

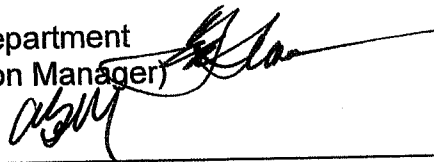
CITY COUNCIL
NEW BUSINESS

October 19, 2009

APPROVED
RM Council
10/19/09

SUBJECT: Traffic Study Thresholds

INITIATED BY: Community Development Department
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STATEMENT OF THE SUBJECT:

The City Council will consider the Transportation Commission recommendation to adopt new traffic study thresholds used for purposes of determining the traffic impacts of development.

RECOMMENDATION:

Staff recommends that the City Council adopt the new traffic study thresholds for development.

BACKGROUND

The California Environmental Quality Act (CEQA) was adopted in 1970 and incorporated in the Public Resources Code §§21000-21177. Its basic purposes are to: inform governmental decision makers and the public about the potential significant environmental effects of proposed activities; identify ways that environmental damage can be avoided or significantly reduced; require changes in projects through the use of alternatives or mitigation measures when feasible; and disclose to the public the reasons why a project was approved if significant environmental effects are involved. Although CEQA is a legal tool of disclosure it does not replace the City's General Plan as a planning tool.

Determining whether or not a project may result in a significant adverse impact is one of the key aspects of CEQA. CEQA guidelines allow lead agencies to adopt *Thresholds of Significance* to indicate the point at which an impact within their jurisdiction will be considered significant. Therefore, it's important that the City develops and adopts CEQA guidelines which will serve West Hollywood's unique goals, objectives and policies of the new General Plan. This recommendation is the first step in imprinting the City's own values, specifically of sustainability, on CEQA by moving away from simply identifying vehicle trip impacts to promoting alternative transportation options and providing measurable transportation system improvements.

One of the areas West Hollywood has historically evaluated for impacts is traffic. The City's current and proposed overall approach to analyzing traffic project impacts and cumulative impacts is consistent with CEQA which uses standards designed for suburban areas. The Transportation Commission and staff are proposing to modify the method currently used to better address the traffic impacts specific to West Hollywood and to streamline the traffic study portion of the development process

allowing staff and applicants to concentrate time and resources on making improvements to the City's transportation infrastructure.

BASIC OVERVIEW OF TRAFFIC STUDY PROCESS

The City's current practice for reviewing a project's traffic begins with the submittal to the Planning Division of either a pre-submittal meeting or an application for a discretionary action, such as a master development plan, planned development, conditional use permit, variance, or intensification of existing use. Once an application has been deemed complete, Transportation begins the formal review of the type and size of project and its potential for traffic impacts that could be subject to environmental review under the California Environmental Quality Act. Transportation staff has two processes for reviewing a proposed project's traffic impacts, including a Transportation Assessment (TA) and a Traffic Impact Study (TIS). All submitted development applications undergo a TA. Subsequent to the TA, projects determined to generate 100 or more peak hour trips and/or cause a decrease in intersection capacity are required to conduct a TIS. The primary difference between the two types of transportation review is the level of detail in the intersection analysis. Generally the TA is done in-house by Transportation staff (with the exception of a project requiring a shared-parking analysis). The TIS is done by an outside Traffic Consultant based upon a proposal process, hired by the City and paid for by the applicant.

Existing traffic conditions are first documented. Normally this is accomplished with new traffic counts in order to provide the latest information. Then future traffic growth is estimated.

A future baseline condition is forecast for the target year of completion for the proposed development project. This is called the "Future Without Project" condition. It represents cumulative traffic growth from approved, proposed and reasonably foreseeable future development projects and sets a baseline against which specific impacts of the proposed development project can be measured.

Forecasting of this future baseline comprises two components; 1) by identifying other future development projects in the general study area that reasonably may be completed in the time frame of the subject project, and forecasting traffic growth from those projects. These projects are often called "related" projects or "cumulative" projects; and 2) by defining an "ambient" growth factor representing traffic growth from outside the study area. Adding traffic growth from the related projects, and the "ambient" traffic growth, to the existing traffic volumes, produces a forecast of future traffic conditions without the proposed project - called the cumulative baseline condition, or Future Without Project condition.

The final step is to determine the traffic growth from the subject project and the impacts it may cause (Future With Project). Because traffic growth from other development projects is also considered (as described above), the final impact analysis represents the cumulative traffic impacts of the subject project.

This basic process will remain the same. However, staff is recommending that the analysis approach and the thresholds for determining when the project undergoes a

TIS and/or identifies traffic impacts to be mitigated and/or determined to be unmitigatable under CEQA guidelines be modified.

CURRENT vs. PROPOSED TRAFFIC STUDY APPROACHES

The major change in the way the Transportation Commission and staff is proposing to conduct future TIS involves the shift from analyzing intersection operations based on capacity (CMA – critical movement analysis) to analyzing operations based on delay (HCM – highway capacity manual). The following is a comparison of the current CMA approach to the proposed HCM approach. The numbers coincide with the example in the table on the next page.

EXAMPLE: SMB/Gardner 300 DU and 20k sq ft retail	Current (CMA)		Proposed (HCM)	
	V/C	LOS	Delay (sec)	LOS
1. Without Project	1.04	F	49	D
2. With Project	1.08	F	77	E
3. With Project with longer left-turn pocket	1.08	F	61	E
4. With Project with protected/permitted left-turn phasing	1.08	F	51	D
5. With Project with longer left-turn pocket & protected/permitted left-turn phasing	1.08	F	44	D

1. **Current Approach:**

Takes into account only the vehicle volumes and capacity of an intersection.

Proposed Approach:

Takes into account existing signal timing, minimum green times, vehicle volumes, pedestrian and bike movements, user defined saturation flow rates (capacity), storage bay lengths, etc.

2. **Current Approach:**

With the project there's an increase in V/C of 0.04, this would be considered a significant impact (current threshold is 0.02 or more). What does the 0.04 capacity decrease mean to the average person?

Proposed Approach:

With the project there will be an average increase in delay of 28 seconds. Most people can understand/"visualize" this. This would be considered a significant impact.

3. **Current Approach:**

The lengthening of the left turn pocket could not be evaluated as a mitigation. The inputs in the CMA methodology do not consider turn pocket lengths. In this case, the significant impact would remain.

Proposed Approach:

Under the proposed HCM approach, the lengthening can be identified as an improvement with benefits that can be measured. In this case, the lengthening reduces average delay by 16 seconds.

4. **Current Approach:**

Signal phasing/timing can not be (for most part) evaluated. With CMA, if a "critical" phase is added, it will make V/C worse, not better.

Proposed Approach:

Phasing and timing can be assessed and evaluated with HCM methodology. In this case, the revised phasing would result in a reduction in delay of 26 seconds.

5. Current Approach:

Impact would remain significant, overriding considerations would be needed.

Proposed Approach:

With both improvements, the project would not only mitigate its impacts but would improve conditions with the project to better than without the project (reduces delay by 5 secs.). The applicant would then be required to fund the identified improvements (design and striping of the left turn pocket and replacement of the signal head) as part of their project conditions.

The second area the Transportation Commission and staff is suggesting be changed is **thresholds**. Currently, the City has thresholds for when a project would be required to conduct a TIS (based on projected increase in peak hour trips) and when a project impact at a signalized intersection is considered significant (related to volume-to-capacity (V/C) ratio). The **current** thresholds are:

- Need for TIS: Proposed project expected to generate 100 or more peak hour trips.
- Signalized Intersection Significant Impact Criteria: Level of Service E and F (Final V/C is 0.901 or more) and Project Related V/C increase is equal to or greater than 0.020 (Final V/C is the V/C ratio at an intersection, considering impacts from the project, ambient and related project growth, and without proposed traffic impact mitigations.)

The **proposed** thresholds would be:

- Need for TIS: Proposed project would generate 60 or more **net** new vehicle peak hour trips or 500 or more **net** new daily vehicle trips.
- Signalized Intersections Significant Impact Criteria – If the intersection is formed by two commercial corridors, an impact is considered significant if the following criteria are met:
 - The addition of project traffic results in a LOS D and an increase in delay of **12 seconds** or greater.
 - The addition of project traffic results in a LOS E or F and an increase in delay of **8 seconds** or greater.

For purposes of the TIS the following are considered commercial corridors:

- Sunset Boulevard
- Santa Monica Boulevard
- Melrose Avenue
- Beverly Boulevard
- Doheny Drive
- Robertson Boulevard
- San Vicente Boulevard (at and/or South of Santa Monica Boulevard)
- La Cienega Boulevard
- Fairfax Avenue
- La Brea Avenue

- At all other signalized and/or 4-way stop intersections, significant impacts will occur if the following criteria are met:
 - The addition of project traffic results in a LOS D and an increase in delay of **8 seconds** or greater.
 - The addition of project traffic results in a LOS E or F and an increase in delay of **5 seconds** or greater.
- Unsignalized Intersections (and/or 1-way or 2-way stops) Significant Impact Criteria – Significant impacts will occur if the following criteria are met:
 - The addition of project traffic results in a LOS D, E, or F and an increase in delay (most constrained approach) of **5 seconds** or greater.

Additionally, the City uses a combination of the City of Los Angeles and City of Beverly Hills standards to identify significant traffic impacts on residential street segments. The methodology and threshold for the **residential street segments** is as follows:

- ADT is less than 2,000 and the Project will increase the ADT by 12%
- ADT is 2,001 or greater but less than 3,000 and the Project will increase the ADT by 10%
- ADT is 3,001 or greater but less than 6,749 and the Project will increase by ADT by 8%
- ADT is 6,750 and the Project will increase the ADT by 6.25%

Although not formally adopted previously, these thresholds have been used in prior Traffic Studies such as Movietown Plaza, Sunset/Doheny, Pavilions and Palm Restaurant. Staff is recommending that these thresholds are formally adopted.

Once the thresholds have been determined, staff will finalize a “*Traffic Impact Study Guidelines*” handout for applicants and traffic consultants to guide them through project development and to ensure potential impact on traffic, parking, transit usage and pedestrian amenities are identified at the front end of the development process.

NEW TRAVEL DEMAND MODEL

Most of the traffic analyses completed in the past year, especially for projects on Sunset Blvd, have concluded that the projects would result in significant unmitigated impacts requiring the Planning Commission and City Council to find overriding considerations. This is primarily the result of the current use of the CMA methodology in that we have been unable to capture the benefits of signal improvements and alternative travel modes such as bicycling and transit use. Intuitively, we know that adding capacity is not the only way to alleviate traffic congestion and with the use of a delay based methodology we will be able to quantify a broader base of alternatives. In order to get to a delay-based analysis and to specifically use the City's travel characteristics (rather than strictly ITE Trip Generation), staff has undertaken the development of a new City of West Hollywood travel demand model.

WHAT IS A TRAVEL DEMAND MODEL?

The travel demand model is a tool to estimate the future demand for travel in a given area (magnitude, direction, and the interaction between different land uses in different areas).

It is a tool that “forecasts” the supply and demand interaction of transportation where:

- Supply equals: Highway networks, transit networks, etc
- Demand equals: People and all the places they wish to travel to and from

The model will enable staff to quantify the effects of “Smart Growth” Design using the 4Ds:

1. Residential and Job Density
2. Diversity of land uses
3. Walkable Design; and
4. Access to Destinations

And will enable staff to capture the change in travel patterns and land use interaction when multiple developments take place; provide consistency between studies, how future projects will interact with each other; and avoid double counting of trips.

Additionally, the new model will allow staff to test and analyze of impacts non-development traffic concepts on the computer, such as reducing travel lanes to accommodate bike lanes, changing streets to one-way; adding traffic signals etc, rather than going to the expense of testing on the street.

SPECIFIC WEST HOLLYWOOD MODEL BASIC INFO

Currently West Hollywood is represented in the SCAG model by

- a. 5 traffic analysis zones (coterminous with census tracts)
- b. Major and a couple of minor arterials
- c. Census socioeconomic data

The new West Hollywood Model:

- a) creates 235 TAZs (191 in City and 44 surrounding) to allow a more precise identification of project impacts
- b) All roadways in the City
- c) Land use database from recently field collected (2008) parcel level data
- d. Trip rates calibrated from SCAG rates to match West Hollywood trip making

The model when coupled with recently approved nexus study will allow staff to identify each development project's “fair share” of traffic impacts and associated mitigations rather than the current “last project in pays” for the required mitigations. This enables staff to collect funds for the implementation of future transportation projects, including traffic calming projects and street and/or traffic signal improvements, from the development projects which help create the need for such improvements limiting the need for use of the City's General Fund monies.

Evaluation

Currently, nearly every development project needs to undergo a CEQA traffic analysis based upon the City's existing use of capacity methodology which ends in significant traffic impacts. In most cases, the result is the need for the Planning Commission and/or City Council to find overriding considerations as the current "toolbox" of mitigation strategies can not be appropriately quantified in order to offset traffic impacts. Evaluation of the new thresholds/travel demand model will be accomplished by the ability to determine both CEQA and non-CEQA traffic impacts of development in a more timely, consistent and understandable manner with less need for findings of overriding considerations while collecting development appropriate fees to offset the cost for implementing neighborhood and/or citywide transportation programs.

Environmental Sustainability and Health

While remaining in compliance with CEQA requirements, staff believes the Transportation Commission recommendations to move to the HCM methodology, revise the traffic thresholds used for determining development traffic impacts and the implementation of the City of West Hollywood Travel Demand Model will provide a much better opportunity for staff to balance the City's desire to encourage responsible development with the concerns of the neighborhoods and allow staff to better quantify the relationships between land use, vehicle trips and their impacts to the environment.

Furthermore, support of these recommendations will simplify the development process, timeline and cost to the applicants relative to the analysis of traffic impacts and enable staff to identify funding opportunities for implementation of traffic calming projects, transit, bicycle, pedestrian and/or infrastructure improvements that promote neighborhood livability.

CONFORMANCE WITH VISION 2020

This item is consistent with the *Primary Strategic Goal to Maintain the City's Unique Urban Balance with Emphasis on Residential Neighborhood Livability and Fiscal Sustainability* and the *Ongoing Strategic Programs of Transportation System Improvement*.

OFFICE OF PRIMARY RESPONSIBILITY

Community Development Department – Transportation Division

FISCAL IMPACT

There is no fiscal impact associated with this report. The travel demand model and nexus study costs have previously been approved by the City Council. Upon City Council action on this report, staff will be able to quantify project specific traffic impacts and collect fees from the project applicant to offset future traffic calming and street and/or traffic signal improvements.