ENGINEERING BULLETIN #06-13

TO: All Interested Parties

FROM: Bryan McKinney, Public Works Director/City Engineer

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Date: 2023.01.24 10:19:13 -08'00'

REVISED EFFECTIVE DATE: August 1, 2022

ORIGINAL EFFECTIVE DATE: December 19, 2006

SUBJECT: Traffic Impact Study Guidelines

This bulletin establishes traffic study specifications. All traffic studies submitted to the City of La Quinta shall be completed by a Traffic Engineer registered in the State of California and shall follow these guidelines unless otherwise directed by the City Engineer.

SCREENING CRITERIA

All projects may be required to submit a Traffic Impact Study or Focused Traffic Impact Memo per the City Engineer. This analysis may include a Vehicle Miles Traveled (VMT) Analysis depending on the screening criteria and analyzes the effects of a project on transportation, access, circulation, and related safety elements proximate to the Project and establishes consistency with the General Plan and other City requirements.

1. **Traffic Impact Studies** - will be prepared for all new development projects generating 100 or more peak hour trips as calculated by the screening criteria below. The screening calculation of the peak hour trips shall utilize the Institute of Transportation Engineers (ITE) p.m. peak hour trip generation rates per the most recent Trip Generation Manual. Selected 9th Edition Trip Generation rates are provided below in **Table 1.0** for convenience and reference only. Additional land use categories and trip generation regression curves are available in the Trip Generation Manual and should be used as applicable. If a traffic study is not required to be prepared, a VMT analysis may still be required.

TABLE 1.0 – Trip Generation Rates Excerpted from ITE Trip Generation 9th Edition

Land Use	Unit	Average Rate P.M. Weekday Peak Hour of the Generator Trips/ Unit	Threshold Development intensity
Light Industry (Code110)	1,000 GFA	1.08	46,296 GFA
Industrial Park (Code 130)	1,000 GFA	0.84	58,140 GFA
Manufacturing (Code140)	1,000 GFA	0.75	66,667 GFA
Single Family Residential (Code 210)	D.U.	1.02	49 D.U.
Apartment (Code 220)	D.U.	0.67	75 D.U
High-rise Apartment (Code 222)	D.U.	0.40	125 D.U.
Residential Condominium (Code 230)	D.U.	0.52	96 D.U.
General Office (Code 710)	1,000 GFA	1.49	33,557 GFA
Corporate Headquarters (Code 714)	1,000 GFA	1.41	35,714 GFA
Office Park (Code 750)	1,000 GFA	1.48	33,333 GFA
Research & Development (Code 760)	1,000 GFA	1.07	46,296 GFA
Drive-In Bank (Code 912)	1,000 GFA	26.69	935 GFA
Gasoline Service w/ Market (Code 945)	Fuel Position	13.57	4 Pumps
Discount Superstore (Code 813)	1,000 GFA	4.40	12,407 GFA
Shopping Center (Saturday Peak Hour) (Code 820)	1,000 GLA	4.82	10,060 GLA
Quality Restaurant (Code 931)	1,000 GFA	9.02	5543 GFA
Fast Food w/ Drive-Thru (Code 934)	1,000 GFA	47.30	1071 GFA

2. **VMT Analysis Guidelines** - This is a part of the traffic study that analyzes transportation impacts under CEQA pursuant to Section 15064.3 of the CEQA Guidelines.

   The General Plan strategically links land use and transportation to reduce environmental impacts of growth by supporting project development that supports walking, biking, and transit, bringing office / residential / and service land uses together to internalize trips to reduce VMT and encourages the development and use of non-automobile transportation modes to help minimize vehicle trips and reduce VMT.

A. **VMT Screening** – There are three types of screening that can apply to effectively screen projects from project-level assessment:
   a. Project Type Screening,
   b. Transit Priority Area Screening, and
   c. Low VMT Area Screening.

   The screening criteria are described in the VMT Policy (Attachment 6). A VMT screening analysis must be completed to determine if the project falls into one of these screening types.

B. **Projects that do not meet the screening criteria** – If the project fails to meet any of the screening criteria above, a detailed VMT analysis is required to be prepared. It must identify potential transportation impacts and propose mitigation and/or improvements. It will be the consultants' responsibility to follow proper procedures and submit a report worthy of satisfying CEQA. See Attachment 6 for VMT policy and analysis methodology. VMT analysis must show screening methodology to determine if project is screened out. If not, then follow the guidelines on VMT analysis. VMT mitigation measures can be incorporated into the summary and recommendations.

C. **VMT Mitigation Measures** - To mitigate VMT impacts, the following choices are available to the applicant:
   a. Modify the project's built environment characteristics to reduce VMT generated by the Project.
   b. Implement Transportation Demand Management (TDM) measures to reduce VMT generated by the project consistent with La Quinta Municipal Code Chapter 9.180.

D. **Significant and Unavoidable Impacts** – if the Project's VMT impacts can't be fully mitigated, the Project applicant may:
   a. Request City Council adopt a Statement of Overriding Considerations as part of the EIR certification.

3. **Focused Traffic Impact Memos** - to address specific issues, such as site access, may be required at the discretion of the City Engineer for new development projects that will generate:
    1. Between 50 and 100 peak hour trips; or
    2. Less than the total peak hour trips associated with the previous existing or approved land use.
4. **Local Transportation Analysis** - All projects may be required to submit a Local Transportation Analysis per the Director of Public Works/City Engineer. This analysis examines the effects of a project on transportation, access, circulation, and related safety elements proximate to the Project and establishes consistency with the General Plan and other City requirements.

The local transportation analysis follows the guidelines of a traffic impact study.

TRAFFIC IMPACT STUDY FORMAT

All traffic impact studies shall provide the following information unless otherwise approved in the proposed scope of work.

1.0 EXECUTIVE SUMMARY

A. Introduction
B. Description of Proposed Project
C. Study Area and Analysis Scenarios
D. Criteria for Determining Significant Impacts
E. Summary of Findings
    1. Existing Conditions
    2. Project Opening Year and Build out Conditions
    3. Site Access and On-Site Circulation
    4. Parking

2.0 PROPOSED DEVELOPMENT

A. Location
B. Land Use and Intensity
C. Site Plan and Project Access
D. Project Timing

3.0 AREA CONDITIONS

A. Study Area
    1. Area of Significant Traffic Impact

B. Study Area Land Use
    1. Existing Land Uses
    2. Approved Future Development
C. Area Roadway System
D. Traffic Volumes and Conditions
E. Level of Service Definitions and Analysis Methodologies
F. City of La Quinta Required Intersection Level of Service
G. Existing Intersection Level of Service
H. City of La Quinta Required Roadway Segment Level of Service
I. Existing Roadway Segment Level of Service
J. Transit Service

4.0 PROJECTED TRAFFIC

A. Site Traffic
    1. Trip Generation
    2. Trip Distribution
    3. Modal Split
    4. Trip Assignment
B. Cumulative Development Traffic
    1. Method of Projection
    2. Non-Site Traffic for Study Area
    3. Ambient Growth Rate
C. Total Future Traffic

5.0 TRAFFIC IMPACT ASSESSMENT METHODOLOGY

A. Scenarios
B. Potential Significant Impact Criteria
    1. Potential Significant Impacts to Intersections (Near Term)

6.0 NEAR TERM CONDITIONS TRAFFIC ANALYSIS FOR INTERSECTIONS AND ROAD SEGMENTS

A. Level of Service for Existing plus Ambient Growth plus Project Opening Year
B. Level of Service for Existing plus Ambient Growth plus Cumulative Plus Project (2025)
D. Statistical Standard Deviation Trip Generation Analysis

7.0 VEHICLE MILES TRAVELED ANALYSIS

A. VMT Methodology
B. Project Screening
C. Project VMT Assessment (if necessary)
D. Project Design Features for VMT Reduction (if any)

7.0 SUMMARY AND RECOMMENDATIONS

A. Project Access
B. Project Traffic
C. Potential Significant Impact Assessment Results
D. On-Site Circulation Recommendations
E. VMT Mitigation (if necessary)
F. Parking

FORMATTING CRITERIA

Traffic Study reports should provide a comprehensive review of any potentially significant project specific impact(s). Included in each report should be a project description, a project schedule and an explanation of the analysis methodology used. Existing, existing plus project, project opening phases and City build-out conditions should be evaluated based on collected and projected volumes. Each of these scenarios should have a Level of Services (LOS) analysis, verification of traffic counts utilized and a list of significant impacts along with recommended mitigation measures. Reports should include fully numbered pages with a table of contents and other standard report formatting measures including Executive Summary and Recommendation sections. Recommendations for mitigation of the potentially significant project specific impacts are required for all potentially significant impacts for each scenario analyzed in the report. Traffic Study reports in letter format are acceptable with City approval when a limited scope analysis or update study is desired.

SCOPING FORM APPROVAL & DRAFT REPORT APPROVAL

Preparation of traffic studies for the City of La Quinta should begin with the submittal of a completed scoping form (see Attachment 4) by the traffic engineer preparing the study for City approval. Included with the submittal should be a figure graphically depicting the report's proposed study intersections and distribution assumptions. The scope should also identify what specific ITE land use codes, trip generation rates, pass-by reduction factors, time periods (e.g. a.m. peak, p.m. peak, weekend peak) and development scenarios (e.g. existing, existing plus project, project phase, project build-out, City build-out) are proposed to be studied. A draft cumulative projects list, if applicable, should also be included with the scoping submittal. This list of planned or entitled projects that could affect the development under review can be obtained from the Planning Division.

The traffic study should only be initiated after the scoping submittal is approved by the Public Works Department. The scoping submittal will be reviewed by the City Traffic Engineer and the Principal Engineer in charge of the Development Services Division with approval given by the Public Works Director. Scoping submittals may also be reviewed by the City Attorney. A draft traffic study report is also requested for City review and approval prior to finalization of report conclusions.

The scope of the Traffic Impact Study shall address all applicable requirements of the California Environmental Quality Act (CEQA) and the Traffic Engineer performing the work should be familiar with these requirements. The scope may be expanded after the initial Scope of Work is approved by the City to address CEQA compliance issues. Questions with regard to CEQA compliance should be addressed to the Planning Division.

FOCUSED TRAFFIC IMPACT MEMOS

The purpose of a traffic memo is to compare the trip generation analysis in an environmental document prepared as part of any already approved entitlement to the trip generation analysis for a proposed or amended entitlement. The analysis for the trip generation associated with the proposed or amended entitlement must be based on the most recent trip generation rates published by ITE or an equally authoritative source as approved by the City Engineer.

If the traffic memo determines that there is an insignificant difference (equal to or less than 100 daily trips or 10 peak hour trips) between the existing entitlement and the proposed or amended entitlement trip generation, no additional traffic analysis will be required. If the difference is larger than 100 daily trips or 10 peak hour trips, a focused analysis in the format of a more comprehensive traffic memo will be required using the appropriate study area consistent with the guidance provided in Table 2 of EB 06-13. and will be prepared as a memo or letter and will follow the same format as above but provide the information in less detail. However, the near-term conditions traffic analysis will only be required for Existing plus Ambient Growth plus Project Opening Year Scenario

GENERAL SPECIFICATIONS

Traffic Studies for the City of La Quinta shall conform to the general specifications contained within the Riverside County Transportation Department guidelines (latest edition) unless otherwise authorized by the City Engineer. These guidelines are located at the following hyperlink:

http://www.rctlma.org/trans/gen_info_pamphlets.html

Specific exceptions to the Riverside County specification document for the City of La Quinta are as outlined in this bulletin.

MINIMUM STUDY AREA

At a minimum, the traffic report or focused traffic impact memo shall analyze roadways and intersections within the following study area radius based on the Average Daily Traffic (ADT) the project is projected to generate:

TABLE 2.0 – Minimum Study Radius

ADT's between 1,000-5,000	0.50 mile from the adjacent perimeter of the project
ADT's between 5,001-10,000	1.0 mile from the adjacent perimeter of the project
ADT's between 10,001-15,000	1.5 miles from the adjacent perimeter of the project
ADT's over 15,000	Radius to be determined by the City

If, in the judgment of the City or the Traffic Engineer, project trips may cause potentially significant project specific impacts to road segments or intersections beyond the study radius, those road segments or intersections are also required to be studied. The study scope should also identify intersections and streets from adjacent municipalities to be included in the traffic study, if appropriate.

No adjustments for diverted trips should be assumed when analyzing intersections or road segments along Highway 111, Washington or Jefferson Streets. Pass by trips can be utilized, if justified.

LEVEL OF SERVICE (LOS)

The City of La Quinta has established LOS 'D' as the minimum level of service for its intersections and street segments.

ROAD SEGMENTS

The maximum daily volume to capacity (V/C) ratio of 0.90 shall be used for all road segments being studied. The maximum daily capacity of a roadway shall be determined based on its functional classification as follows:

Classification	Lane Configuration	Capacity (ADT)
Local	2U	9,000
Collector	2U	14,000
Modified Secondary	2D	19,000
Secondary	4U	28,000
Primary	4D	42,600
Major	6D	61,100
Augmented Major	8D	76,000

SIGNALIZED INTERSECTIONS

Signalized intersections shall have an overall intersection delay that equates to a LOS 'D' or better based on the delay methodology in the latest version of the 2010 Highway Capacity Manual (HCM) or Intersection Capacity Utilization (ICU). Input parameters for the HCM analysis shall comply with Attachment 2 of this document. Alternatively, the Intersection Capacity Utilization Method (ICU) may be used to calculate LOS for signalized intersections.

UNSIGNALIZED INTERSECTIONS

Unsignalized intersections shall have a LOS 'D' or better for all critical movements at an all-way stop controlled intersection and a LOS 'E' for a side street on a two-way stop-controlled intersection based on the latest HCM delay methodology.

TRAFFIC COUNTS

TIME OF DAY

Required traffic counts should measure morning peak volumes between the hours of 6:00 to 8:30 a.m. and afternoon peak volumes between the hours of 2:30 to 5:30 p.m. Time frames for Saturday counts, if required, should be agreed upon with the City prior to their collection. The City of La Quinta experiences peak traffic volumes at atypical times of day as a result of heavy construction and maintenance worker trip volumes with early start/end work schedules.

SEASONAL ADJUSTMENT

The City of La Quinta historically experiences significant variations in seasonal population. To compensate for these cyclical fluctuations, adjustments should be made to traffic counts based on the time of year they are taken. Counts taken from January 2 to March 31 require

no seasonal adjustments. Use of traffic counts taken in the period between Thanksgiving and New Years Day will generally not be allowable given the wide variation in traffic volumes during this period. Counts taken in the months of April and November shall be increased by 5%. Those taken in May and October shall be increased by 10%. Those taken in June and September shall be increased by 15%, while those taken in July and August shall be increased by 20% over measured levels. With the City approval, historical traffic counts may be utilized for a period no greater than 1 year from the initial submittal of the full traffic study. A request to use historical traffic counts should be included as part of the scoping package submitted to the City.

FUTURE TRAFFIC VOLUMES

CUMULATIVE GROWTH VOLUMES

For determining future traffic volume growth for time periods between existing conditions and the City's General Plan Build out Year (2035), the latest projections from the La Quinta Traffic Model for both intersections and street segments, will be used for this purpose. For intersections where no projected volumes are provided, turning movement counts for existing conditions will be factored up based on the projections from the La Quinta Traffic Model for the intersection street segments.

The methodology described in NCHRP Report 255 may be used to assist in estimating intersection turning movement counts.

TRAFFIC VOLUME BENCHMARKS

Traffic counts and studies should benchmark against current peak season traffic volume levels available from the Coachella Valley Association of Governments at:

http://www.cvag.org/Trans/pdffiles/2007TrafficMap.pdf

Studies should review current traffic census information to ensure that actual or theoretical counts are of the proper magnitude.

TRIP GENERATION RATES

ITE trip generation rates should utilize appropriate land use categories for peak hour assumptions as described in the "Screening Criteria" section of this Engineering Bulletin unless other rates are authorized by the City Engineer. If the ITE Trip Generation Report provides an equation for calculating trip generation that has a good regression curve fit to the data points ($R^2>0.7$), the equation should be used in place of the average rate. For high weekend use facilities such as shopping centers and restaurants, the traffic study should utilize the higher trip generation values assigned to these time periods as well as

an analysis of weekday trip generation conditions. AM peak hour analysis is not generally applicable for commercial sites. The ITE rate of the peak hour of the generator NOT the peak hour of the adjacent street should generally be utilized.

Reduction factors may be applied to the traffic that is added to the streets adjacent to the project to account for non-diverted pass-by traffic. The reduction factors, outlined in the latest edition of the Institute of Transportation Engineers Trip Generation Informational Report Users Handbook, are to be approved by the City during the scoping process.

In addition to average peak hour rates, increases in average rates to incorporate one (1) statistical standard deviation (1 sigma) for commercial projects such as discount superstores, shopping centers, quality and fast-food restaurants, gasoline service stations and drive-in banks, should be reviewed for worst case sensitivity analysis. The analysis is requested to identify marginal traffic issues with potential additional traffic volumes.

The statistical standard deviation trip generation increase analysis should review all site access intersections and adjacent arterial intersections. While the details of this analysis can be located in the report appendix, a supplemental table and diagram should be provided within the traffic study to document standard deviation maximum trip distributions and the potential traffic impacts occurring at the margins of the trip generation estimates.

The standard deviation trip generation rates are not intended to define standard mitigation measures, but to provide a sensitivity review for possible traffic impacts adjacent to the development, given the inexact nature of traffic study assumptions and results.

TRIP DISTRIBUTION AND ASSIGNMENT

A typical trip distribution for a proposed project is illustrated in Attachment 3. This information should be attached to the proposed scope of work (see Attachment 4) for a traffic impact study, as well as in the final study report. The basis used to determine the percentage distribution should be identified in the scoping form and approved by the City. The percent of trips assigned to the road network can be based on the relative location of population, commercial, recreational and employment centers; existing peak hour link and turning movement volumes; ADT volumes; proximity to regional transportation corridors and/or knowledge of local and regional traffic circulation.

TRAFFIC SIGNAL GUIDANCE

A Traffic Signal Warrant Analysis should be performed at all unsignalized study intersections for each study scenario. Warrant analysis should utilize the most appropriate of eight warrants listed in section 4 of the latest edition of the California Manual of Uniform Traffic Control Devices (CA MUTCD).

The need for traffic signals should also include an analysis for Warrant 6 (Coordinated Signal Systems). This warrant should be applied to locations where adjacent traffic signals do not provide the necessary degree of platooning and where the addition of a new traffic signal will assist in providing progressive signal operation. Normally, this should be considered only at locations which are between 1300 and 2600 feet from existing or future traffic signal installations. At locations which are less than 1300 feet from adjacent traffic signals, new traffic signals will not generally be permitted.

Where applicable, the need for traffic signals should also include an analysis for Warrant 8 (Roadway Network). The signal warrant may be met by an intersection which has a total existing or immediately projected entering volume of at least 1,000 vehicles per hour during the peak hour of a typical weekday or has a total existing or immediately projected entering volume of at least 1,000 vehicles per hour for each of any 5 hours of a non-normal business day (Saturday or Sunday).

EXCLUSIVE LEFT & RIGHT TURN LANES

As part of the analysis of Study Intersections, available storage capacity of existing and proposed auxiliary lanes (i.e. left and right turn pockets) should be reviewed for capacity. At their 95th percentile traffic volume demand level, left-turn lanes should not exceed their storage capacity. Traffic study recommendations for dual left turn lanes should be based on a threshold volume of 250 vehicles per peak hour. Traffic study recommendations for an exclusive right turn lane at an intersection should be based on a threshold volume of 200 vehicles per peak hour.

SITE ACCESS

Auxiliary lanes shall be installed on all primary arterial, secondary arterial and higher order street classifications according to the following criteria:

A left-turn deceleration lane with taper and storage length is required for any driveway with a projected peak hour left ingress turning volume estimated to be 25 vehicles per hour (vph) or greater. The taper length shall be included as part of the required deceleration lane length.

A right-turn deceleration lane is required for any driveway with a projected peak hour right ingress turning volume estimated to be 50 vph or greater. The taper length shall be included as part of the required deceleration lane length. Pocket storage length requirements shall be based on individual project characteristics.

A right-turn deceleration lane should be considered for lower turning volumes on high volume streets (e.g. Washington Avenue, Highway 111).

A left-turn deceleration lane should be considered for locations where left turning vehicles would be required to queue in a high speed ($\geq$ 40mph) through lane.

Installation recommendations for deceleration lanes and related intersection turning movement distributions shown in the final traffic study report will be subject to approval by the City Engineer.

AUXILIARY LANES

Auxiliary lanes will be required to meet the following criteria:

The minimum lane length shall be 100 feet plus taper length for deceleration lanes. The left-turn deceleration lane should include storage for the left turn pocket using the Nomograph provided (Attachment 1).

The design length for deceleration lanes should be determined based on the tables 3.0 and 3.1 (see below). Deceleration lengths are based on the assumption that motorists will decrease their travel speed by 10 mph prior to entering the transition taper and will decelerate at 6.5 ft/sec. The right-turn deceleration lengths also assume that the motorist's final speed will be 10 mph as they turn the corner.

TABLE 3.0 - Design Length for Left-Turn Deceleration Lanes

POSTED SPEED LIMIT	DECELERATION LENGTH	TRANSITION LENGTH	STORAGE LENGTH
40 mph	248 feet	120 feet	TO BE CALCULATED*
45 mph	319 feet	120 feet	TO BE CALCULATED*
50 mph	397 feet	150 feet	TO BE CALCULATED*
55 mph	484 feet	150 feet	TO BE CALCULATED*

*Please see minimum distances identified in Nomograph (Attachment 1)

TABLE 3.1 - Design Length for Right-Turn Deceleration Lanes

POSTED SPEED LIMIT	DECELERATION LENGTH	TRANSITION LENGTH	STORAGE LENGTH*
40 mph	132 feet	120 feet	0
45 mph	186 feet	120 feet	0
50 mph	248 feet	150 feet	0
55 mph	319 feet	150 feet	0

*Assumes free flow for right turn movement

TABLE 3.2 - Design Length for Widening to Dual Left-turn Lanes

POSTED SPEED LIMIT	APPROACH TAPER	BAY TAPER	STORAGE LENGTH*
40 mph	320 feet	200 feet	0
45 mph	540 feet	220 feet	0
50 mph	600 feet	240 feet	0
55 mph	660 feet	265 feet	0

*Please see minimum distances identified in Nomograph (Attachment 1)

1. In general, the right-of-way (with a bike lane) must be widened to 8 to 10 feet in order to accommodate the 12-foot-wide auxiliary lane.
2. The bike lane width should be reduced to 4 feet when it is adjacent to a deceleration lane, per the California Manual of Uniform Traffic Control Devices (CA MUTCD),
3. No reductions in the width of the required landscape buffers will be permitted to construct the auxiliary lane.

Other access issues that should be reviewed, as applicable, in the Traffic Impact Study include intersection sight distance, driveway throat distances, gated access issues, corner clearance from adjacent intersections and distances between driveways.

ON SITE CIRCULATION

On site circulation shall be evaluated as part of the traffic impact study analysis. This shall include a review of the final site plan and specifically address the following:

1. Total parking spaces, shared parking and reciprocal parking agreements.
2. Parking space and circulation aisle dimensions.
3. Provision of accessible parking spaces.
4. Provision of compact parking space.
5. Delivery truck access and circulation.
6. Pedestrian and bicycle access, circulation and connection to offsite facilities.
7. Provision of access to adjacent transit facilities.
8. Drive thru facility design and stacking at the exits to the site
9. Access and circulation into and out of parking structures
10. Design of roads within the site
11. Sight distance at intersections etc.
12. Pedestrian and bicycle circulation and parking for bicycles
13. The configuration and efficiency of valet parking facilities
14. Shuttling of employees from remote facilities.

POTENTIALLY SIGNIFICANT TRAFFIC IMPACT CRITERIA

Potentially significant traffic impacts are divided into two divisions: 1) intersections; and 2) road segments. Both divisions must be evaluated for existing plus project, opening year(s) and City General Plan build out (if the City General Plan Build-out scenario is required by the City Engineer).

Traffic volumes used for the opening year (or years if phased opening) shall use the method outlined under "Cumulative Growth Volumes" in the Future Traffic Volumes section of this document. Analysis for the City build-out scenario shall use volumes generated using the methodology found in the Analysis of General Plan Build-out Conditions section.

While LOS is no longer the measure for impact significance under CEQA, and subject to the City Council's final determination and findings, a potentially significant project specific traffic impact may become a traffic impact which requires mitigation.

INTERSECTIONS

Existing Plus Project Opening Year(s) – A potentially significant project specific traffic impact is defined to occur at any signalized intersection if the project trips will result in the LOS for that intersection exceeding the criteria established in Table 4.0. If HCM analysis is used, the input parameters for the analysis shall comply with Attachment 2 of this document. Alternatively, the Intersection Capacity Utilization Method (ICU) may be used to calculate LOS for signalized intersections. For this analysis scenario, improvements fully funded by City's Capital Improvement Program (CIP) are assumed to be in place. If ICU analysis is used, the input parameters for the analysis shall comply with Attachment 2 of this Bulletin.

TABLE 4.0: Impact Criteria for Existing Intersections Already Operating at LOS E or LOS F

SIGNIFICANT CHANGES IN LOS	
LOS E	Either an increase in delay of 2 seconds or more (HCM) or 30 peak hour trips or more (ICU) on critical movements per lane*
LOS F	Either an increase in delay of 1 second or more (HCM) or 15 peak hour trips or more (ICU) on critical movements per lane*

*Critical movements are the controlling movements when the sums of the maximum volumes per lane for conflicting movements on each roadway are compared. Typically, there are two pairs of critical movements (one left with its opposing through movement) for a four-legged intersection.

A potentially significant impact at an unsignalized study intersection is defined to occur when, with project traffic included, an intersection has a projected LOS 'F' on a side street for two-way stop control or LOS 'E' or worse for the intersection at an all-way stop controlled intersection **and** the addition of project traffic results in an addition of 3 seconds or more of delay for any movement. Delay shall be calculated for all unsignalized study intersections to demonstrate this condition.

Cumulative Impacts - A potentially significant project traffic impact is defined to occur at any signalized intersection if the project trips will result in the LOS for that intersection

exceeding the criteria established in Table 4.0 for cumulative growth volumes which should be forecast using the methodology identified in the Future Traffic Volumes section of this Bulletin. If HCM analysis is used, the input parameters for the analysis shall comply with Attachment 2 of this document. Alternatively, the Intersection Capacity Utilization Method (ICU) may be used to calculate LOS for signalized intersections. If ICU analysis is used, the input parameters for the analysis shall comply with Attachment 2 of this Bulletin. For this analysis scenario, improvements fully funded by the City's Capital Improvement Program (CIP), the Development Impact Fee Program (DIF) and the Transportation Uniform Mitigation Fee Program (TUMF) are assumed to be in place.

A potentially significant impact at an unsignalized study intersection is defined to occur when, with the addition of project traffic included, an intersection has a projected LOS 'F' on a side street for two-way stop control or LOS 'E' or worse for the intersection at an all-way stop control at City build-out **and** the addition of project traffic results in an addition of 3 seconds or more of delay for any movement. Delay shall be calculated for all unsignalized intersections in the study area to demonstrate this.

Additionally, the Traffic Engineer shall report any intersections that change from one LOS to another LOS. This information will be used to ensure that the City's CIP is responsive to the needs of the motoring public.

ROAD SEGMENTS

Existing plus Project/Project Opening Year(s) - A potentially significant project traffic impact is defined to occur on any road segment if the segment is projected to be operating at LOS E or LOS F with project traffic included and the peak hour V/C in the peak direction is increased by 0.02 or more by addition of project traffic at existing plus project or at project opening year(s). The V/C ratio shall be calculated for all studied road segments to demonstrate this. For this analysis scenario, improvements fully funded by the City's Capital Improvement Program (CIP) are assumed to be in place. Additionally, the Traffic Engineer shall report any road segments that change from one LOS to another LOS. This information will be used to ensure that the City's CIP is responsive to the needs of the motoring public.

Cumulative Impacts - A potentially significant project specific traffic impact is defined to occur on any studied road segment if the project would cause the existing LOS to fall to worse than LOS D for cumulative growth volumes which should be forecast using the methodology identified in the Future Traffic Volumes section of this Bulletin. A potentially significant project specific traffic impact is also defined to occur on any studied road segment that is already operating at LOS E or LOS F, if the project traffic will increase the peak hour

V/C in the peak direction by more than 0.02 with cumulative traffic volumes. The V/C ratio shall be calculated for all studied road segments to demonstrate this. For this analysis scenario, improvements fully funded by the City's Capital Improvement Program, the DIF and the TUMF are assumed to be in place.

Additionally, the Traffic Engineer shall report any road segments that change from one LOS to another LOS. This information will be used to ensure that the City's CIP Program is responsive to the needs of the motoring public.

ANALYSIS OF GENERAL PLAN BUILDOUT CONDITIONS

TYPE OF REQUIRED ANALYSIS BASED ON PROJECT SIZE

An updated general plan buildout analysis may be required if deemed necessary by the City Engineer for General Plan Modifications involving projects that are more than 10 acres in size. For such projects, the applicant will be required to retain the services of one of six consulting firms approved by the County of Riverside (Attachment 5) to update RivTAM and its derivatives such as the La Quinta Traffic Model. One of these firms will be required to update the land use socio economic data for the Traffic Analysis Zone (TAZ) in which the proposed project is located to determine the additional traffic that will be added to the intersections and street segments to be included in a full Traffic Impact Study for which a City approved scope of work will be required.

For General Plan Modifications involving projects that are less than 10 acres in size, City staff will apply the most recently published ITE trip generation rates to the land uses approved in the existing General Plan and to those being proposed by the General Plan Modification. Any net increase in peak hour and daily trip generation will be added to nearby intersections and street segments for which peak hour turning movement and average daily volumes are available in the La Quinta Traffic Model to determine if the project will have any potentially significant impacts. The results of this limited analysis will be summarized in a Traffic Memo for the purposes of processing the General Plan Modification application.

INTERSECTIONS IMPACT ANALYSIS

If a general plan buildout analysis is required for a General Plan Modification, a potentially significant project traffic impact is defined to occur at any signalized intersection if the project trips will result in the LOS for that intersection exceeding the criteria established in Table 4.0 by the addition of project traffic to the General Plan build out traffic projected by the most recently approved version of the La Quinta Traffic Model. The time horizon for

General Plan build out will be the year 2035.

If HCM analysis is used, the input parameters for the analysis shall comply with Attachment 2 of this document. Alternatively, the Intersection Capacity Utilization Method (ICU) may be used to calculate LOS for signalized intersections. If ICU analysis is used, the input parameters for the analysis shall comply with Attachment 2 of this Bulletin or more by the addition of project traffic to the General Plan build out traffic. For this analysis scenario, improvements identified in the Circulation Element of the General Plan are assumed to be in place.

ROAD SEGMENTS IMPACT ANALYSIS

If a general plan buildout analysis is required for a General Plan Modification, a potentially significant project specific traffic impact is also determined to occur on any studied road segment that is already operating at LOS E or LOS F, if the project traffic will increase the peak hour V/C in the peak direction by more than 0.02 with cumulative traffic volumes. The V/C ratio shall be calculated for all studied road segments to demonstrate this. For this analysis scenario, improvements identified in the Circulation Element of the General Plan are assumed to be in place.

Projected build-out volumes for City of La Quinta roadway segments should be obtained from the City's most recently approved version of the La Quinta Traffic Model. For this analysis scenario, improvements identified in the Circulation Element of the General Plan are assumed to be in place.

MITIGATION MEASURES

The Traffic Impact Study shall recommend measures to mitigate potentially significant traffic impacts caused by the project individually or cumulatively, under each scenario, to the levels found prior to the addition of project traffic under that scenario. These measures could include, but are not limited to, the addition of lanes, increasing the length of turn pockets, intersection signalization or by changing the project description to reduce project impacts.

For proposed improvements to intersections or road segments located outside the City of La Quinta, if an agency such as another City or the County of Riverside has adopted a program to mitigate impacts from future development that commits that agency to construct the improvement projects included in the program or to obtain the balance of the funding needed to construct the improvements through some other means, the applicant or financial sponsor for the development in the City of La Quinta shall be required to pay its

fair share into the program of that agency.

For non-residential developments, mitigation measures should consider Transportation Demand Management Strategies which are designed to reduce the overall trip generation for the project and the need for road related improvements. Such strategies may include the following:

- Establishing preferential parking for carpool or vanpool vehicles.
- Providing bus pass or Vanpool subsidies.
- Establishing a coordinated program for a Guaranteed Ride Home in cases of emergencies, or in case of unanticipated work time extensions.
- Allowing employees that arrive to work by alternative modes some level of leeway on their arrival times due to the unforeseen transit delays.
- Implement alternate work schedules to reduce employee trips during peak hours.
- Provide shower facilities and lockers for employees that arrive to work by walking, bicycling, or other alternative modes.
- Providing bicycle parking where bicycles can be locked to an appropriate device or lockable bicycle lockers.

PROJECT FAIR SHARE

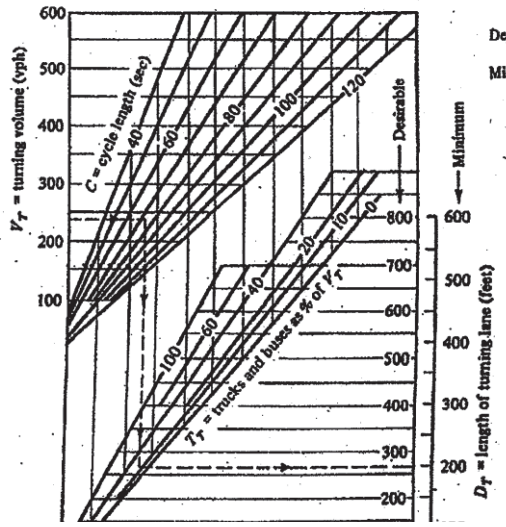
For projects that create significant impacts to City facilities, a percentage of fair share shall be determined for each location impacted. Fair share for intersections shall be calculated as the ratio of the increase in peak hour turning movement volumes from the project divided by the sum of the existing peak hour turning movements plus peak hour turning movement volumes generated by the cumulative development projects.

Fair share for street segments shall be calculated as the ratio of the increase in average daily trips from the project divided by the sum of the existing average daily trips plus average daily trips generated by the cumulative development projects.

Fair share cost of mitigation shall be calculated using the Project Fair Share percentage (P) multiplied by the total cost of mitigation.

ATTACHMENT 1

Nomographs – Left turn storage at signalized and non-signalized intersections



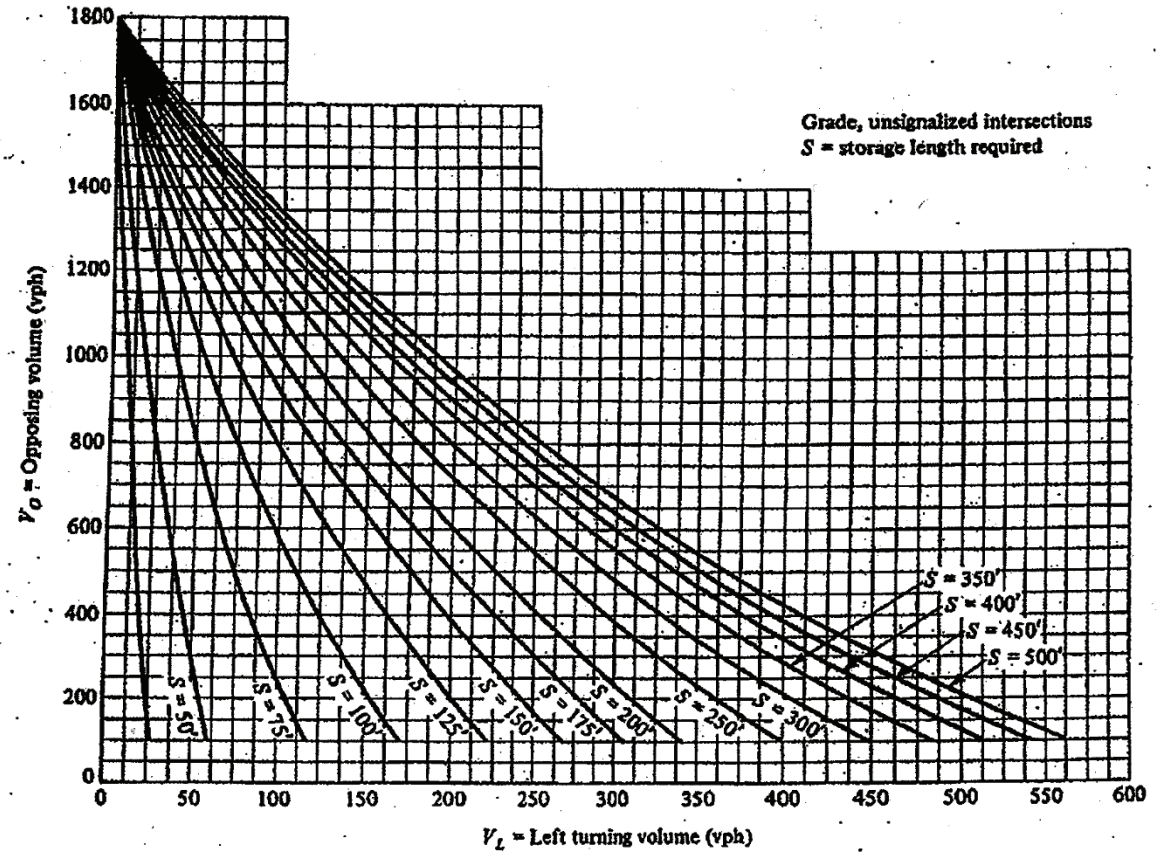


Figure 9-14. Left-turn storage at nonsignalized intersections. (Source: M.D. Harmelink, "Volume Warrants for Left-Turn Storage Lanes at Unsignalized Grade Intersection," Highway Research Record 211, 1967)

ATTACHMENT 2
HCM METHOLODGY - SIGNALIZED INTERSECTION ANALYSIS INPUT PARAMETERS

PARAMETER	VALUE
Base Saturation Flow Rate	1850 pc/hr/ln
Heavy Vehicle factor	Determine % heavy vehicle in existing traffic stream based on count data or consultation with County Transportation Dept. Projects with truck intensive uses must convert project trips to passenger car equivalents (PCE=3). Truck intensive uses include heavy industrial, warehousing or as determined by the Transportation Department.
Grade	Include as appropriate
Exclusive left turn lane	Peak hour volume >100
Dual left turn lanes	Peak hour volume > 300
Protected Left Turn Phasing	Left turn volume > 240 vph
Minimum green time	7 seconds each movement in areas of light pedestrian activity. In areas of heavy pedestrian activity, the minimum green shall be calculated based on the methodology in the HCM.
Cycle length/K Factor	60 sec to 120 sec and Peak Hour K Factor of 8%
Lost time	Per HCM Exhibit 10-17 (below)

Major street	Minor Street	Number of Phases	L(s)
Protected	Protected	4	16
Protected	Permitted	3	12
Permitted	Protected	3	12
Permitted	Permitted	2	8

All above values are from HCM2000 Chapters 10 and 16. Any deviation from these parameters requires prior approval from La Quinta Public Works Department. Refer to HCM2000 for any default values not specifically identified here.

Intersection analyses should be conducted utilizing acceptable software based on HCM methodology. Closely spaced intersections are to be analyzed using analysis tools capable of accounting for turn lane storage, queue length, blockage, etc. such as Synchro.
Actual signal timing and peak hour factors should be collected in the field and utilized in the existing and near-term analyses. In cases where traffic is added from a significant number of cumulative projects, the consultant shall use their engineering judgment in the application of peak hour factors to maintain consistency with the existing conditions analyses. A peak hour factor of 1.0 shall be applied to build out traffic conditions.

ICU METHOLODGY

Level of Service (LOS) for signalized intersections on the CMP network shall be calculated using the Intersection Capacity Utilization (ICU) method. LOS on freeway and select road segments will be measured using methods described in the Highway Capacity Manual.

The ICU method includes a number of variables which, depending on the value assigned to each, can have a dramatic effect on LOS. For CMP monitoring purposes, the following guidelines are to be used to calculate LOS using the ICU method:

Phasing/split phasing: Shared left/through lanes will be treated as split phased.

Right-turn overlap: The overlapping left-turn volume will be subtracted from the right-turn volume and then compared to the opposing through volume to determine the critical move.

Right-turn on Red: An average of 40% right-turns on red should be used for LOS calculations. If a separate right-turn lane is provided, the through lane should be used as the critical movement even if the right-turn volume is higher. Where a right-turn overlap phase is provided, the overlapping left-turn volume should be subtracted from the right-turn volume and then the remaining right-turn volume would be compared to the through volume per lane to determine the critical movement.

Lane Distribution: It should be assumed that traffic is evenly distributed among all the lanes.

Split Phasing: When an intersection approach has a shared left/through lane, it should be treated as having split phasing for the purpose of calculating LOS.

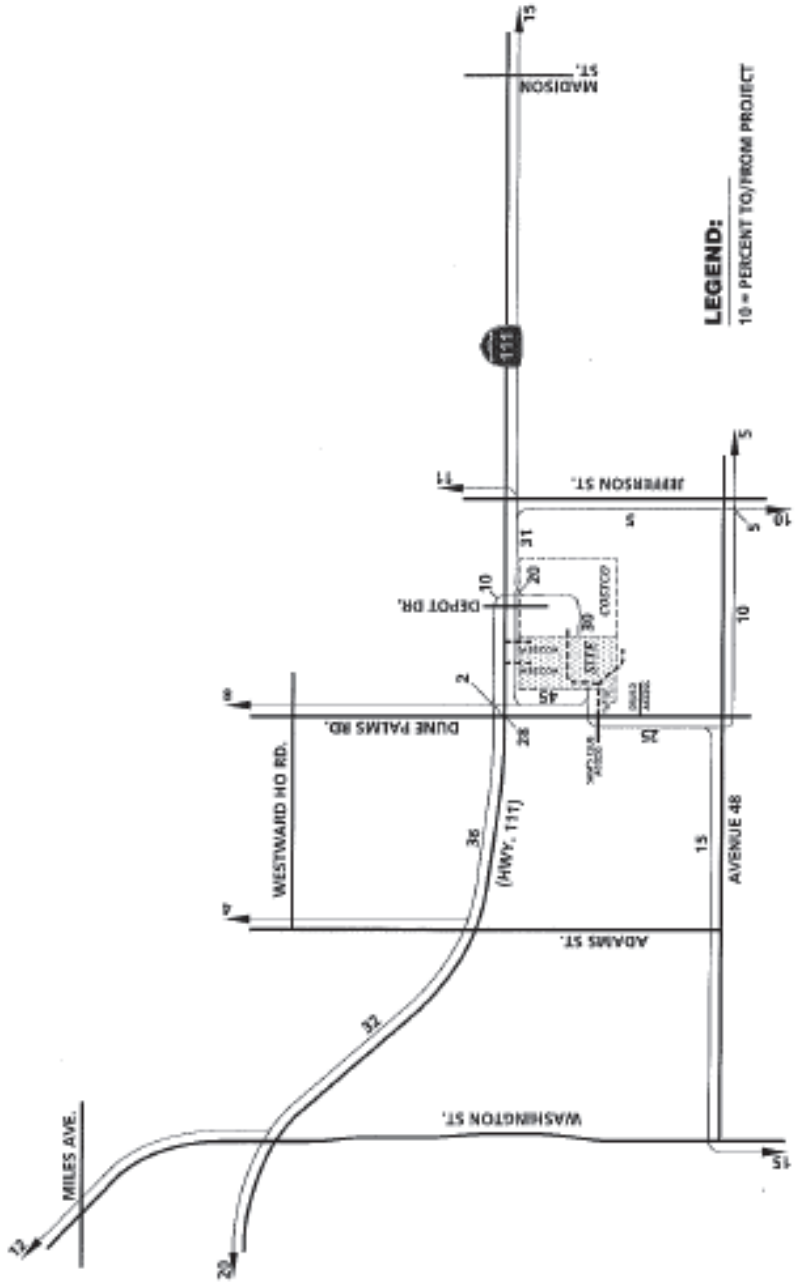
LOS threshold: LOS will be calculated to 2 decimal points.

Intersection proximity: Each intersection will be analyzed separately.

Multiple left-turn lanes: Assume uniform lane distribution.

Base Saturation flow rate: 1,850 vehicles per lane per hour with an adjustment factor of 14%-15% (the adjustment factor represents a combination of start-up delay, unequal lane distribution, and lost time during clearance. Application of this factor effectively reduces the saturation flow rate to approximately 1,600 vehicles per lane per hour).

ATTACHMENT 3



ATTACHMENT 4
CITY OF LA QUINTA

DATE _____

TRAFFIC IMPACTS ANALYSIS SCOPE

Work to be done per Engineering Bulletin 06-13

Project Name: _____
Project Location: _____
Project Description: _____
_____

	Developer	Traffic Engineer
Name		
Address		
Contact		
Phone		
Email		

Study Intersection	Study Segments

ITE Land Use Code	ITE Trip Gen. Rate	Unit of Measure	Daily Trips	Pass by %

Time periods to be analyzed:	Year(s) to be analyzed:
☐ AM ☐ PM ☐ Sat ☐ Other _____	_____

Special issues to be addressed:

Attachments: ☐ Site Plan ☐ Study Intersections/Segments Map
☐ Distribution Assumption Map ☐ Cumulative Impacts

City Approval _____ Date _____

ATTACHMENT 5

Riverside County Traffic Analysis Model (RIVTAM)

On-call Consultants

Amendment No. 1

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Main: (949) 660-1994 x210
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cwaters@urbanxroads.com

F:\Forms\Lists\RIVTAM Consultants Amendment No. 1 Wednesday, July 17, 2013
Effective July 2013 – June 2014

ATTACHMENT 6

CITY OF LA QUINTA
VEHICLE MILES TRAVELED ANALYSIS POLICY

Senate Bill (SB) 743, signed in 2013, requires changes to the guidelines implementing the California Environmental Quality Act (CEQA) regarding the analysis of transportation impacts. A key element of SB 743 is the elimination of automobile delay and Level of Service (LOS) as the sole basis of determining CEQA impacts and analyzing Vehicle Miles Traveled (VMT), with the goal of reducing greenhouse gas emissions to meet State mandates for 2030 and beyond. The most recent CEQA guidelines, effective January 1, 2020, recommend VMT as the most appropriate measure of project transportation impacts. However, SB 743 does not prevent a city or county from continuing to analyze delay or LOS as part of other plans (i.e., the general plan), studies, or ongoing network monitoring. The following policy assists in determining VMT impact thresholds and mitigation requirements for Traffic Impact Analysis (TIA) preparation as recommended by the Technical Advisory on Evaluating Transportation Impacts in CEQA published by the Governor's Office of Planning and Research (OPR) (https://www.opr.ca.gov/docs/20190122-743_Technical_Advisory.pdf).

VMT Analysis Methodology

All projects may be required to submit a TIA or Focused Traffic Impact Memo as determined by the City Engineer. For purposes of SB 743 compliance, these may include a VMT analysis, as deemed necessary by the Traffic Division, depending on screening criteria, and also analyze the effects of a project on transportation, access, circulation, and related safety elements proximate to the Project and establish consistency with the General Plan and other City requirements.

Project Screening

Projects will first go through a screening process to determine if a VMT analysis is necessary. The purpose of this screening is to determine if a presumption can be made that a project would not have a significant transportation related CEQA impact. If a project meets the screening criteria, the project would not need to conduct a VMT analysis. If a project does not meet screening criteria, the project will need to conduct the VMT analysis.

There are three types of screening that can apply to effectively screen projects from project-level assessment. The following describes the available screening criteria pursuant to California Environmental Quality Act (CEQA) guidance provided by the Office of Planning and Research (OPR).

Step 1: Project Type Screening

Certain project types can be determined to have a less than significant effect on the environment and therefore would not need to provide a full VMT analysis. A detailed CEQA assessment will not be required for land use elements of a project that meet the screening criteria listed below.

Small Projects
This applies to projects with low trip generation per existing CEQA exemptions or result in a 3,000 Metric Tons of Carbon Dioxide Equivalent (MTCO2e) per year screening level threshold, based on the Riverside County Climate Action Plan and South Coast Air Quality Management District's draft interim guidance for assessing project-level greenhouse gas impacts.

- Single Family Housing projects less than or equal to 140 Dwelling Units (DU); or
- Multi Family (low-rise) Housing projects less than or equal to 200 DU; or
- Multi Family (mid-rise) Housing projects less than or equal to 245 DU; or
- General Office Building with area less than or equal to 160,000 SF; or
- Retail buildings with area less than or equal to 70,000 SF; or
- Warehouse (unrefrigerated) buildings with area less than or equal to 410,000 SF; or
- General Light Industrial buildings with area less than or equal to 170,000 SF; or
- Small Infill Projects; or
- Transportation Projects that reduce or do not increase VMT; or
- Project GHG emissions less than 3,000 Metric Tons of Carbon Dioxide Equivalent (MTCO2e) as determined by a methodology acceptable to the Design and Development Department; or
- Unless specified above, project trip generation is less than 110 trips per day per the ITE Manual or other acceptable source determined by the City.

Local Serving Projects
Projects that introduce local serving land uses are determined to shorten non-discretionary trips by putting goods and services closer to residents, resulting in an overall reduction in VMT. These land uses can be presumed to have a less than significant impact, absent substantial evidence to the contrary. Local serving land uses are listed below.

- Local serving retail projects less than 50,000 square feet
- Local-serving K-12 schools
- Local parks
- Day care centers
- Local-serving gas stations
- Local-serving banks

- Local-serving hotels (e.g. non-destination hotels)
- Local-Serving Public Facilities
- Student housing projects
- Local serving community colleges that are consistent with the assumptions noted in the RTP/SCS
- Affordable Housing

Step 2: Transit Priority Area (TPA) Screening

Projects located within a TPA[1] may be presumed to have a less than significant impact absent substantial evidence to the contrary. Projects may include but are not limited to the following:

- Transit Supportive Projects in Planned Growth Areas with Low VMT and/or High-Quality Transit
- Restricted Affordable, Transit Supportive Residential Projects in Planned Growth Areas with Low VMT and/or High-Quality Transit

This presumption may ***NOT*** be appropriate if the project:

1. Has a Floor Area Ratio (FAR) of less than 0.75; or
2. Includes more parking for use by residents, customers, or employees of the project than required by the jurisdiction (if the jurisdiction requires the project to supply parking); or
3. Is inconsistent with the applicable Sustainable Communities Strategy (as determined by the City of La Quinta, with input from the Southern California Association of Governments); or
4. Replaces affordable residential units with a smaller number of moderate or high-income residential units.

Step 3: Low VMT Area Screening

Residential and office projects located within a low VMT-generating area may be presumed to have a less than significant impact absent substantial evidence to the contrary. In addition, other employment-related and mixed-use land use projects may qualify for the use of screening if the project can reasonably be expected to generate VMT per resident, per worker, or per service population that is similar to the existing land uses in the low VMT area.

[1] A TPA is defined as a half mile area around an existing major transit stop or an existing stop along a high-quality transit corridor.

For this screening in the CVAG / City of La Quinta area, the Riverside County Travel Demand Model (RIVTAM / RIVCOM) is used to measure VMT performance for individual jurisdictions and for individual traffic analysis zones (TAZs). TAZs are geographic polygons similar to Census block groups used to represent areas of homogenous travel behavior. Total daily VMT per service population (population plus employment) is estimated for each TAZ. Those TAZs that perform at or below the jurisdictional (City, Subarea, County, or CVAG) average of total VMT per service population under base year conditions are considered low VMT areas. This presumption may not be appropriate if the project land uses would alter the existing built environment in such a way as to increase the rate or length of vehicle trips.

To identify if the project is in a low VMT-generating area, the analyst must identify if the project is consistent with the existing land use within that TAZ and use professional judgement that there is nothing unique about the project that would otherwise be mis-represented utilizing the data from the travel demand model.

VMT Assessment for Non-Screened Land Use Development Projects

Projects not screened through the steps above should complete VMT analysis and forecasting through the RIVTAM / RIVCOM model to determine if they have a significant VMT impact. This analysis should include 'project generated VMT' and 'project effect on VMT' estimates for the project TAZ (or TAZs) under the following scenarios:

- Baseline Conditions – Typically baseline conditions align with the project's Notice of Preparation (NOP). Baseline VMT for the year of the NOP can be interpolated between VMT estimates calculated using the base and future year model.

- Baseline Plus Project – This scenario represents the "project generated VMT" and is determined by adding the project land use to the project TAZ or a separate TAZ would be created to contain the project land uses. A full base year model run would be performed and VMT changes would be isolated for the project TAZ and across the full model network. The model output must include reasonableness checks of the production and attraction balancing to ensure the project effect is accurately captured. If this scenario results in a less-than-significant impact, then additional cumulative scenario analysis may not be required.

- Cumulative No Project – This scenario would consider background/ambient growth including other proposed projects (other than proposed project) in the City but without the proposed project's contribution.

- Cumulative Plus Project – The project land use would either be added to the project TAZ or a separate TAZ would be created to contain the project land uses. The addition of project land uses should be accompanied by a reallocation of a similar amount of land use from other TAZs; especially if the proposed project is significant in size such that it would change other future developments. Land use projects will generally not change the cumulative no project control totals for population and employment growth. Instead, they will influence the land use supply through changes in general plan land use designations and zoning. If project land uses are simply added to the cumulative no project scenario, then the analysis should reflect this limitation in the methodology and acknowledge that the analysis may overestimate the project's effect on VMT.

The model output should include total VMT, which includes all vehicle trips and trip purposes, and VMT per service population (population plus employment). Total VMT (by speed bin) is needed as an input for air quality, greenhouse gas (GHG), and energy impact analysis while total VMT per service population is recommended for transportation impact analysis[2].

Both "plus project" scenarios noted above will summarize two types of VMT: (1) project generated VMT per service population and comparing it back to the appropriate benchmark noted in the thresholds of significance, and (2) the project effect on VMT, comparing how the project changes VMT on the network looking at a sub-regional VMT per service population and comparing it to the no project condition.

Project-generated VMT shall be extracted from the travel demand model using the origin-destination trip matrix and shall multiply that matrix by the final assignment skims. The project-effect on VMT shall be estimated using a sub-regional boundary (City limit) and extracting the total link-level VMT for both the no project and plus project condition.

[2] This assumes that the lead agency will use VMT per service population for its impact threshold. If a lead agency decides to isolate VMT by trip purpose, then the lead agency would need to update this section of the recommended guidelines.

VMT Metrics

VMT should always be normalized based on the number of residents and employees present in the zone, City, or regional area for comparative purposes to determine impacts. The following presents the metrics to normalize VMT. The metrics used in the VMT analysis are dependent upon the method in which the VMT is calculated.

- Total VMT per service population - includes the VMT generated divided by the population and employment in a given area (TAZ, City, or sub-region).

  An important note regarding service population is that the calculation includes the employment and population coded into the travel demand model. This calculation excludes VMT-generating groups such as visitors, patients, guests and students. Each project should consider if it is appropriate to add VMT-generating groups to its service population.

- Home-based VMT per resident - includes the VMT generated only by home-based work and home-based other productions divided by the population in a given area (TAZ, City, or sub-region). This method does not include trips with one trip end outside of the model. Zones without any residential uses will generate zero home-based VMT per resident.

- Home-based work VMT per worker - includes the VMT generated only by home-based work attractions divided by the number of employees in a given area (TAZ, City, or sub-region). This method does not include trips with one trip end outside of the model. Zones with no commercial uses will generate zero home-based VMT per worker.

VMT Analysis Methodology for Land Use Plans

Land use plans are not subject to screening and require specific VMT analysis. Land use plans should be tested for significant impacts under cumulative conditions using the same cumulative threshold options (or lead agency thresholds) as the land use projects. These thresholds require modeling land use plan changes to determine VMT impacts. To capture the project effect on VMT, the same cumulative year population and employment growth totals should be used model wide.

VMT Analysis Methodology for Transportation Projects

Use of VMT as an environmental impact metric for transportation projects is discretionary under the Section 15064.3(b)(2) of the updated CEQA Guidelines.

Using VMT as a transportation project impact metric would allow for a variety of transit, bicycle, and pedestrian projects to be presumed to have a less than significant impact. Smaller roadway network modifications such as intersection restriping could also be presumed to have a less than significant impact. Roadway capacity expansion projects are types of projects that can increase vehicle travel and VMT by changing people's travel behavior including making new vehicle trips and making longer vehicle trips.

Thresholds for Determination of Significant Transportation Impact

Project-Generated VMT Impacts

Residential Uses

- VMT per resident exceeding a level of:
  - 15 percent below the Citywide per resident VMT, OR
  - 15 percent below regional VMT per resident, whichever is more stringent

General Employment Uses

- Includes offices and R&D establishments.
- VMT per employee exceeding a level of 15 percent below existing regional VMT per employee.

Industrial Employment Uses

- Includes warehouse, manufacturing and distribution uses.
- VMT per employee exceeding existing regional VMT per employee.

Retail Uses

- Includes Hotels
- A net increase in the total existing VMT for the region

Public/Quasi-Public Uses

- Public/Quasi-Public land use projects will be analyzed using the most relevant threshold as determined by the Public Works Director for the proposed use on the site.

Mixed-Uses

- Each land use component of a mixed-use project will be analyzed independently, applying the significance threshold for each land use component.

Change of Use or Additions to Existing Development

- Changes of use or additions to existing development will be analyzed applying the significance threshold for each land use component.

Urban Village, Station Area Plans, Development Policy, Specific Strategy or Other Area Plans

- Each land use component will be analyzed independently, applying the significance threshold for each land use component.

General Plan Amendments

- General Plan Amendments will be analyzed in conformance with the General Plan's definition of VMT. An increase in City total VMT is a significant transportation impact.

Transportation Projects

- Net increase in VMT greater than that consistent with the SCAG's Regional Transportation Plan/Sustainable Communities Strategy

Project-Generated VMT Impacts

A project would result in a significant project generated VMT impact if either of the following conditions are satisfied:

1. The baseline project generated VMT per service population exceeds the City of La Quinta baseline VMT per service population, or

2. The cumulative project generated VMT per service population exceeds the City of La Quinta baseline VMT per service population

Project Effect on VMT Impacts

The project's effect on VMT would be considered significant if it resulted in either of the following conditions to be satisfied:

3. The baseline link-level boundary VMT per service population (City or sub-regional boundary) to increase under the plus project condition compared to the no project condition; or

4. The cumulative link-level boundary VMT per service population (City or sub-regional boundary) to increase under the plus project condition compared to the no project condition.

Public Transit Impacts

Potential impacts to public transit, pedestrian facilities and travel, and bicycle facilities and travel can be evaluated using the following criteria.

- A significant impact occurs if the project conflicts with adopted policies, plans, or programs regarding public transit, bicycle, or pedestrian facilities, or otherwise decreases the performance or safety of such facilities.

The TIA should include analysis of a project to examine if it is inconsistent with adopted policies, plans, or programs regarding active transportation or public transit facilities, or otherwise decreases the performance or safety of such facilities and make a determination as to whether it has the potential to conflict with existing or proposed facilities supporting these travel modes.

VMT Mitigation Measures

To mitigate VMT impacts, the following choices are available to the applicant:

1. Modify the project's built environment characteristics to reduce VMT generated by the Project

2. Implement Transportation Demand Management (TDM) measures to reduce VMT generated by the project consistent with La Quinta Municipal Code Chapter 9.180[3].

[3] For non-residential developments, mitigation measures should consider Transportation Demand Management Strategies which are designed to reduce the overall trip generation for the project and the need for road related improvements. Such strategies may include the following:

- Establishing preferential parking for carpool or vanpool vehicles.
- Providing bus pass or Vanpool subsidies.
- Allowing employees that arrive to work by alternative modes some level of leeway on their arrival times due to the unforeseen transit delays.
- Implement alternate work schedules to reduce employee trips during peak hours.
- Provide shower facilities and lockers for employees that arrive to work by walking, bicycling, or other alternative modes.
- Providing bicycle parking where bicycles can be locked to an appropriate device or lockable bicycle lockers.

For proposed improvements to intersections or road segments located outside the City of La Quinta, if an agency such as another City or the County of Riverside has adopted a program to mitigate impacts from future development that commits that agency to construct the improvement projects included in the program or to obtain the balance of the funding needed to construct the improvements through some other means, the applicant in the City of La Quinta shall be required to pay its fair share into the program of that agency.

APPENDIX A
GLOSSARY OF TERMS

Active Transportation - A means of getting around that is powered by human energy, primarily walking and biking.

Alternative Transportation Modes - Sustainable transportation methods that are alternative to personal motorized vehicles, primarily walking, biking, and riding transit.

Approved Trip Inventory (ATI) - A City-maintained database of vehicle-trips generated by projects for which an entitlement to build has been granted that have yet been built or occupied. Consists of assigned vehicle-trips by turn movement at signalized intersections.

Area Development Policy (ADP) - A City-adopted implementation policy of an Area Plan.

Area Plan - A City-adopted plan that coordinates transportation infrastructure improvements and land use development in support of a unique vision for a subarea of the City (e.g. an Urban Village Plan).

Boundary VMT Method - A method used to calculate total VMT on roadways bounded within the City. VMT per service population, a performance metric for General Plan amendments, is based on this method.

Effect - Project-related effects on elements of the transportation system for which no transportation standards or CEQA thresholds of significance have been established by the City. Distinct from "impact".

Existing VMT - Current VMT levels for the existing buildings within a one-half mile buffer of a development project.

High-Quality Transit Areas - Areas are within half a mile of a high-quality transit corridor or major transit stop.

High-Quality Transit Corridor - A corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours (Pub. Resources Code § 21155 (b)).

Impact - Refer to a project's impacts as determined by the transportation standards or CEQA thresholds of significance established by the City. Distinct from "effect".

Improvement - A change that addresses the effects, particularly adverse effects, of a project on elements of the transportation system for which no transportation standards or CEQA thresholds of significance have been established by the City. Distinct from "mitigation'.

Induced Trips - Increase in traffic volume that occurs soon after a new road is opened, or a previously congested road is widened. Increases in roadway capacity are typically quickly filled up with additional traffic.

Infill Opportunity Zone (IOZ) - Areas designated by the City that exempt intersection operations standards in the Congestion Management Program (CMP). CMP facilities located within IOZs are exempt from provisions of the CMP's operations standard requirements.

Internal Trips - Trips between different land use types within the same development project that are accommodated at the project site. Trips that are not internal are those with the project at one end and other locations at the other end.

Intersection Operations Standard - A measure of automobile vehicle delays through a signalized intersection, graded on a scale A through F.

Major Transit Stop - A rail transit station, a ferry terminal served by either a bus or rail transit service, or the intersection of two or more major bus routes with a frequency of service interval of 15 minutes or less during the morning and afternoon peak commute periods (Pub. Resources Code § 21064.3).

Mitigation - A change that addresses the CEQA impacts of a project on elements of the transportation system for which transportation standards or CEQA thresholds of significance have been established. Distinct from "improvement".

Mixed-Use Project - A development project that combines two or more land uses.

Mode Share - The share of all person-trips to and from a project taken by each transportation mode (personal motorized vehicles, transit, bicycle, and pedestrian).

Multimodal Improvement Plan (MIP) - VTA terminology for "Deficiency Plan" as defined by CMA statue. VTA's plans developed to identify offsetting measures to improve transportation conditions on CMP facilities in lieu of making physical traffic capacity improvements such as widening a roadway.

Multimodal Transportation Improvement Plan (MTIP) - The City's area-based

prioritized list of projects and programs intended to facilitate realization of goals and objectives identified in a long-range plan.

Net Change in Total VMT - Difference in total VMT in the area with and without the project. Performance metric for regional retail projects and transportation projects.

Origin-Destination (O-D) VMT Method - A method used to calculate the total vehicle-miles traveled a study area (e.g. a development project, the City, or the region) is expected to generate in a day. For a personal motorized vehicle-trip to be included in the VMT calculation using the OD VMT method, one of the trip ends must be within the study area. The OD Method accounts for all trips, including external trips that have one trip end outside of the model boundary, and therefore provides a more complete capture of all travel within the study area.

Production/Attraction (PA) VMT Method - A method used to calculate the total vehicle-miles traveled a study area (e.g. a development project, the City, or the region) is expected to generate in a day. The PA Method allows project VMT to be evaluated based on trip purpose which is consistent with OPR's recommendations. PA matrices do not include external trips that have one trip end outside of the model boundary, and therefore do not include those trips in the VMT estimates.

Passive Parks - Less structured recreational activities and casual pursuit of hobbies that allow for the preservation of natural habitat.

Peak Hour - The highest morning or evening hour of travel reported on a transportation network or street.

Personal Motorized Vehicles - Mainly personal motor vehicles that transport people rather than goods. VMT is based on only personal motor vehicles.

Physical VMT Reduction Strategies - Strategies that development projects can physically construct to encourage the shift from driving alone to walking, biking, and riding transit. Include three of the four VMT reduction strategies – project characteristics, multimodal network improvements, and parking measures.

Project VMT - Calculated VMT generation of a development project.

Service Population - The sum of residents and workers in an area such as the City of La Quinta.

Sphere of influence - Area in which travel patterns are expected to change due to a transportation project.

Transportation Demand Management (TDM) - Programmatic measures that discourage drive-alone trips and encourage pedestrian, bicycle, and transit use. One of the four categories of VMT reduction strategies for development projects.

Trip Cap - A maximum number of vehicle-trips that a development project is allowed to generate in a day.

Trip Adjustments - Effort to reduce the number of vehicle-trips to and from a project.

Trip Assignment - An assignment of vehicle-trips to transportation facilities based on trip distribution percentages.

Trip Distribution - A forecast of the travel direction of vehicle-trips to and from a project.

Trip Generation - The estimated total number of vehicle-trips to and from a project.

Vehicle-Miles Traveled - The total miles of travel by motorized on-road passenger vehicles in a day. A measure on which a project' transportation impact(s) are based.

VMT per Capita - The sum of VMT for personal motorized vehicle-trips made by all residents of a development project, divided by the total number of residents of the project.

VMT per Employee - The sum of VMT for personal motorized vehicle-trips made by all workers of an office or industrial development project, divided by the total number of workers at the project.