	0.1		0.2	0.9	0.8	0.2	0.9	0.8
Q2	0.0	0.0		0.0	0.3		1.7	0.4	0.0	0.2	0.7	0.1
Q Average	0.0	0.0		0.3	0.9		4.5	3.8	0.1	1.7	6.2	1.1

### Percentile Back of Queue (95th percentile)

fB%	2.1	2.1		2.1	2.1		2.0	2.0	2.1	2.0	1.9	2.1
Back of Queue	0.0	0.0		0.6	1.9		8.8	7.5	0.2	3.5	12.0	2.3

### Queue Storage Ratio

Queue Spacing	25.0	25.0		25.0	25.0		25.0	25.0	25.0	25.0	25.0	25.0
Queue Storage	0	0		0	0		0	0	0	0	0	0
Average Queue Storage Ratio												
95% Queue Storage Ratio												

## BACK-OF-QUEUE WORKSHEET

### General Information

Project Description 5-08-3744-2 Harvard-Westlake

### Average Back of Queue

	EB			WB			NB			SB		
	LT	TH	RT	LT	TH	RT	LT	TH	RT	LT	TH	RT
Lane Group	<i>L</i>	<i>TR</i>		<i>L</i>	<i>TR</i>		<i>L</i>	<i>T</i>	<i>R</i>	<i>L</i>	<i>T</i>	<i>R</i>
Initial Queue/Lane	0.0	0.0		0.0	0.0		0.0	0.0	0.0	0.0	0.0	0.0
Flow Rate/Lane Group	154	15		14	32		0	1373	3	52	801	0
Satflow/Lane	1399	1615		1421	1615		1805	1900	1615	1805	1900	1615
Capacity/Lane Group	146	169		148	169		120	1322	1123	120	2517	1123
Flow Ratio	0.1	0.0		0.0	0.0		0.0	0.7	0.0	0.0	0.2	0.0
v/c Ratio	1.05	0.09		0.09	0.19		0.00	1.04	0.00	0.43	0.32	0.00
I Factor	1.000	1.000		1.000	1.000		1.000	1.000	1.000	1.000	1.000	1.000
Arrival Type	3	3		3	3		3	3	3	3	3	3
Platoon Ratio	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
PF Factor	1.00	1.00		1.00	1.00		1.00	1.00	1.00	1.00	1.00	1.00
Q <sub>1</sub>	3.8	0.3		0.3	0.7		0.0	34.3	0.0	1.2	4.1	0.0
k <sub>B</sub>	0.2	0.2		0.2	0.2		0.2	0.8	0.7	0.2	0.8	0.7
Q <sub>2</sub>	2.6	0.0		0.0	0.1		0.0	15.4	0.0	0.1	0.4	0.0
Q Average	6.5	0.4		0.3	0.8		0.0	49.8	0.0	1.4	4.5	0.0

### Percentile Back of Queue (95th percentile)

f <sub>B</sub> %	1.9	2.1		2.1	2.1		2.1	1.5	2.1	2.1	2.0	2.1
Back of Queue	12.4	0.8		0.7	1.6		0.0	76.5	0.1	2.9	8.8	0.0

### Queue Storage Ratio

Queue Spacing	25.0	25.0		25.0	25.0		25.0	25.0	25.0	25.0	25.0	25.0
Queue Storage	0	0		0	0		0	0	0	0	0	0
Average Queue Storage Ratio												
95% Queue Storage Ratio												