



MEMORANDUM

DATE: 25 April 2019

TO: Planning Commission

FROM: John *JS* Swycki, Community Development Director

SUBJECT: Implications of SB 743 on CEQA Analysis of Transportation Impacts and Local Transportation Planning

Background

Under the California Environmental Quality Act (CEQA), lead agencies such as the City of Brisbane are required to evaluate the potential environmental impacts of a project related to traffic and transportation. Historically, vehicular traffic congestion has been used by cities, counties, and Caltrans to evaluate transportation impacts.

The amount of traffic congestion at a given location has typically been expressed as the “Level of Service” (LOS) of an intersection or a freeway segment and given a letter grade ranging from LOS A (best) to LOS F (worst) based on either:

- The length of the delay experienced by drivers at an intersection during peak morning and afternoon travel times; or
- The ratio of traffic volumes to an intersection’s or freeway segment’s capacity (volume to capacity ratio) during peak morning and afternoon travel times.

Table 1 illustrates LOS for both delay (the average time drivers wait at an intersection) and volume to capacity ratio (the percentage of intersection or freeway mainline segment capacity being utilized by traffic).

Table 1
Level of Service Criteria for Signalized Intersections

	Intersection Utilization Capacity (ICU) Method		Highway Capacity Manual (HCM) Methodology	
	Description	Volume to Capacity Ratio	Description	Delay
A	Excellent. No vehicle waits longer than one red light, and no approach phase is fully used.	0.0 – 0.60	This level of service occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.	0 – 10 seconds
B	Very Good. An occasional approach phase is fully utilized; many drivers begin to feel somewhat restricted within groups of vehicles.	>0.60 – 0.70	This level generally occurs with good progression, short cycle lengths, or both. More vehicles stop than with LOS A, causing higher levels of average delay.	>10 – 20 seconds
C	Good. Occasionally drivers may have to wait through more than one red light; backups may develop behind turning vehicles.	>0.70 – 0.80	These higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, though many still pass through the intersection without stopping.	>20 – 35 seconds
D	Fair. Delays may be substantial during portions of the rush hours, but enough lower volume periods occur to permit clearing of developing lines, preventing excessive backups.	>0.80 – 0.90	The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.	>35 - 55 seconds
E	Poor. Represents the most vehicles intersection approaches can accommodate; may be long lines of waiting vehicles through several signal cycles.	>0.90 – 1.00	This level is considered by many agencies to be the limit of acceptable delay. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are frequent occurrences.	>55 – 80 seconds
F	Failure. Backups from nearby locations or on cross streets may restrict or prevent movement of vehicles out of the intersection approaches. Potentially very long delays with continuously increasing queue lengths.	>1.00	This level, considered to be unacceptable to most drivers, often occurs with over saturation, that is, when arrival flow rates exceed the capacity of the intersection. It may also occur at high v/c ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also be major contributing factors to such delay levels.	> 80 seconds

Separate from CEQA, many cities and counties throughout the state have used LOS standards to express “acceptable” or “unacceptable” delay or congestion within their jurisdictions. Most jurisdictions, including the City of Brisbane, have included such standards in their General Plan

Circulation Elements as either goals that the agency will strive to meet or as specific standards that must be met. The Brisbane General Plan currently includes the following LOS standard:

“The level of service for all arterial streets within the City shall not be less than LOS ‘D’ except for the intersections on Bayshore Boulevard at Old County Road and San Bruno Avenue, which shall not be less than LOS ‘C.’ The two intersections having LOS ‘C’ shall not be degraded below that level as a result of increased impacts from other intersections within the City and such impacts shall be mitigated as necessary to maintain the LOS ‘C’ standard at the identified intersections.”

LOS standards, such as the one adopted by the City, are typically used in three different ways.

1. For roadway and freeway planning as part of a City’s General Plan or a regional transportation plan to determine the number of lanes needed along roadways or freeways to accommodate anticipated traffic volumes consistent with the applicable LOS standard.
2. For roadway or freeway improvements undertaken by a public agency to determine when a roadway or freeway needs to be widened or when additional turn lanes or through lanes are needed at an intersection to meet the applicable LOS standard.
3. To analyze in a CEQA document how the traffic generated by a proposed development project would cause or increase congestion. At intersections where a proposed project would cause LOS standards to be exceeded by a defined amount (a “significant transportation impact”) , mitigation measures in the form of adding capacity at intersection(s), widening roadway(s), or providing signalization would then be required to mitigate the traffic impacts of the development project and thereby maintain applicable LOS standards.

Thus, the use of LOS standards is aimed at expanding the capacity of roadway and highway systems to accommodate increasing volumes of vehicular traffic.

In recent years, climate change has become a matter of critical concern as greenhouse gas (GHG) levels in the atmosphere have increased dramatically due to human activity with the transportation sector (including private automobiles) being one of the largest producers of GHG emissions. In California, targets for GHG emission reductions have been established and substantial regulatory efforts are underway to ensure that these reduction targets are met. Reducing the amount of automobile travel throughout the state is one of the major strategies being put forth to reduce GHG emissions.

Efforts by the California Air Resources Board, as well as regional and local agencies to reduce transportation-related GHG emissions have brought the traditional use of LOS and congestion-related traffic analyses into question. Reducing traffic congestion and improving LOS by increasing roadway capacity has consistently been shown to promote or induce additional

vehicle trips, thereby increasing the total amount of traffic and transportation-related GHG emissions.

Additionally, by prioritizing the movement of automobiles over other modes travel through measures such as wider roadways, the use of LOS has also tended to constrain the use of alternative modes of transportation (e.g., transit, bicycles, walking) that reduce transportation-related GHG emissions. In addition, reducing roadway and freeway congestion encourages automobile travel while making use of transit and non-motorized travel comparatively less desirable.

Summary of Senate Bill 743 and Related CEQA Guidelines

Largely in response to the issues raised above, SB 743 was adopted in September 2013 to eliminate traffic congestion as a significant impact under CEQA within designated Transit Priority Areas¹. SB 743 also gave the Governor's Office of Planning and Research (OPR) the discretion to eliminate level of service from CEQA entirely throughout the State, which OPR has elected to do. The provisions of SB 743 are therefore applicable throughout the State, including the City of Brisbane.

Pursuant to the requirements of SB 743, revised CEQA transportation Guidelines will take effect July 1, 2020. These Guidelines eliminate level of service and other measures of traffic congestion (often referred to as delay-based metrics) from CEQA as a threshold for evaluating transportation impacts. While SB 743 and related CEQA Guidelines prohibit use of LOS and other delay-based metrics in the analysis of transportation impacts in CEQA documents as of July 1, 2020, continued use of LOS or other delay-based metrics as a planning tool in the City's General Plan would not be prohibited.

The new CEQA Guidelines specifically state that a "project's effect on automobile delay does not constitute a significant environmental impact." These changes to CEQA mean that cities and other CEQA lead agencies will no longer have a CEQA basis for requiring project proponents to (1) disclose and address increased roadway congestion or (2) provide requiring mitigation for the increased congestion their project would generate. These changes to CEQA Guidelines also inhibit a City's ability to require mitigation for the traffic and congestion that would be generated by development in neighboring jurisdictions.

¹ A "Transit Priority Area" is an area located within a 1/2 mile of an existing or planned "major transit stop" or an existing stop along a "high quality transit corridor." Per Public Resources Code, § 21064.3, "Major transit stop" means a site containing an existing 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." Per Public Resources Code, § 21155, a high-quality transit corridor means a "corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours." Lands within 1/2 mile of the Bayshore Caltrain Station are within a Transit Priority Area."

Instead of using traffic congestion as a means of measuring a project's traffic impacts, SB 743 places emphasis on "the amount and distance that a project might cause people to drive²" as measured in Vehicle Miles Traveled (VMT). Thus, starting July 1, 2020, SB 743 mandates that CEQA documents analyze the vehicle miles travelled that a proposed project would generate and set forth requirements to reduce VMT such as increased use of transit, reducing vehicular trip generation, and implementing land use measures that reduce the length of automobile trips (e.g., mixed-use development and more "efficient" land use patterns).

Evaluating Significant Impacts Under CEQA under SB 743 Guidelines

Starting July 1, 2020, a "substantial increase" in VMT will be considered to be a significant transportation impact under CEQA. However, CEQA Guidelines do not set forth any specific definition of "substantial increase" that the City could use to determine what would constitute a significant impact. The Guidelines leave local agencies the discretion to define how a "substantial increase" in VMT would be determined and what would be considered a significant transportation impact.

A technical advisory prepared by OPR to assist local agencies with implementation of SB 743 guidelines suggests that local agencies consider the following thresholds:

- For residential and office projects, any project that does not achieve a fifteen percent reduction from the regional average VMT³ would have a significant VMT impact.
- For retail projects, any project that increases total VMT in the community would have a significant VMT impact.
- Generally, all development within ½ mile of either an existing major transit stop or a stop along an existing high quality transit corridor (e.g., Bayshore Caltrain station) would have a less than significant VMT impact.

The suggestions set forth in OPR's Technical Advisory are "suggestions" and do not constitute mandatory standards for local agencies to use in determining the significance of VMT impacts.

While a number of agencies are beginning to use OPR's suggested VMT thresholds, a number of other agencies are using other thresholds such as existing average VMT to determine the significance of VMT impacts (e.g., a project having a per capita VMT that is at or below the city's average VMT per capita would have a less than significant VMT impact).

Implications for Local Transportation Planning and the City's General Plan

² 2019 CEQA Guidelines.

³ "Regional average VMT" is not defined in SB 743, in proposed CEQA Guidelines implementing SB 743, or in OPR's Technical Advisory. For Brisbane, "regional average VMT" could mean average VMT for the City, Brisbane and adjacent cities (San Francisco, Daly City, and South San Francisco), San Mateo County, the San Francisco Peninsula, or the nine-County Bay Area region.

California General Plan law requires a community's General Plan Circulation (Mobility) Element plan not only for roadways but also for bicycling, walking, and transit, and to address aspects of transportation other than congestion such as safety, accessibility, and livability. SB 743 thus shifts transportation planning from an auto-centric focus on expanding roadway capacity to a more multi-modal, systems approach that addresses some of the unanticipated consequences of the intersection LOS system of analysis.

As noted previously, the Brisbane General Plan establishes level of service standards that have been used in traffic impact analyses prepared for CEQA documents. These studies have found that traffic generated by development projects outside of the City of Brisbane will substantially increase traffic congestion and the amount of delay drivers in Brisbane experience at intersections along Bayshore Boulevard. Because of peak hour congestion along the 101 freeway, many freeway drivers traveling between locations north of Brisbane and locations south of Brisbane tend to use Bayshore Boulevard through Brisbane as an alternative to the freeway ("pass-through" traffic). The problems created by freeway congestion and related through traffic on Bayshore Boulevard will increase substantially over time as the result of development in San Francisco, Daly City, South San Francisco, and other communities on the Peninsula.

One of the unanticipated consequences of the traditional, intersection-by-intersection LOS approach to transportation planning and traffic impact analysis is the emphasis LOS places on increasing traffic throughput in the form of additional through lanes and turn lanes at specific intersections, which tends to encourage additional vehicular travel. Improvements to Bayshore Boulevard that reduce travel time through Brisbane will also tend to encourage more motorists to divert off the 101 freeway, until congestion begins to reoccur and travel times for motorists using Bayshore Boulevard through the City are once again roughly equal to travel times for motorists staying on the freeway. In addition, many development projects approved by adjacent cities that will increase future traffic congestion in Brisbane have not been required to provide traffic improvements within the City, leaving Brisbane residents and business to bear the burden of traffic from projects approved by others.

As a result, traffic from developments approved by the cities of San Francisco, Daly City, South San Francisco, and others will increase congestion on the 101 freeway and cause sufficient increases in traffic congestion to exceed Brisbane's General Plan LOS standard at six intersections along Bayshore Boulevard and adjacent to the 101 freeway even in the absence of any new development within the Baylands. Such levels of development occurring outside of Brisbane and their effects on the City could not have been anticipated in the long-term traffic projections Brisbane used to set its LOS standards when it adopted its General Plan in 1994.

Next Steps to Address SB 743 Requirements

CEQA Considerations

City staff is researching methodologies to measure VMT for individual development projects. Staff is also developing specific standards to define “substantial increase” in VMT so that CEQA analyses can appropriately determine what a significant VMT impact would be. Consistent with the provisions of SB 743, VMT, rather than LOS, will be used in CEQA documents to address the significance of transportation impacts and required mitigation measures.

General Plan Considerations

While SB 743 eliminates consideration of LOS as a significant impact in CEQA analyses, it does not require LOS standards be eliminated as a planning from a City’s General Plan.

The retention of existing LOS standards for intersections along Bayshore Boulevard is problematic for the reasons discussed above (e.g., diversion of traffic from the 101 freeway, traffic generated by development outside of Brisbane, prioritization of vehicle trips over other modes of mobility).

City staff is working to develop General Plan strategies to replace the use of LOS standards along Bayshore Boulevard to more effectively address the implications of traffic generated from outside of Brisbane on Bayshore Boulevard and increase mobility within the City. Such General Plan strategies would focus on promoting a multi-modal approach to transportation and providing enhanced mobility within the City for Brisbane residents and businesses, as opposed to analyzing traffic operations at individual intersections along Bayshore Boulevard and then designing, managing, and operating Bayshore Boulevard to function as a regional bypass to Highway 101.

One strategy under consideration would involve development and implementation of a multi-modal mobility plan for Bayshore Boulevard and transportation facilities affected by diversion of traffic from the 101 freeway. Such a plan would emphasize enhanced mobility within the City for Brisbane residents and businesses and provide for a combination of roadway, transit, bicycle, and pedestrian facility improvements. Because of the priority LOS places on improvements for automobile travel at individual intersections, use of traditional LOS analyses would emphasize automobile throughput for regional traffic on Bayshore Boulevard at the expense of transit, bicycle, and pedestrian facility improvements and mobility for Brisbane residents and businesses. In addition, because of the priority LOS places on movement along the primary roadway, LOS analyses tend to minimize delays for movement of regional traffic along Bayshore Boulevard at the expense of vehicular access *to* Bayshore Boulevard by Brisbane residents and businesses.

While use of traditional LOS analysis would be problematic along Bayshore Boulevard, LOS analyses would continue having value for use along other roadways and at intersections not affected by diversion of traffic from the 101 freeway, such as roadways within Central Brisbane.

In addition, because SB 743 effectively precludes traditional LOS traffic analyses under CEQA, staff is working to develop standards as to the types and locations of development projects that would be required to prepare LOS-based traffic impact analyses to demonstrate compliance with General Plan roadway performance objectives.

While the Planning Commission will have additional opportunities to provide input into and review any subsequent VMT CEQA thresholds or General Plan transportation strategies, any feedback the Commission wishes to offer at this point would be welcome.