



**SAN RAFAEL CITY COUNCIL AGENDA REPORT**

Department: Community Development

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City Manager Approval: \_\_\_\_\_

**TOPIC: GENERAL PLAN 2040 TRANSPORTATION STANDARDS**

**SUBJECT: RECOMMENDED STANDARDS FOR VEHICLE MILES TRAVELED (VMT) AND TRANSPORTATION LEVEL OF SERVICE (LOS) FOR GENERAL PLAN 2040**

**RECOMMENDATION:**

1. Accept proposed VMT screening criteria and thresholds for General Plan 2040 and future CEQA determinations, as required by SB 743.
2. Accept proposed approach to retaining LOS in General Plan 2040 and subsequent planning and development review procedures.

**BACKGROUND:**

Staff is nearing completion of General Plan 2040, the Downtown Precise Plan, and the associated Environmental Impact Report (EIR) covering both documents. General Plan 2040 introduces new standards for measuring transportation impacts in EIRs, as required by the California Environmental Quality Act (CEQA). The City Council discussed this issue at its [June 3, 2019](#) and [December 2, 2019](#) meetings and provided preliminary guidance to staff at each meeting. Staff has worked in collaboration with Fehr and Peers (the General Plan transportation consultant) to draft standards and policy language that reflects State law, greenhouse gas reduction goals, analysis of future transportation conditions, and input from the General Plan 2040 Steering Committee and several community groups.

**Context**

Like many local municipalities in California, San Rafael has used "Level of Service" (LOS) to monitor traffic impacts for the past 35 years. LOS applies a letter grade (from "A" to "F") to define the acceptable level of delay at intersections or along road segments during the peak hours. When an intersection or road segment falls below the standard, physical improvements such as turning lanes or signal adjustments may be programmed to restore traffic conditions. LOS standards for intersections and road segments are included in General Plan 2020 (adopted in 2004) and have been used in the environmental review of proposed development projects since the 1980s. Furthermore, LOS has been the method of analysis prescribed by CEQA until changes were made at the state level in 2013.

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**FOR CITY CLERK ONLY**

Council Meeting: \_\_\_\_\_

Disposition: \_\_\_\_\_

In 2013, the Governor signed SB 743, which mandates major changes in how transportation impacts are analyzed under CEQA. SB 743 requires a shift in traffic analysis methodology from LOS and local street operations to “vehicle miles traveled” (VMT). The intent is to analyze and reduce the amount of driving and the length of vehicle trips associated with new development. With the use of VMT, the longer the vehicle travel from origin to destination, the greater the impact. The intent of SB 743 is to reduce the vehicle-related greenhouse gas emissions increases that contribute to global climate change. Increasing roadway capacity to accommodate more cars (the outcome of purely relying on LOS in transportation network design and management) conflicts with the goal of reducing greenhouse gas emissions.

Although SB 743 was signed in 2013, updates to CEQA Guidelines related to analyzing transportation impacts pursuant to SB 743 were finalized on December 28, 2018. The updated Guidelines require that the new CEQA provisions shall apply statewide beginning on July 1, 2020. Effective that date, all transportation impact analysis for CEQA related to land use plans and projects must rely on VMT. The new requirements do not preclude cities and counties from continuing to use LOS for planning and development review purposes.

Attachment 1 to this staff report explains the key differences between LOS and VMT.

### **Prior Council Discussions**

The City Council initially considered SB 743 and its relationship to General Plan 2040 at its June 3, 2019 meeting. At that time, staff provided an [informational report](#) on Traffic Methodologies for General Plan 2040. The report identified current traffic methodologies, indicated the choices that needed to be made in establishing VMT thresholds and identified four options for LOS. These options ranged from eliminating LOS entirely to maintaining the “status quo” (but eliminating the link to CEQA/ environmental review). Two intermediate options included shifting to a “delay index” (assessing LOS by area or segment rather than by individual intersection), and monitoring trip generation within traffic zones.

On December 2, 2019, the Council continued its discussion of proposed VMT standards and the future use of LOS in General Plan 2040. The [staff report](#) for that item addressed five major policy issues:

- (1) **Screening Criteria.** These are the criteria used to determine when a project is expected to have a less-than-significant impact (and thus would not require a detailed study).
- (2) **Significance Thresholds.** For projects that are not screened and required a detailed VMT assessment, these are the numeric thresholds used to determine the potential for a “significant” impact on VMT under CEQA.
- (3) **Mitigation.** This includes the mitigation measures that would be required for projects that have potentially significant impacts on VMT. Typical measures include requirements for on-site multi-modal improvements, bicycle facilities, pedestrian facilities, transit facilities, carpool and vanpool programs, transit subsidies, and other “transportation demand management” (TDM) measures.
- (4) **Level of Service (LOS).** This covers the future of LOS standards, since these standards may no longer be used for CEQA.
- (5) **Fees.** Traffic mitigation fees are currently collected based on the number of trips a new project is expected generate. This will continue to be the case in the future.

At the December 2, 2019 City Council meeting, the Council heard testimony and received written correspondence from Responsible Growth in Marin (RGM) and other concerned residents on these policy issues. RGM expressed concerns about the proposed screening criteria (including the number of exemptions) and the significance thresholds (use of a locally derived threshold vs a regional threshold). RGM also strongly recommended that the Council continue to use LOS as a method to assess local roadway network conditions as part of the review of proposed development projects.

Following testimony and discussion, Council directed staff to “[retain LOS as a planning tool](#)” in General Plan 2040. The parameters for how this would be incorporated in the General Plan were left open. Staff indicated its intent to return the Council in Spring 2020 with a follow-up proposal, incorporating Council feedback and reflecting the findings of traffic modeling for General Plan 2040.

### **Subsequent Activities**

The General Plan Steering Committee considered draft transportation (Mobility Element) policies at its meeting on January 8, 2020. While there was general agreement with the proposed approach to VMT, there were differences of opinion regarding the continued use of LOS.

Traffic modeling for General Plan 2040 took place during March and April 2020 using the new Transportation Authority of Marin Demand Model (TAMDM). In May 2020, Fehr and Peers provided model output data for 2040, including estimated VMT with and without the General Plan Update. The model output data also included projected arterial volumes for 2040, including estimates of LOS for 2040 with and without the General Plan Update. The data provided the foundation for a refined set of VMT significance thresholds, which were presented in a memorandum from Fehr and Peers. The recommendations of the memorandum are summarized in this staff report. The memorandum itself is included as Attachment 2 to this report.

Staff has had recent communication with Responsible Growth in Marin (RGM) to address the issues raised in their December and January memos. Several members of RGM provided correspondence to the General Plan Steering Committee shortly before their meeting on June 10, 2020 expressing continued concern about the approach to Level of Service. Staff has subsequently re-drafted 2040 Mobility Element Policy M-2.5 to respond to the issues that were raised (see Attachment 3 to this report).

Staff also met with RGM on June 23, 2020 (via Zoom) to review the VMT recommendations and revised LOS policy. With respect to VMT, RGM’s primary concerns were: (a) the methodology and modeling techniques used to estimate VMT; (b) the screening criteria (the number of projects that would be “screened out” of analysis requirements); (c) the thresholds for determining when a project has a significant impact. With respect to LOS, RGM’s primary concerns were: (a) allowances for LOS “E” and “F” at particular intersections and road segments; (b) consistency between General Plan 2040 model outcomes and recent EIR traffic analyses for North San Rafael; and (c) the City Council criteria for granting an exception for projects exceeding the adopted LOS standard.

An initial list of questions was provided by RGM at the meeting. A second set of much more detailed and technical questions was provided the following day. The consolidated list of questions, along with staff’s responses, has been included as Attachment 4 to this report. Staff has also placed a list of Frequently Asked Questions on the General Plan website, drawing on FAQs made available by the State Office of Planning and Research. Staff has also made further revisions to Policy M-2.5 to incorporate some of the issues raised by RGM.

### **ANALYSIS**

The following section provides: (1) a summary of recommendations for VMT; and (2) a proposed approach to retaining LOS.

#### **1. Recommendations for Vehicle Miles Traveled (VMT)**

##### **A. Proposed Screening Criteria**

The first step in evaluating a proposed project’s impact on VMT is to determine if it qualifies as a “low VMT generator” and can be screened out of further analysis requirements. This screening step is similar to the process currently used by staff to determine if an LOS assessment is required for a project.

Low VMT generators are typically projects that are consistent with the General Plan, located in areas with low VMT generation rates, and have characteristics conducive to travel by transit, walking or bicycling. An example would be an affordable housing development near the SMART station in Downtown San Rafael. Such projects are presumed to have a less than significant VMT impact. A qualitative discussion would be provided to justify this conclusion, and no VMT-related CEQA mitigations would be required.

**Table 1** below presents the recommended screening criteria. For each project type, the table indicates the criteria suggested by the State Office of Planning and Research (OPR), followed by a recommendation from Fehr and Peers for San Rafael based on existing and projected conditions, and best practices. A “check” indicates that the State criteria would be used. Staff is considering the addition of several project types to Table 1, including single family housing and light industrial uses. The numeric criteria for such uses (e.g., the number of housing units or the square footage of non-residential space) would be established based on OPR guidance that projects may be screened out if they generate fewer than 110 trips per day.

**Table 1: Recommended VMT Screening Criteria**

Project or Area Type	OPR Suggested Criteria	Recommended Criteria
Small developments	Projects that generate fewer than 110 trips per day. This may equate to non-residential projects of 10,000 sq. ft., or less and multi-family residential projects of 20 units or less.	√
Residential and office projects in low-VMT areas <sup>1</sup>	Map-Based Screening of Residential and office projects that are located in low-VMT areas that have similar features (i.e., density, mix of uses, transit accessibility) with nearby uses.	√
Projects in Proximity to Major Transit Stops <sup>2</sup>	Projects that are located within ½ mile walking distance of a high-quality transit corridor or major transit stop. <sup>2</sup> Additional criteria include high density (minimum floor area ratio of 0.75), reduced parking supply, consistency with <i>Plan Bay Area 2040</i> ( <a href="http://2040.planbayarea.org/">http://2040.planbayarea.org/</a> ), and no effect on existing affordable housing.	√
Affordable housing	Projects containing a high percentage of affordable housing or the addition of affordable housing to infill locations.	100% affordable housing
Local-serving retail	Local-serving retail projects of 50,000 sq. ft. or less.	√
Transportation projects	Transit, bicycle, pedestrian, and roadway operational or maintenance (i.e., street improvements that do not increase vehicle capacity) projects that do not lead to a measurable and substantial increase in vehicle travel.	√
Downtown San Rafael	N/A	All residential and local-serving retail (less than 50,000 sf) projects.

Local-serving retail projects that are larger than 50,000 square feet, and all region-serving retail projects, would not meet the screening criteria and would be subject to a VMT analysis requirement. The screening of smaller local retail projects presumes that these uses improve retail destination proximity and shorten

<sup>1</sup> A low VMT area is one in which VMT is 15% or greater below the regional average (for residential and office uses)  
<sup>2</sup> Pub. 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.”). Pub. Resources Code, § 21155 (“For purposes of this section, 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.”).

trip lengths, as they reduce the need to drive to other communities for these services. The determination of whether a project is “local” or “regional” would be based on market studies, economic impact analyses, local zoning definitions, and other data sources on consumer travel behavior and market share.

Projects that do not meet the screening criteria would be required to provide a quantitative VMT analysis. The purpose of the analysis is to determine if the project exceeds a defined threshold and could result in a significant VMT impact. If a potential significant impact is identified, mitigation measures would need to be identified.

***B. Proposed Numeric VMT Thresholds***

Thresholds are used to determine whether a project has a potentially significant impact. The following excerpt from the California Office of Planning and Research (OPR) *Technical Advisory on Evaluating Transportation Impacts (2018)* provides the overarching recommendation for significance thresholds:

*“Based on OPR’s extensive review of the applicable research, and in light of an assessment by the California Air Resources Board quantifying the need for VMT reduction in order to meet the State’s long-term climate goals, OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development may be a reasonable threshold.”<sup>3</sup>*

Table 2 shows how this overarching goal would be applied to different land uses and project types. Fehr and Peers is recommending using the OPR standard in most cases, with modifications to reflect 2020 conditions and the 2040 General Plan VMT forecasts.

**Table 2: Recommended VMT Thresholds of Significance**

<b>Project Type</b>	<b>Recommended VMT Threshold of Significance</b>
Residential Project	A proposed project exceeding 15% below existing regional average VMT rate (per resident) would indicate a significant transportation impact.
Office Project	A proposed project exceeding a 15% below existing regional average VMT rate (per employee) would indicate a significant transportation impact.
Retail Project	A proposed project exceeding a 15% below existing Total VMT rate (per employee) would indicate a significant transportation impact.
Mixed Use Project	A proposed project exceeding 15% below existing regional average VMT rate (per service population) would indicate a significant transportation impact. Alternatively, each land use type in a proposed mixed-use project can be evaluated independently against the residential, office, and retail thresholds above. The analysis of each use should take credit for internal trip capture.
Other Project Types	The City will either develop an ad hoc (i.e., project-specific) VMT threshold for a unique land use type or apply the most applicable of the above thresholds depending on project characteristics. In general, a proposed project exceeding 15% below existing regional average VMT for similar land uses would indicate a significant transportation impact.
Redevelopment Project	Where a proposed redevelopment project replaces an existing VMT-generating land uses, if the redevelopment project leads to a net overall decrease in VMT, the project would cause a less than significant transportation impact. If the redevelopment project leads to a net overall increase in VMT, it may cause a significant transportation impact if proposed new residential, office or retail land uses would individually exceed their respective thresholds. If a mixed-used project, the analysis of each use will take credit for internal trip capture.
Transportation Project	A proposed project that results in a net increase in total VMT would indicate a significant transportation impact (e.g., street widening for new travel lanes that would increase road capacity).
Area Land Use Plan	A general plan, area plan, or community plan may have a significant impact on transportation if proposed new residential, office, or retail land uses would individually exceed their respective thresholds or cause an aggregate metric (e.g., Total Project-Generated VMT per service population) to exceed 15 percent below the plan area baseline.

For a residential project, the threshold is 15% below the regional average of VMT per resident. For an office project, the threshold is 15% below the regional average of VMT per employee. Thresholds

<sup>3</sup> Page 10, *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018

based on a per capita rate are considered to be based on “partial” VMT because they only consider VMT for passenger cars and light-duty trucks. By contrast, the 15% reduction for retail use is based on a “total” VMT rate, which includes all trips associated with the use, including visitor trips, employee trips, truck deliveries, and bus trips as well as auto trips.

**C. Relationship of Proposed Thresholds to Model Forecasts**

The proposed thresholds have been established in part based on Year 2040 forecasts using the new Transportation Authority of Marin Demand Model (TAMDM). The Model predicts the VMT that would be generated in San Rafael by the Year 2040 based on the land uses projected in the General Plan and other factors such as regional growth and travel patterns. Overall, the General Plan land use growth is projected to have a positive impact on VMT per capita because of its emphasis on balancing job growth and housing growth and directing growth to areas where travel by transit, bicycle, and walking is more feasible.

The Model showed the following outcomes for San Rafael:

**Residential (home-based VMT per resident):**

- The current (2020) residential home-based citywide average is 12.2 VMT per resident. This is about 10 percent (10%) lower than the 2020 regional average for VMT per resident.
- By 2040, with the proposed General Plan land uses in combination with regional land use and network changes, the residential citywide VMT average rate would further decline by about 7 percent and be about 16 percent (16%) lower than the current regional VMT average rate.
- By 2040, with the proposed General Plan land uses in combination with regional land use and network changes, the average Residential Home-Based VMT rate for **Downtown** San Rafael would be about 28 percent (28%) lower than the current regional VMT average rate

**Office (home-based work trips per employee) VMT <sup>4</sup>**

- The current (2020) office home-based work citywide average is 18.1 VMT per employee. This is about 7 percent (7%) higher than the regional average for VMT for employee
- By 2040, with the proposed General Plan land uses in combination with regional land use and network changes, the office citywide VMT average rate would decline by 7 percent (7%) and be similar to the current regional VMT average rate
- By 2040, with the proposed General Plan land uses in combination with regional land use and network changes, the average Office Home-Based Work VMT rate for **Downtown** San Rafael would be about 4 percent (4%) lower than the current regional VMT average rate

Table 3 indicates total VMT in the baseline year (2020) and projected VMT per service population for the General Plan horizon year of 2040. The figures shown here are for the entire San Rafael Planning Area, which includes the City and the unincorporated sphere of influence. The “service area population” is the sum of all persons living and working in this area (in other words, it includes all persons living in San Rafael, plus all persons working in San Rafael even if they live in another city). While “Total VMT” will increase slightly as the City adds population and jobs, VMT per service population will decrease slightly. Moreover, adoption of General Plan 2040 would decrease total VMT relative to the “no project” alternative due to its focus on growth in the Downtown area, where transit is more readily available and more trips can be made on foot.

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<sup>4</sup> Trips by persons working in San Rafael.

**Table 3: Total VMT (City of San Rafael Planning Area, including sphere of influence)**

Scenario	Total VMT	Service Area Population* (Population plus Employment)	VMT/ Service Population
Baseline (2019)	3,614,326	119,951	30.1
2040 No Project (TAM)	3,812,138	129,111	29.5
2040 GP Preferred Alt	3,737,890	132,976	28.1

*(\*) Service Area Population is the sum of all persons living in San Rafael plus all persons working in San Rafael. It is a common metric used in VMT forecasts.*

**D. Mitigation for Significant VMT Impacts**

As noted earlier in this report, mitigation for VMT impacts is achieved in part through transportation demand management (TDM) programs that reduce or shorten vehicle trips. These measures include:

- amenities that reduce vehicle trips (e.g., onsite or local childcare, fitness center, bike racks, etc.)
- parking lots that do not obstruct pedestrian access
- sidewalks and pathways to facilitate pedestrian and bicycle travel
- easy access to buses and transit facilities
- changes to the development program (e.g., adding housing into a proposed office project, to create opportunities for workers to live and work in the same place)
- spreading or shifting peak-hour trips to off-peak hours
- shifting trips to transit, walking, cycling, and other modes (transit passes, etc.)
- carpools and vanpools
- applying technology (such as electric charging stations) to reduce the environmental impacts of vehicle traffic.

TDM measures can be quantified so that a particular menu or combination of measures can be prescribed to reduce the projected VMT for a new project by a specific increment. Where implementation of these measures does not reduce VMT below the threshold, the CEQA document would determine the VMT impact to be significant and unavoidable and the Council would need to adopt an overriding consideration finding before approving the project.

There are challenges associated with TDM programs that will need to be addressed as this is implemented. Monitoring and reporting would likely require additional City staff and represents an expense for employers. The City already has a Trip Reduction Ordinance (Sec 5.81 of the Municipal Code) that requires a trip reduction program for all employers with over 100 employees at an individual work site. Such programs were common in the 1980s and 90s but proved to be expensive to coordinate and administer. The December 2019 staff report raised the possibility of TDM coordination at the regional or County (TAM) level as a potential solution.

**2. Revised Level of Service (LOS) Policy**

Staff has developed a revised LOS policy for Council consideration. Policy M-2.5 is included as Attachment 3 to this report and would appear under Goal M-2 in the Draft Mobility Element of General Plan 2040. The policy carries forward and updates existing Policy C-5 from General Plan 2020, which established LOS standards for intersections and arterial segments. An “exceptions” policy is also carried over. As required by SB 743, the revised policy is now detached from the CEQA process.

Draft Policy M-2.5 retains LOS “D” as the City standard, with the following exemptions:

- Intersections and arterials in the Downtown Precise Plan boundary are subject to a separate process, described in the Draft policy (and summarized below).

- On and off-ramps to the 101 and 580 freeways are exempt
- LOS “E” is deemed acceptable for specific intersections and segments listed in the policy
- LOS “F” is deemed acceptable for specific intersections and segments listed in the policy<sup>5</sup>

These exemptions are discussed below:

**A. Downtown Precise Plan Area.**

At the outset of the General Plan process, staff proposed that Downtown be exempt from LOS standards. The express purpose of LOS is to reduce vehicle delays and provide a tool for increasing roadway capacity as development takes place. This potentially conflicts with previously established goals for Downtown, including encouraging travel by other modes (biking, walking, transit), improving bicycle and pedestrian safety, reducing greenhouse gas emissions, preserving historic resources, and creating vibrant retail streets. Downtown also represents some of the City’s best opportunities for higher-density housing and office development, and for low-VMT projects, given the proximity to transit and the mixed-use environment.

Additionally, Downtown streets are heavily encumbered by regional congestion, particularly along Irwin, Hetherton, 2nd and 3rd Streets. All of these streets are currently operating at LOS “F.” Several other Downtown streets are also operating at LOS “F” during peak hours.

Staff’s recommended approach has evolved in response to feedback from prior City Council meetings and on-going community concerns expressed about Downtown congestion. Simply eliminating LOS without a suitable alternative to manage congestion is not an acceptable solution. Residents and businesses seek a commitment to monitor Downtown traffic, study and disclose the potential impacts of new development on the network, and identify operational and physical improvements to address those impacts. Given that the current operating conditions on many Downtown streets is already LOS “F”, Staff does not believe that a traditional LOS letter grade is the best tool to achieve these objectives.

The proposed Policy would require Local Traffic Assessments (LTAs) for future Downtown development. Each LTA would address impacts of a proposed project on surrounding road segments and nearby intersections and recommend improvements to offset impacts. The changes could include site plan and project design modifications, operational and signal changes, and where feasible, changes to the network itself (turn lanes, etc.). Metrics such as travel delay will continue to be used to manage and monitor roadway performance.

This approach would only be applied Downtown. The traditional “status quo” approach to LOS would continue to be applied elsewhere.

**B. US 101 and I-580 Ramp Exemptions**

The exemption for US 101 and I-580 ramps is carried forward from General Plan 2020. The rationale is that the City cannot control freeway traffic and that much of the traffic using the on and off ramps is regional in nature. The City will continue to work with Caltrans to improve the performance of these intersections, as it does today.

**C. LOS “E” and “F” Provisions for Specific Road Segments and Intersections**

The exemption for specific roads operating at LOS “E” and “F” corresponds to locations where traffic modeling indicates LOS “E” or “F” will occur in 2040 and where options to expand capacity are infeasible or would conflict with other city goals. Adoption of lower LOS standards for specific intersections or segments does not mean that nearby development proposals will be “relieved” of their

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<sup>5</sup> The City has received data on existing (2020) and projected (2040) LOS for *arterial segments* from Fehr and Peers. Data on existing and projected LOS for *intersections* is in progress. The list of intersections where LOS “E” and “F” are acceptable has yet to be finalized.

responsibility to make improvements. Rather, it acknowledges physical or operational constraints that make LOS "D" unrealistic. Future development proposals would still be subject to traffic studies and measures to mitigate their impacts on these segments. Some of these proposals would also be required to prepare VMT analyses and implement transportation demand management (TDM) programs.

Draft Policy M-2.5 includes a number of implementation programs. Program M-2.5A carries forward the requirement to do traffic impact studies for projects with the potential to increase congestion, create safety hazards or otherwise impact traffic conditions. Program M-2.5B carries forward an exception process for projects that would exceed the adopted LOS standards. The exception process requires approval by the City Council and a finding that the specific economic, social, technological, and other benefits of the project to the community would substantially outweigh the project's impacts on circulation. The exception also would need to be consistent with the Guiding Principles of the General Plan 2040.

### **Conclusions**

Staff is requesting that the Council accept the proposed VMT screening criteria and thresholds. Pursuant to the SB 743 deadline of July 1, 2020, these will go into effect immediately and become the City's thresholds for identifying a significant VMT impact under CEQA. Staff will prepare a follow-up memorandum that sets forth the screening criteria and thresholds and includes a flow chart outlining the process. General Plan 2040 will also include a policy establishing VMT reduction targets consistent with this staff report.

Draft General Plan 2040 includes a program to revisit VMT screening criteria and thresholds at least once every four years, and to adjust metrics to reflect changing conditions. Given that these are new standards, it is important to build in this periodic review and update.

Staff is further recommending that the Council accept, in concept, proposed Policy M-2.5 on levels of service. Staff anticipates returning to the City Council in the near future with further information on planned transportation improvements and an update of the traffic mitigation fee, both of which will be adopted concurrently with General Plan 2040. An update on VMT and LOS may be provided at that time.

### **COMMUNITY OUTREACH:**

A public notice of this meeting was mailed to stakeholders, agencies and special interest groups 15 days prior to this meeting (Attachment 2). Those noticed included, among others, all neighborhood associations in the city, the San Rafael Chamber of Commerce, and members of the General Plan 2040 Steering Committee. Notice of this report was also provided on the General Plan 2040 [meetings and events webpage](#).

On June 23, 2020, City staff met with Responsible Growth in Marin (RGM) to discuss the proposed approach to VMT and LOS. As previously noted, RGM provided staff with a list of questions which are included as Attachment 4 to this report, along with Staff's responses. Staff has also prepared a list of Frequently Asked Questions (FAQ) on LOS and VMT which is available at [this link](#).

### **FISCAL IMPACT:**

The VMT screening criteria and thresholds, and the LOS policy, would not have a direct fiscal impact on the City budget. The proposed approach continues the City's practice of collecting traffic mitigation fees based on the number of trips a project would generate. As part of General Plan 2040, the City is developing an updated transportation project list that will provide the basis for an updated fee. Changes to the fee will be addressed at a future Council meeting.

**RECOMMENDED ACTION:**

1. Accept the proposed screening criteria for determining which future projects will be subject to an analysis of their impacts on VMT, and the proposed thresholds for finding that a project will have a significant impact on VMT under CEQA.
2. Accept the proposed Policy M-2.5 on Level of Service, including programs requiring future traffic studies and a process for exceptions.

**ATTACHMENTS:**

1. Comparison of LOS and VMT
2. Memorandum from Fehr and Peers on Transportation Metrics (June 16, 2020)
3. Proposed General Plan 2040 Policy M-2.5 on Levels of Service (June 30, 2020)
4. Questions from Responsible Growth in Marin, and Staff Responses
5. Post-Card Notice of Meeting

## ATTACHMENT 1

### Level of Service (LOS) vs Vehicle Miles Traveled (VMT): A Comparison

	LOS	VMT
Definition	A way of measuring transportation performance that focuses on delay and congestion on the roadway network (intersections and road segments)	A way to measure the distance (number of miles) that vehicles travel across the entire regional transportation system in a day
Measurement	Expressed using a letter scale from A to F	Usually expressed with a per capita number
Scale	Focuses on local roadway network conditions	Focuses on regional conditions and distance of travel from origin to destination
Time Unit	AM or PM Peak Hour	Daily
Intent	Intended to reduce travel delay for motor vehicles along a roadway network	Intended to reduce greenhouse gas emissions by reducing driving and trip lengths
History	Has been in use in San Rafael since 1980s	Has been used for greenhouse gas analysis as part of EIRs for the last decade
CEQA/ Environmental Review	Until July 1, 2020, was commonly used in CEQA to determine if a project had a potential significant impact on the environment. Now expressly prohibited for CEQA.	As of July 1, 2020, required for CEQA
Use in Development Review	City can require a traffic study to determine LOS impacts of a project and require improvements to maintain LOS as a condition of approval.	City can require a VMT analysis for projects that are not “screened out” (e.g., projects that are “high VMT generators” or projects that require rezoning or a General Plan Amendment)
Thresholds	Usually a single threshold (LOS “D”) with exceptions provided where a lower threshold is needed.	Varies by different land uses and development types
Determination of a significant impact	Projects exceeding the delay threshold (LOS “D”) are determined to have a potential significant impact and must mitigate. The significance of the impact can no longer be tied or linked to CEQA/environmental review	Projects that are “high VMT generators” perform an analysis. If they will impede the city from reaching certain VMT reduction targets, they have a potential significant impact and must mitigate their impacts.
Typical Mitigation Measures	Increase road or intersection capacity, add or extend travel and/or turning lanes, add or modify traffic signal, change signal timing, add signage, make operational improvements, etc.	Reduce number and length of vehicle trips through “transportation demand management” (TDM) measures such as telecommuting, transit improvements, transit passes, bike and pedestrian improvements, combining housing and employment, incorporating day care facilities, etc.
Exceptions	City Council may approve project even if LOS will not meet standard, provided certain findings are met (regarding project benefits).	City Council may approve project even if VMT will exceed thresholds, provided certain findings are met (regarding project benefits)
Benefits	Easy to understand and locally focused. May result in tangible measures to reduce delay.	Streamlines desirable infill projects deemed to be “low VMT generators” (housing near transit, affordable housing, transit projects, active transportation projects, local-serving retail), thereby making it easier to build in places where per capita GHG emissions will be lower.
Liabilities	Induces demand—increases traffic capacity and supports additional driving. Also, may push development to the edges of a city or region, where more capacity is available.	Difficult to understand; benefits are not immediately apparent; can increase vehicle congestion and delay.

# Memorandum

Date: June 16, 2020  
To: City of San Rafael General Plan Team  
From: Bob Grandy, Fehr & Peers  
Subject: **Recommendations for SB743 Thresholds for San Rafael**

SF19-1020

This memorandum describes recommendations for initial VMT significance thresholds to be applied by the City of San Rafael as of July 1, 2020, as required for implementation of Senate Bill (SB) 743. These recommendations are informed by input provided at City Council study sessions in 2019 on June 3 and December 2 and are generally consistent with State guidance.

SB 743 eliminates the use of automobile delay from the CEQA environmental review process and the determination of CEQA transportation impacts. The new metric required by the CEQA Guidelines is vehicle-miles traveled (VMT). The shift from automobile delay to VMT changes the focus of transportation impact analysis in CEQA from measuring impacts to drivers, to measuring the impact of driving. CEQA transportation studies should continue to evaluate the effects of a project on safety as well as the facilities and services related to transit, pedestrians, scooters, and bicycles.

SB 743 takes full effect on July 1, 2020; after that time, all transportation impact analysis for CEQA related to land use plans and land use projects must rely on VMT. CEQA Statute Section 21099(b)(2) states that upon certification of the 2018 CEQA Guidelines, Level of Service (LOS) shall not be considered a significant impact on the environment.

The following section provides a summary of recommendations for VMT significance thresholds. It is followed by a section that provides additional background on those VMT significance thresholds as well as a draft summary of how LOS may continue to be used during entitlement review by the City of San Rafael after July 1, 2020.



## Summary of VMT Significance Threshold Recommendations

California law<sup>1</sup> states that the criteria for determining the significance of transportation impacts must promote: (1) reduction of greenhouse gas emissions; (2) development of multimodal transportation networks; and (3) a diversity of land uses.

As described above, the following recommendations for initial VMT significance thresholds to be applied by the City of San Rafael as of July 1, 2020 are based on input provided at two City Council study sessions and guidance provided by the Governor's Office of Planning and Research (OPR). The following excerpt from the OPR *Technical Advisory* provides the overarching recommendation for VMT significance thresholds (Quote from page 10 of the *Technical Advisory on Evaluating Transportation Impacts in CEQA*, December 2018).

*Based on OPR's extensive review of the applicable research, and in light of an assessment by the California Air Resources Board quantifying the need for VMT reduction in order to meet the State's long-term climate goals, **OPR recommends that a per capita or per employee VMT that is fifteen percent below that of existing development may be a reasonable threshold.***

The first step in applying the new VMT process will be to determine if a project meets one of several screening criteria. The purpose of the screening process is to quickly assess projects to support the presumption that they would either reduce VMT or would generate VMT below the city's threshold, which would qualify the project as a low VMT generator. This type of screening is most appropriate for projects that are consistent with the General Plan, are located in areas with existing low VMT generation rates, and have characteristics conducive to travel by transit, walking, or bicycling. For these projects, a project would be presumed to have a less than significant VMT impact. A qualitative discussion would be provided to justify this conclusion, and no mitigations would be required. Projects that are high VMT generators are not eligible for screening. The VMT screening process is similar to the process currently applied by San Rafael staff to determine whether a LOS assessment is required for a project. The current LOS screening process is based on a peak hour vehicle trip criterion.

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<sup>1</sup> Section 21099 of California Public Resources Code codifies the required changes to the guidelines implementing CEQA as mandated in Senate Bill 743. Section 21099 includes a requirement that the criteria for determining the significance of transportation impacts must "promote the reduction of greenhouse emissions, the development of multimodal transportation networks, and a diversity of land uses".



For projects that do not meet one of the screening criteria, a quantitative VMT analysis would be required to assess whether the project exceeds a defined VMT threshold and thus would result in a significant VMT impact. If a significant VMT impact is identified based on that analysis, mitigation measures would be identified. VMT thresholds are needed for land use projects and land use plans while the city has discretion whether to use VMT (and therefore set thresholds) for transportation projects that require a CEQA analysis. **Tables 1 and 2** below present recommended screening criteria and VMT thresholds.

**Table 1: Recommended Screening Criteria**

Project or Area Type	OPR's Suggested Criteria	Recommended Criteria
Small Developments	Projects that generate fewer than 110 trips per day. This may equate to non-residential projects of 10,000 sq. ft., or less and multi-family residential projects of 20 units or less.	√
Residential and Office Projects in Low-VMT Areas	Map-Based Screening of Residential and office projects that are located in low-VMT areas <sup>2</sup> that have similar features (i.e., density, mix of uses, transit accessibility) with nearby uses.	√
Projects in Proximity to Major Transit Stops	Projects that are located within ½ mile walking distance of a high-quality transit corridor or major transit stop <sup>3</sup> . Additional criteria include high density (minimum floor area ratio of 0.75), reduced parking supply, consistency with <i>Plan Bay Area 2040</i> ( <a href="http://2040.planbayarea.org/">http://2040.planbayarea.org/</a> ), and no effect on existing affordable residential housing.	√
Affordable Housing	Projects containing a high percentage of affordable housing or the addition of affordable housing to infill locations.	100 percent affordable housing projects
Local-Serving Retail	Local-serving retail projects of 50,000 sq. ft. or less.	√
Transportation Projects	Transit, bicycle, pedestrian, and roadway operational or maintenance (i.e., street improvements that do not increase vehicle capacity) projects that do not lead to a measurable and substantial increase in vehicle travel.	√
Downtown San Rafael	N/A	All residential and local-serving retail (less than 50,000 sf) projects.

<sup>2</sup> Residential projects that locate in areas 15% below existing regional average, and office projects that locate in areas 15% below regional average could presume to be low-VMT areas.

<sup>3</sup> Pub. 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.”). Pub. Resources Code, § 21155 (“For purposes of this section, 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.”).



The local-serving retail screening would apply only to stores of 50,000 square feet or less. Local-serving retail are uses that, when added into a community, improve retail destination proximity and thus shorten trips and reduce VMT. Regional-serving retail are uses that result in longer vehicle trip lengths. In making a determination as to whether a project is local-serving, the City of San Rafael will refer to local zoning definitions as well as any available market studies or economic impact analyses that provide data on consumer travel behavior.

**Table 2: Recommended VMT Thresholds of Significance**

Project Type	Recommended VMT Threshold of Significance
Residential Projects	<ul style="list-style-type: none"> <li>A proposed project exceeding 15% below existing regional average VMT rate (per resident) would indicate a significant transportation impact.</li> </ul>
Office Projects	<ul style="list-style-type: none"> <li>A proposed project exceeding a 15% below existing regional average VMT rate (per employee) would indicate a significant transportation impact.</li> </ul>
Retail Projects	<ul style="list-style-type: none"> <li>A proposed project exceeding a 15% below existing Total VMT rate (per employee) would indicate a significant transportation impact.</li> </ul>
Mixed-Use Projects	<ul style="list-style-type: none"> <li>A proposed project exceeding 15% below existing regional average VMT rate (per service population) would indicate a significant transportation impact. Alternatively, each land use type in a proposed mixed-use project can be evaluated independently against the residential, office, and retail thresholds above. The analysis of each use should take credit for internal trip capture.</li> </ul>
Other Project Types	<ul style="list-style-type: none"> <li>The City will either develop an ad hoc (i.e., project-specific) VMT threshold for a unique land use type or apply the most applicable of the above thresholds depending on project characteristics. In general, a proposed project exceeding 15% below existing regional average VMT for similar land uses would indicate a significant transportation impact.</li> </ul>
Redevelopment Project	<ul style="list-style-type: none"> <li>Where a proposed redevelopment project replaces an existing VMT-generating land uses, if the redevelopment project leads to a net overall decrease in VMT, the project would cause a less than significant transportation impact. If the redevelopment project leads to a net overall increase in VMT, it may cause a significant transportation impact if proposed new residential, office or retail land uses would individually exceed their respective thresholds. If a mixed-used project, the analysis of each use will take credit for internal trip capture.</li> </ul>
Transportation Projects	<ul style="list-style-type: none"> <li>A proposed project that results in a net increase in total VMT would indicate a significant transportation impact.</li> </ul>
Area Land Use Plans	<ul style="list-style-type: none"> <li>A general plan, area plan, or community plan may have a significant impact on transportation if proposed new residential, office, or retail land uses would individually exceed their respective thresholds or cause an aggregate metric (e.g., Total Project-Generated VMT per service population) to exceed 15 percent below the plan area baseline.</li> </ul>



## Background on VMT Significance Thresholds

When applying the above VMT thresholds that involve using a VMT rate, a project's VMT rate is compared to a baseline VMT rate that is the regional average. The baseline VMT rate represents existing conditions and changes over time. The 15 percent reductions for residential or office uses are based on partial VMT measured as a light-duty vehicle (i.e., passenger cars and light-duty trucks) project generated VMT rate. The 15 percent reduction for retail use is based on a Total VMT rate.

Forecasts developed using the new Marin County Travel Model recently developed by the Transportation Authority of Marin (TAM) yield the following VMT data for residential and office uses in San Rafael.

### Residential VMT (Home-based VMT per resident)

- Current (2020) Residential Home-Based Citywide Average: 12.2 VMT per resident
- The 2020 residential citywide VMT average rate is about 10 percent lower than the regional VMT average rate
- By 2040, with the proposed General Plan land uses in combination with regional land use and network changes, the residential citywide VMT average rate would decline by about 7 percent from today's citywide VMT average rate and be about 16 percent lower than the current regional VMT average rate
- By 2040, with the proposed General Plan land uses in combination with regional land use and network changes, the average Residential Home-Based VMT rate for Downtown San Rafael would be about 28 percent lower than the current regional VMT average rate

### Office VMT (Home-based Work VMT per employee)

- Current (2020) Office Home-Based Work Citywide Average: 18.1 VMT per employee
- The 2020 office citywide VMT average rate is about 7 percent higher than the regional VMT average rate
- By 2040, with the proposed General Plan land uses in combination with regional land use and network changes, the office citywide VMT average rate



would decline by 7 percent from today's citywide VMT average rate and be similar to the current regional VMT average rate

- By 2040, with the proposed General Plan land uses in combination with regional land use and network changes, the average Office Home-Based Work VMT rate for Downtown San Rafael would be about 4 percent lower than the current regional VMT average rate

The above VMT forecasts, that show the average Residential Home-Based VMT rate for Downtown San Rafael would be about 28 percent lower than the current regional VMT average rate with the proposed General Plan uses by 2040, is the basis for the screening recommendation that residential uses in the downtown area could be presumed to have a less than significant VMT impact and be screened from performing a quantitative VMT impact analysis.

## **Future LOS Applications**

Based on input provided at City Council study sessions in 2019 on June 3 and December 2, the City of San Rafael will conduct a LOS analysis for future projects located outside Downtown San Rafael if triggered by the current LOS screening criteria. The LOS assessment will be based on the General Plan threshold that is applicable at the time the analysis is conducted. The LOS assessment will include an evaluation of intersections based on the project trip generation and distribution characteristics. In general, intersections will be evaluated where 50 or more peak hour trips are added by a proposed project.

## **Future Transportation Analysis**

Under the updated CEQA Guidelines, CEQA transportation analyses will focus on VMT, multi-modal access, transit, bicycle and pedestrian, and safety concerns rather than vehicular delay.

LOS analysis would not be included in the transportation analysis for CEQA but would be performed as part of entitlement review for projects located outside Downtown San Rafael that trigger the current LOS screening criteria. The results of the LOS assessment would inform the entitlement process and related conditions of approval.

Smaller projects that do not trigger an LOS assessment may be required to prepare a focused Local Transportation Assessment (LTA) that addresses the effect of the project on intersections and active transportation facilities immediately adjacent to the project as well as the proposed project access points and any proposed changes to parking or curb use.

## ATTACHMENT 3: Draft Level of Service (LOS) Policy

### Policy M-2.5: Traffic Level of Service

Maintain traffic Level of Service (LOS) standards that ensure an efficient roadway network and provide a consistent basis for evaluating the transportation effects of proposed development projects on local roadways. These standards shall generally be based on the performance of signalized intersections during the AM and PM peak hours. Arterial LOS standards may be used in lieu of (or in addition to) intersection LOS standards in cases where intersection spacing and road design characteristics make arterial LOS a more reliable and effective tool for predicting future impacts.

- a) Intersection Standards. LOS “D” shall be the citywide standard for intersections, except as noted below:
  - 1) Intersections within the Downtown Precise Plan boundary are subject to the provisions of Section (c) below.
  - 2) Signalized intersections at Highway 101 and I-580 on-ramps and off-ramps are exempt because these locations are affected by regional traffic and are not significantly impacted by local measures.
  - 3) LOS “E” shall be acceptable at the following intersections:
    - Andersen and West Francisco
    - Andersen and Bellam
    - Freitas at Civic Center/ Redwood Highway (unsignalized)
    - Merrydale at Civic Center Drive
    - Merrydale at Las Gallinas Avenue
    - TBD<sup>1</sup>
  - 4) LOS “F” shall be acceptable at the following intersections:
    - TBD<sup>1</sup>
- b) Arterial Standards. LOS “D” shall be the citywide standard for arterials, except as noted below:
  - 1) Arterials within the Downtown Precise Plan boundary are subject to the provisions of Section (c) below.
  - 2) LOS “E” shall be acceptable on the following arterial segments:
    - Freitas Parkway from Las Gallinas to Del Presidio
    - Lucas Valley from Las Gallinas to 101 S/B ramps
    - Los Ranchitos from North San Pedro to Lincoln
    - Francisco Blvd East from Bellam to Main (Richmond Bridge)
  - 3) LOS “F” shall be acceptable on the following segments:
    - Francisco Blvd East from Grand Avenue to Bellam
    - Lincoln from 101 SB/ Hammondale to Mission
    - Del Presidio from Las Gallinas to Freitas
    - Bellam Blvd from I-580 to Francisco Blvd East<sup>2</sup>
- c) Downtown Standards. Intersections and arterials within the boundaries of the Downtown San Rafael Precise Plan are not subject to LOS standards, recognizing their unique context, operation, and physical constraints, as well as their multi-modal character. Proactive measures shall be taken to address and manage Downtown congestion, evaluate and reduce the impacts of new development on the transportation network, and ensure the long-term functionality of streets and intersections. Traffic shall be monitored and evaluated to identify the need for improvements to ensure that Downtown streets adequately serve both local and regional traffic.

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<sup>1</sup> Additional intersections may be added to this list pending completion of 2040 intersection analysis.

<sup>2</sup> Additional segments of Bellam may be added to the exceptions.

- d) Additional Provisions for Roads Operating at LOS “E” or “F.” Where the adopted standard is LOS “E” or “F,” measures should be taken to avoid further degradation of traffic conditions. Projects impacting roads operating at LOS “F” may still be subject to requirements to offset those impacts as a condition of approval.

**Program M-2.5A: Traffic Circulation Studies.** *Traffic impact studies will be required for projects with the potential to increase congestion, create safety issues, or otherwise impact local circulation conditions. Unless covered by the exemptions in Policy M-2.5, such studies should include projections of future LOS, an assessment of the contribution of the proposed project to increases in congestion, an assessment of projected increases in congestion on greenhouse gas emissions, and an assessment of traffic impact fees related to the project. Measures to maintain adopted service levels may be required as a condition of approval.*

*Projects that are exempt from LOS and/or VMT standards may still be required to perform traffic and circulation studies to evaluate impacts on traffic conditions or traffic control devices in the immediate area of the proposed project. For projects in Downtown San Rafael, local traffic assessments (LTAs) should evaluate the potential for additional delay or safety hazards at nearby intersections. LTAs should identify necessary road or operational improvements, ingress and egress requirements, and potential site plan changes that reduce delays, conflicts between travel modes, and potential safety hazards.*

*Guidelines for traffic impact studies and Local Traffic Assessments should be developed within one year after General Plan adoption. The guidelines should include metrics for evaluating impacts to the road network where LOS does not apply or where the acceptable LOS is below the “D” standard.*

**Program M-2.5B: Level of Service (LOS) Exceptions**

*Exceptions to LOS planning thresholds may be granted where both of the following circumstances apply:*

- a) *The improvements necessary to attain the standards would conflict with other land use, environmental, community character, emission reduction, safety, housing, or economic development priorities.*
- b) *Based on substantial evidence, the City Council finds that:*
  - (i) *The specific economic, social, technological, and/or other benefits of the project to the community, substantially outweigh the project’s impacts on circulation;*
  - (ii) *All feasible mitigation measures have been required of the project including measures to reduce vehicle delay and measures to reduce Vehicle Miles Traveled (VMT); and*
  - (iii) *The project is consistent with and advances the Guiding Principles of General Plan 2040, including foundational principles such as maintaining great neighborhoods and a sense of community, and aspirational principles such as improving housing affordability, preparing for climate change, and sustaining a healthy tax base.*

**Program M-2.5C: Traffic Monitoring.** *Monitor and evaluate traffic conditions throughout San Rafael on an ongoing basis. Based on such evaluations, the City Traffic Engineer may develop recommendations to improve operations, address safety concerns, or modify thresholds. New traffic monitoring technology should be implemented as it becomes available.*

## ATTACHMENT 4:

### Questions and Answers Regarding Transportation Methodologies

*The questions shown here were submitted by Responsible Growth in Marin (RGM) on June 23 and June 24. Staff has merged both sets of questions by topic and prepared responses below. Staff responses are in red italics font.*

- 1) General question on the VMT and LOS process: how can the public access and verify TAM model (for VMT) and Synchro program (used by City for LOS)?

*For General Plan 2040, San Rafael used the recently updated travel model developed by the Transportation Authority of Marin (TAM) for both the LOS and VMT analysis. The TAM model pivots off the regional MTC model and estimates both vehicle trip generation and trip length. The model base year for the updated TAM model was validated to existing conditions and presented to the TAM Board for review and approval. Synchro was not used for General Plan 2040 LOS analysis.*

*For future VMT analysis in CEQA documents, City Staff will require that a detailed discussion of model assumptions and model outputs is provided with the VMT determination. Interested third parties may request backup information on the model network and land use inputs, and any other changes to the model, to independently review and verify. This would be similar to the current procedure for trip generation and distribution calculations in traffic studies.*

- 2) Clarity on VMT process:

- a) When will the Draft Transportation Guidelines (Methodology for VMT) be available for review?

Supplemental Question from RGM:

Will the City develop a handbook describing the methodology for integrating the VMT screening criteria and VMT thresholds? We recommend preparation of at least a flow chart, but preferably a handbook, that can be made available on the City's website. For example, the City of Elk Grove and City of San Jose have developed handbooks for transportation analysis guidelines. The City of San Jose also provides a VMT evaluation tool on its website accompanied by a user guide as well as a feedback form; these were prepared by Fehr & Peers. Will similar tools and a website be prepared for the City of San Rafael?

*The City will finalize the screening criteria and thresholds following its meeting with the City Council on July 6. We do not anticipate preparing a formal set of guidelines or handbook for VMT at this time. This could be considered this in the future depending on need. The two examples cited (Elk Grove and San Jose) are much larger cities than San Rafael (populations 174,000 and 1.03 million) and are experiencing much more rapid and diverse growth than San Rafael. We would anticipate preparing something much*

*simpler, such as a memorandum or outline documenting the criteria, thresholds, and process.*

*The City prepared a general flow chart outlining the process as part of the [December 2, 2019 Staff report](#) to the City Council (see Attachment 2, page 16, of the PDF file). We will update the flow chart once the criteria have been set. Generally, there four steps involved: (1) Is the project required to do a VMT analysis (e.g., does it meet the screening criteria?); (2) Does the project have a potentially significant impact? (e.g., does the VMT analysis indicate it will exceed the thresholds?) ; (3) If yes, what are the requirements for mitigation (Transportation Demand Management measures); (4) Does it still exceed the thresholds after mitigation measures are applied? (e.g., is the impact significant and unavoidable after TDM and other mitigation measures are factored in).*

*The City may add to the screening criteria over time as projects are proposed, referencing accepted standards as appropriate. We do not anticipate a list of screening categories as detailed as San Jose’s (our study volume is much lower), although we could develop an outline explaining how criteria may be added or determined for project types that don’t appear on the initial list. The key metric for screening land uses that are not explicitly referenced is the 110 daily trips—uses that exceed that number based on ITE trip generation rates and that are not covered by other screening categories would be subject to the requirement to do a VMT analysis.*

### 3) Screening criteria for VMT:

#### a) How will cumulative effects of projects screened out be accounted for?

##### Supplemental Question from RGM

A1) Cumulative impacts: How will the cumulative impacts for all the projects screened out of the requirement for a VMT analysis be accounted for? (Multiples of approved trips under the 110-trip per day limit will accumulate over time and lead to traffic congestion and substantial increases in VMT unless public transit is considerably improved.) We understand from the June 23rd meeting that the cumulative impacts of projects screened out will be accounted for in the General Plan 2040 EIR. How will the City keep track of the cumulative impacts and what will happen if the cumulative impacts exceed the cumulative amounts projected in the General Plan 2040 EIR?

*The intent of the General Plan EIR is to evaluate the cumulative effects of all projects, including those that are screened out as well as those that will require VMT analysis. The EIR is based on projected 2040 conditions, which include the addition of roughly 4,400 residential units (half of which are Downtown) and 4,100 jobs between 2020 and 2040. The traffic modeling for General Plan 2040 Plan included assumptions about where these residential units and jobs would be located. In effect, this creates a VMT “bank” in each part of the City that corresponds to the large and small projects that will add these new homes and jobs. Future projects will be reviewed to determine if they are*

*consistent with the General Plan based on land use, type, size, and location. If a project is deemed consistent with the General Plan, it is “built in” to the 2040 forecasts and have been accounted for, enabling the General Plan analysis to serve as the cumulative scenario.*

*This is the same approach that is taken now with LOS. When General Plan 2020 was adopted (2004), it included an analysis of expected conditions in the horizon year (2020) based on assumptions about where jobs and homes would be added. This growth was forecast to occur through large projects and incremental small projects, which collectively form a cumulative scenario. Growth is tracked after the General Plan is adopted and is annotated in an annual report on the Plan.*

- b) How did the city determine that 20 dwelling units generate 110 trips/day?

Supplemental Question from RGM

Review of the ITE Manual (10th edition), shows that there are three ITE categories for multi-family residential units: low-rise (1-2 floors, ITE 220), mid-rise (3-10 floors, ITE 221), and high-rise (>10 floors, ITE 222). As buildings get taller, the number of trips per unit get smaller. 110 trips/day are generated by only 15 low-rise multi-family units (trip generation rate 7.32 trips/dwelling unit/day). We suggest that the City conservatively use a screening criterion of 15 dwelling units (as proposed in the 12/2/2019 Staff Report for the City Council, p. 7), instead of 20 dwelling units, which generate 146 trips/day.

*As noted in the response above, the screening threshold identified by OPR for “small projects” is 110 trips per day—the question is which project types would generate an equivalent number of trips. The General Plan forecasts indicate that 80% of the units developed between 2020 and 2040 will be multi-family. Based on the supplemental questions above, these units would generally be in the low end of the “mid-rise” range and generate approximately 6 trips per day. We will consider specifying a separate standard for single family units and modifying the multi-family threshold.*

Supplemental Question from RGM

Establishing a lower screening criterion is also important in the age of ever-increasing online shopping, which generates additional delivery trips in residential areas that are not accounted for.

*ITE rates are updated regularly to account for changing conditions and trends. As they are true tested samples, this trend will be tested by ITE in time. It would be premature for the City to speculate on how this impact may be quantified, and potentially challengeable to do this now. We will monitor ITE rates over time and adjust the screening criteria accordingly.*

- c) How can the screening criteria designate that the Civic Center SMART station is not a “major transit stop” until it has adequate service frequency and connectivity (15 minute headways during peak hours and more bus stops)?

### Supplemental Question from RGM

Projects in Proximity to Major Transit Stops: We understand that the legal definition of “major transit stop” for purposes of CEQA review identifies “rail transit stations” as one of the categories. However, as discussed during the June 23, 2020 Zoom meeting, in reality, the Civic Center Station is not a “major transit stop” because of infrequent rail service and lack of connectivity to other public transportation (only two bus lines, Marin Transit 39 and 45). As a result, North San Rafael/Terra Linda is car-dependent. For example, the realtor site Redfin identifies the Civic Center Station as “car-dependent” with “some transit” with a Walk Score of only 42 out of 100 and a Transit Score of only 45 out of 100. Therefore, despite having a rail station, adding intense development to North San Rafael will increase rather than decrease vehicle trips and VMT because of the lack of frequency of bus and train stops to make public transit a viable option. We ask the City to explore if it has the flexibility to circumvent the one-size-fits-all CEQA mandate by addressing this issue with additional approval conditions elsewhere.

*We appreciate and understand this concern and will continue to explore our options; however, this standard is established by State law. Section 15064.3(b)(1) of the California Code of Regulations states “Generally, projects within ½ mile of an existing major transit stop or a stop along an existing high quality transit corridor should be presumed to cause a less than significant transportation impact.”. Moreover, Public Resources Code 21064.3 defines a “major transit stop” as 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 of 15 minutes or less during the morning and afternoon peak commute periods.”*

*Unlike bus corridors, which have a service frequency requirement defined by the State, rail transit stations do not. In fact, the transit screening provision is the only VMT screening measure that was actually written into the 2018 revisions to the CEQA Guidelines to comply with SB 743. The other screening measures are in the OPR Technical Advisory, not in the CEQA Guidelines. Additionally, the SMART stations are expressly recognized by MTC and Marin Transit, while GGBH&TD defines the Civic Center Station as a major transfer point.*

### Supplemental Questions from RGM on Screening Criteria

- d) Small Developments: During the Zoom meeting on June 23, 2020, Bob Grandy of Fehr & Peers explained that trip generation rates from the ITE Manual are the basis for equating multi-family residential projects of 20 dwelling units or less to generating 110 trips per day or fewer. We have several concerns:
  - i.) The ITE Manual trip generation rates rely on a limited number of data collected nationwide and typically show a wide range within each ITE category; the average trip generation rate for each ITE category is derived from a fitted curve and often has a high standard deviation and low confidence (R<sup>2</sup> below 0.7). Can

the City identify trip generation rates specific to San Rafael or for areas comparable to San Rafael for multi-family residential trip generation instead of the ITE trip generation rates?

*See earlier response to question 3(b). The ITE rates are tested, sampled, and proven to be reliable and suitable for their intended purpose, which in this case is to determine when a VMT analysis is required. Many other California cities are in the same situation and are starting with a “basic” approach that can be adapted and tailored as it is put into practice. We would revisit the criteria in the future to determine if adjustments are needed.*

- ii.) Please add screening criteria for single-family residential developments, warehouses, light industrial, and office. These are not covered by the other screening criteria. (See 12/2/2019 Staff Report for the City Council, p. 7.)

*We concur with this recommendation and will look at adding categories for several additional uses (light industrial, single family, public facilities, etc.). If a use is not explicitly listed in Table 1, the ITE rates would be used to determine the equivalent number of square feet, units, etc. that would generate 110 trips per day.*

- e) Residential and Office Projects in Low-VMT Areas: this bullet references map-based screening. Is the City in the process of preparing maps indicating low-VMT areas? For example, the City of San Jose provides maps for low VMT per capita screening and low-VMT per job screening, as well as several other maps such as VMT per capita, VMT per jobs, affordable housing screening criteria

*We agree with this suggestion. TAM has prepared a map with comparable information, and it generally corresponds to the ½ mile radius around the SMART stations. Bus corridors in San Rafael (outside the station area radius) do not currently qualify as low VMT areas.*

- f) Transportation Projects: What does “measurable and substantial increase in vehicle traffic” mean, *i.e.*, what are the “measurable parameters” and what is the threshold for “substantial increase?” Please define.

*This would include any road improvement project that increases the number of vehicle travel lanes, adds turning lanes, or provides signalization in a manner that increases the capacity of the road network.*

- g) All Project Types: Please consider replacing the non-committal phrases “may have a significant impact on transportation” or “would indicate a significant impact on transportation” with “indicates a significant impact on transportation.”

*It would be presumptive to imply a determination of a significant impact when the intent is only to determine if a VMT assessment is required. The term “may” is broader, since we would not yet know if the impact is significant.*

- h) On Page 4 of the Fehr and Peers memo, Footnote 3: The text of Public Resource Code § 21064.3 has been updated in January 2020.

*Noted*

4) Threshold criteria for VMT

- a) What “regional average” is being used: Marin County or Bay Area?

*References to the regional average are to the nine-county Bay Area.*

- b) Why are the VMT data in the forecast in Fehr & Peers 6/16/2020 memo, pp. 5-6, so different from:

- i) the VMT data in Fehr & Peers’ 12/11/2019 memo (which were based on the MTC model and

*The VMT data in the Fehr & Peers’ 12/11/2019 memo was data extracted from an older version of the MTC travel model (Travel Model 1) that has since been substantially updated. The older MTC model data was the best available data at the time (December 2019), as the TAM model was still under development and updates to the regional model were not yet completed and ready for application.*

*The new TAM model pivots off the regional MTC model, an activity-based model with a network encompassing the nine-county Bay Area. The new travel model includes significant network and land use refinement in Marin County as well as modifications to improve performance based on analysis of existing travel patterns and trip lengths using new Big Data. The new TAM model has a 2015 base year and a 2040 horizon year. Note that the prior TAM model does not include the SMART rail line, which opened in 2017.*

*The data in the Fehr & Peers’ 6/16/2020 memo was extracted from a modified version of the new TAM travel model. For the General Plan analysis, Fehr & Peers created a 2019 base year, which is updated from the TAM 2015 base year, and a 2040 horizon year that is based on the planned General Plan 2040 land use growth. The forecasts are roughly equal to the prior forecasts for employment, but slightly higher for housing. The General Plan 2019 base year was validated to Spring 2019 count data and includes the SMART rail line without the Larkspur Extension that opened later in 2019.*

- ii) the VMT numbers obtained when using the online TAM demand model?<sup>1</sup>

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<sup>1</sup> Available at: <https://www.arcgis.com/home/search.html?q=tamdm#content>.

*The purpose of the online TAM demand model is to provide data that can be used for screening of “Residential and Office Projects in Low-VMT Areas”. This is a map-based screening of residential and office projects that are located in low-VMT areas<sup>2</sup> with similar features (i.e., density, mix of uses, transit accessibility). The VMT data provided in the link is provided at the Traffic Analysis Zone (TAZ) scale based on data from the older TAM model and a 2015 base year.*

*By contrast, the VMT data in the Fehr & Peers’ 6/6/2020 memo is provided at the Citywide level and Downtown scale, each of which is an aggregation of TAZs, for both 2019 and 2040 conditions. As noted above, for the General Plan analysis, Fehr & Peers created a 2019 base year, which is updated from the TAM 2015 base year, and a 2040 horizon year that is based on the planned General Plan 2040 land use growth.*

*As a result, the model outputs for the General Plan 2019 base year and 2040 horizon years are slightly different than the TAM 2015 base year and 2040 horizon year. The newer outputs are based on a different mix of land uses and include the SMART rail line. The VMT results are relatively close, though. For example, the TAM web site references a Total Auto VMT Per Service Population value of 27.1 for the Bay Area for 2015, whereas the General Plan 2019 base year model generates a VMT per Service Population value of 27.2 for the Bay Area. For residential VMT, the TAM web site references an Auto VMT Per Resident for Home-Based Trips value of 13.3 for the Bay Area and the General Plan 2019 base year model generates an Auto VMT Per Resident for Home-Based Trips value of 13.3 for the Bay Area.*

#### Supplemental Question from RGM

What is the distinction between regional average and total VMT used in different sections of the memo? Please provide definitions and consider harmonizing the language. For example, Redevelopment Project references “net overall increase in VMT” and Transportation Projects references “net increase in total VMT.” Are these two measures the same? If the answer is “yes,” please use one or the other; if the answer is “no,” please provide a definition for both and rationale for why they are applied to each category.

*The two measures in the example above are not the same. We will look at the language used to ensure that the distinctions between them are clear and internally consistent.*

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<sup>2</sup> Residential and office projects that are located in areas with VMT that is 15% below existing regional average.

- c) What are the assumptions underlying the percentages projected for future VMT reductions? Where do these percentages come from?

*The VMT values in the Fehr & Peers' 6/16/2020 memo are based on VMT aggregated at a Citywide scale and a Downtown scale for the 2019 base year and 2040 horizon year. For 2040, the model includes planned 2040 General Plan land use growth. The VMT data is normalized by dividing it by the service population (i.e., population plus employment), allowing for a comparison to regional VMT per service population rates.*

Supplemental Question from RGM on Thresholds

Other Project Types: Instead of developing *ad hoc* thresholds for projects that are not otherwise defined (or apply the most applicable threshold for other projects), why not instead require preparation of a VMT analysis as default?

*This comment is on the thresholds rather than the screening criteria, so the requirement to prepare a VMT analysis would have already been made. The threshold to determine if there is a significant VMT impact is will be determined on a case by case basis.*

5) Supplemental Questions from RGM on VMT:

- a) Intro, p. 5: Please replace “new Marin County Travel Model” with “TAM Demand Model (TAMDM)”.

*Noted*

- b) The TAM Demand Model is available online at <https://www.arcgis.com/home/search.html?q=tamdm#content>. Is this the same version used by Fehr & Peers for determining city-wide and regional VMT rates?

*No. See response to Question 4(b)(i)*

- c) The TAM Demand Model available online is based on 2015 data, the memorandum refers to “current (2020)” data. Is there a 2020 data set that was used to prepare the city-wide and regional VMT rates on page 5 of the memo?

*Yes. Per earlier responses, the TAM model has been updated and was further validated for San Rafael by Fehr and Peers with 2019 traffic counts.*

- d) The online version of TAMDM does not allow for downloading results of a query (rather one has to painstakingly copy the data). How can this model be used by a member of the public to verify projections of city-wide or regional VMT?

*The data for a particular project may be requested in the same way that data can be requested for a local traffic analysis. The VMT analysis that would be required of an applicant would typically include sufficient information to make this determination.*

e) How were the specific VMT rates derived? (12.2 city-wide home-based VMT per resident and 18.1 city-wide home-based work VMT per employee.)

i.) Please confirm that the “VMT rate” for “VMT per resident” and “VMT per employee” are “daily VMT rates” and harmonize the language accordingly.

*All of the VMT forecasts that are provided are daily values for a typical weekday. VMT can briefly be described as the product of a project’s daily vehicle trip generation and the average length of those trips. For instance, if a project generates 100 daily vehicle trips, each with an average length of five miles, that project generates 500 daily VMT.*

ii.) Please define “home-based VMT per resident” and “home-based work VMT per employee.”

*The CEQA Guidelines state that each lead agency can identify the metrics and methods used to evaluate environmental effects, so a jurisdiction can choose from a variety of VMT metrics. CEQA practice focuses on environmental effects that occur on a typical weekday, so all references to VMT are intended to mean VMT that occurs on a typical weekday. Weekday VMT can be broken down into components related to trips for specific purposes (for example, commute trips or shopping trips). Total VMT will tend to scale with the level of activity in a location; that is, the more people who live or work in a particular zone, the higher the total VMT associated with that zone.*

*VMT can be expressed in a variety of forms, depending on specific objectives of the analysis. Examples of these forms include as follows:*

- ***Total Project Generated VMT:*** VMT including all vehicle trips, vehicle types, and trip purposes. This can be expressed as total project generated VMT or total project generated VMT per service population (residents plus employees). This metric would be used for retail uses.
- ***Partial Home-Based VMT:*** VMT generated by light-duty vehicles for all trips that begin or end at a residential land use. This is used in describing the VMT effects of residential land uses and is often expressed as home-based VMT per resident (or per capita). This metric would be used for residential uses.
- ***Partial Home-Based Work VMT:*** VMT generated by light-duty vehicles only for commute trips (that is, trips that have one end at a workplace and one end at a residence). This is used in describing the VMT effects of workplaces and is often expressed as home-based work VMT per employee. This metric would be use for office or non-retail employment uses.

- iii.) Why the switch from the MTC travel demand model (basis of Fehr & Peers' December 2019 memo for VMT rates) to TAMDM?

*The VMT rates presented to the City Council in December 2019 were derived from a version of MTC Travel Model One that was developed for the 2013 Regional Transportation Plan. As part of the early work done for TAM in conjunction with the development of TAMDM, VMT rates were extracted from this version of the model to provide member agencies with data for use in their initial SB 743 implementation efforts. This data was used in 2019 to provide an illustration of how citywide VMT rates for San Rafael compared to regional VMT rates, with the knowledge that updated information would be provided in 2020 based on applying the TAMDM with General Plan 2040 land use forecasts.*

*Models are regularly updated and advancements in modeling and methodology occur over time. In 2016, TAM initiated work on the development of the Transportation Authority of Marin Demand Model (TAMDM). One of the primary purposes for the updated travel demand model is to provide a tool for member agencies to evaluate VMT for CEQA purposes pursuant to Senate Bill 743 and for major planning efforts such as the San Rafael General Plan Update. The update is one of the TAM's major responsibilities as the County's Congestion Management Agency.*

*As noted in the response to Question 1, the updated TAMDM model includes significant network and land use refinement in Marin County as well as modifications to improve reliability. The updated model also considers the SMART rail line, and uses a 2040 horizon year (the General Plan horizon year was selected in part to be consistent with the new model).*

- iv.) The models developed by MTC and TAM appear to generate substantially different VMT numbers, both on a regional and city-wide level (based on Fehr & Peers December 2019 and June 2020 memos): for San Rafael residential home-based VMT per person: **MTC Travel Model One = 16.2 VMT/day** in 2015 and **TAMDM = 12.2 VMT/day** in 2020; for San Rafael office home-based work VMT per worker: **MTC Travel Model One = 30.1 VMT/day** in 2015 and **TAMDM = 18.1 VMT/day** in 2020). What explains these differences and how have the revised VMT rates affected the development of VMT thresholds?

*Staff will research the difference. As noted earlier, the rates presented in December 2019 were from a model done for the 2013 Regional Transportation Plan. The data displayed in the December memo was extracted to provide TAM member agencies with data to use in their initial SB 743 implementation efforts. While the TAM data was helpful for illustrative purposes, it is based on outdated land use data.*

*The revised VMT rates did not substantively affect the proposed VMT screening criteria or thresholds. For the VMT screening criteria, the only impact was to recommend that VMT screening in Downtown San Rafael apply to residential and*

*local-serving retail uses less than 50,000 s.f. Office uses in Downtown San Rafael would not be part of the general downtown screening, but would be screened from detailed VMT evaluation if they meet the criteria for “Projects in Proximity to Major Transit Stops” (i.e., located within ½ mile walking distance of a major transit stop or high-quality transit corridor and meet additional criteria). The VMT rates did not have an impact on the recommended numeric VMT Thresholds of Significance.*

- v.) Based on VMT rates derived with the MTC Travel Model One, the Agenda Report for the 12/2/2019 City Council meeting stated that “The challenge for San Rafael is that its VMT is currently substantially above the regional average. Persons working in San Rafael commute relatively long distances by car, while many of those living in San Rafael commute to San Francisco or other regional employment centers.” *Are these statements no longer true based on the TAM Demand Model? If the answer is “yes,” please discuss the difference between these models and rate your confidence in the results.*

*The quote above refers to VMT rates for office (i.e., non-retail) employment uses, which is expressed as home-based work VMT per employee. For San Rafael, the VMT rate for non-retail employment uses is higher than the regional average using both the TAMDM and MTC Travel Model One. As such, the statement remains true that office (i.e., non-retail employment) uses, that do not meet the screening criteria for “Projects in Proximity to Major Transit Stops”, would likely cause significant VMT impacts that may be challenging to mitigate to a less than significant level. Thus, the statement is still true. The TAMDM model has been validated to local conditions in San Rafael and presents current VMT conditions more accurately than the prior (2013) model.*

*The 2019 base year model developed for the San Rafael General Plan is the only model that has been calibrated and validated to local daily roadway volumes in San Rafael. The 2019 base year for the San Rafael General Plan was validated based on model confidence thresholds defined in the California Transportation Commission 2017 RTP guidelines.*

- vi.) The citywide VMT rates provided by Fehr & Peers on p. 5 of the memo also differ from the numbers obtained when running a query on the online TAM Demand Model for San Rafael, which generates population-weighted rates of **11.5 VMT per resident/day** and **18.7 VMT per employee/day**. *What explains the difference?*

*The differences may be explained by a combination of the following.*

- *The online data is for the TAMDM 2015 base year and the data, whereas the 2020 Fehr & Peers memo is for a 2019 base year developed for the San Rafael General Plan. The latter includes updated land uses for 2019 and reflects the SMART rail line (which is not included in the TAMDM 2015 base year).*

- *The VMT data in the 2020 Fehr & Peers memo includes data from Traffic Analysis Zones (TAZs) located both within the City limits as well as in the City's sphere of influence (SOI).*
- *Potential differences in VMT aggregation methodology.*

*Previous responses regarding the higher level of accuracy of the TAMDM model, and its calibration and validation for San Rafael, also apply in this case.*

- f) On pages 5-6, for bullets 3, 4, 6, 7, and 8, please provide numeric regional VMT rates in addition to the percentage difference compared to city-wide rates for both 2020 and 2040 projections.

*Staff is following up with TAM on this question.*

6) Supplemental Question on VMT Mitigation for Significant Transportation Impacts

Please provide a list of feasible mitigation measures for findings of significant VMT impacts as a starting point that can be continually updated in the future. Several recommendations exist that list and quantify mitigation measures, including lists developed by CAPCOA, BAAQMD, and Fehr & Peers.

*We concur with the recommendation and believe this can be treated as an implementing action once an overall approach for SB 743 implementation has been agreed to. Please note that Program M-3.3A of Draft General Plan 2040 calls for the City to develop TDM Program Guidelines, or to work in partnership with other local governments to develop Guidelines, that can be used to mitigate potential VMT increases in new development and encourage reductions in existing development. We have listed TDM measures in earlier staff reports (see bottom of page 9/ top of page 10 of the [December 2, 2019 Staff report](#)).*

7) LOS discussion (clarity on LOS process and the City's intent)

We appreciate the substantive re-drafting of this Policy. We believe it overall addresses many community concerns and aligns with the City Council's comments on December 2, 2019. We have a few additional questions, primarily to clarify the City's intent regarding managing traffic conditions in the City.

- a) Defining screening criteria that trigger traffic circulation (LOS) studies-
1. What are the criteria for deciding if projects have "the potential to increase congestion, create safety hazards, or other impact circulation conditions?"

Supplemental Question from RGM:

Please provide criteria that will be used in deciding whether a project has "potential to increase congestion, create safety hazards, or otherwise impact local circulation conditions" and therefore much do traffic impact studies. We

understand from the June 23rd meeting that these decision of whether a project is required to do traffic impact studies is highly context dependent and that no strict threshold for number of generated trips applies. We also heard that there is a substantial range of “rule of thumb” thresholds, such as 50 new trips or 100 new trips. Please expand the explanation about what guidelines or criteria are used in various contexts, so all parties have clarity.

*Each project is reviewed on a case by case basis. The determination as to whether to prepare a traffic study is based on several factors, including: (a) the project setting and context; (b) the conditions and LOS of the road network serving the site; (c) project size; (d) the City entitlements required for the project; and (e) other development activity that is proposed or occurring in the general vicinity. In addition, if the project is controversial or if the topic of traffic generation is of concern, a study will be required. This is the approach currently used by the City and would not be changed by General Plan 2040.*

Supplemental Comment from RGM

Please replace “Unless covered by the exemptions in Policy M-2.5, such studies should include...” with “Unless covered by the exemptions in Policy M-2.5, such studies shall include...”

*In this instance, “should” is the more appropriate term as not every attribute of the study is equal, and more focused (or broader) studies may be appropriate and acceptable in some situations. Discretion is appropriate in determining the specific contents of each report.*

2. Who will make the decision of whether traffic impact studies will be required?

*This determination is typically made by the City Traffic Engineer, sometimes in collaboration with the Community Development Department, the City Council, and other reviewing bodies. No change to the existing decision-making process is proposed.*

- b) What are the standards for intersections/road segments classified as LOS E or LOS F?

1. Intersections and road segments should not be exempt from traffic standards just because they don't meet LOS D. Policies should specify that intersections/road segments at LOS E should remain at LOS E.

Supplemental Comment from RGM

The City needs to maintain its commitment to overseeing and managing reasonable traffic flow through those intersections and segments which have fallen below the City Standard LOS D. Please provide a policy that intersections and road segments currently at LOS E not be allowed to fall below LOS E in future conditions.

*We concur with this statement. The intent of listing LOS E as an acceptable service level is not to exempt these projects from traffic standards, but rather to acknowledge that LOS D is infeasible at the specified location. The listed intersections/ segments are either currently operating at LOS E, have an LOS E standard in the existing Plan, or are projected to be at LOS E by 2040 based on traffic forecasts. Projects in the vicinity of these intersections or segments would still be required to conduct studies, pay fees, and address their impacts, potentially including changes to the impacted road segments and intersections. The intent of listing a road segment at “E” is to establish that it is expected to remain at E and may not deteriorate to “F.”*

*The Circulation Element of General Plan 2020 included a bar chart indicating the seconds of delay corresponding to each lettered service level (for intersections), and the average speed corresponding to each lettered service level (for arterials). We will retain this bar chart and carry it forward into General Plan 2040. No change to the existing protocol for implementing LOS requirements is proposed, with the potential exception of Downtown San Rafael.*

2. LOS F conditions are not all equal. A delay of 20 minutes is much greater than a delay of 2 minutes, although both would be LOS F. Once an intersection or road segment is classified as LOS F, what will the City find acceptable for length of delays and reduced speed? Are there “shades of F” that the City should incorporate into LOS standards?

Supplemental Comment from RGM

LOS F conditions are not all equal. The definition of LOS F at intersections begins with an intersection delay of 80 seconds (waiting through more than one traffic signal cycle) to an infinite time of delay. LOS F on arterial segments is defined as speeds of less than 7 mph to 0 mph (*i.e.*, stopped traffic) for an undefined period of time. Once an intersection or road segment reaches LOS F, what will the City find acceptable for length of delays and reduced speed? The City has a responsibility to set standards in the “shades of F” to continue to oversee and manage traffic conditions at these highly congested intersections and road segments. Please provide a policy that delineates what degree of delay will be acceptable at intersections and road segments currently at LOS F and requires that these intersections and segments not be allowed to fall below this degree LOS F in future conditions.

*We agree with this concern and are exploring potential ways of addressing it. In General Plan 2020, this was addressed as a CEQA issue. The General Plan 2020 EIR included thresholds of significance for intersections and arterial road segments operating at LOS “F.” These are referenced in EIRs prepared over the last two decades, including:*

- *If an arterial with baseline travel volumes is already at an unacceptable level of service and there is a decrease in the average travel speed of 5 miles per hour or more, this impact is significant.*

- *If a signalized intersection with baseline traffic volumes is already operating at level of service “F” and there is an increase in delay of five seconds or more, this impact is significant.*

*With SB 743, the City may no longer use these criteria as CEQA thresholds and may not include this language in the General Plan 2040 EIR. However, it could establish that projects that exceed similar thresholds require a City Council exception. Another approach that has been discussed is an Arterial Delay Index. This would be most applicable in Downtown San Rafael, where there signalized intersections are close together. The delay index simply establishes that the peak hour speed should not exceed x% of the free-flowing speed between a given origin and destination.*

*We would not expect this matter to resolved in the General Plan itself, but rather through follow-up guidelines or operational/ administrative memoranda to be developed as the City begins SB 743 implementation. The General Plan will acknowledge that metrics and methods should be developed to address this issue.*

- c) Six intersections/road segments in North San Rafael have been newly classified as LOS E, in particular Del Presidio in North San Rafael.

Supplemental Comment from RGM

Three road segments in North San Rafael are classified as LOS E and exempted from the Citywide LOS D standards (These intersections include Freitas Parkway at Civic Center Drive/Redwood Highway (unsignalized), Merrydale at Civic Center Drive, and Merrydale at Las Gallinas Avenue).

1. On what traffic counts are these LOS calculations based? The traffic studies for the Northgate Walk Project projected better LOS for 3 of these intersections. (Supplemental: The classification of three of these intersections varies substantially from the LOS determinations of these intersections in the 2018 traffic study for the Northgate Walk project. Please provide an explanation.)

*The LOS E standard for the Freitas/Civic Ctr/Redwood, Merrydale/Civic Center, and Merrydale/ Las Gallinas intersections is being carried over from General Plan 2020 (See Page 167 of the General Plan 2020 Circulation Element).*

*The three arterial road segments in North San Rafael that are proposed for LOS “E” are Freitas (Las Gallinas to Del Presidio), Lucas Valley (Las Gallinas to 101), and Los Ranchitos (N. San Pedro to Lincoln). This is based on TAM model forecasts using 2019 baseline traffic data and projected growth for 2020-2040. The forecasts for 2040 are based on 2020-2040 growth assumptions from the San Rafael General Plan for properties within the San Rafael Planning Area, and growth assumptions from TAM and MTC for properties outside the San Rafael Planning Area. The analysis also included a “no project” alternative, in which the growth assumptions for San Rafael were not changed from the TAM model. These three road segments were also projected to operate at LOS “E” in that*

*scenario. Freitas Parkway from Las Gallinas to Del Presidio was already operating at LOS E in both the AM and PM peak hours in 2019. Likewise, Los Ranchitos (between North San Pedro and Lincoln) was already operating at LOS “E” during the PM peak hour in 2019.*

*The allowance for LOS “F” on Del Presidio is a carry-over from General Plan 2020 (see Exhibit 20, on page 168 of the General Plan 2040 Circulation Element). This particular segment was operating at E/F in 2003 when the General Plan 2020 EIR was prepared. Improving Del Presidio to “D” is not feasible given the design and location of this street (a single 400’ block, with signals at either end, essentially an extension of the US 101 S/B off-ramp). This standard would be retained in General Plan 2040.*

*We will investigate the differences between the model forecasts and the Northgate Walk forecasts. The General Plan analysis represents a cumulative scenario for 2040 using the TAMDM model, which may be more conservative (e.g., higher volume) due to its accounting for regional growth and regional traffic increases.*

#### Supplemental Questions from RGM

- i.) We understand from the June 23<sup>rd</sup> meeting that existing traffic LOS determinations are based on traffic counts done by Fehr & Peers in Spring 2019, and that the future traffic increase is not yet available from the TAM Demand Model. Please confirm and provide the data. Please reassess the classifications of these intersections and road segments and their exemptions from the City standard of LOS D.
- ii.) For these intersections, please provide the underlying data of traffic delay and LOS calculation for AM and PM peak hours (existing, existing + project, baseline, baseline + project, cumulative, cumulative + project) for comparison with the Northgate Walk traffic studies.
- iii.) If conditions at these intersections have changed, how does the City account for these changes? Unlike highway interchanges and intersections within the Downtown Precise Plan exempted from LOS D, there is no explanation for why these intersections and road segments have degraded and why they should be exempted from City traffic standards. Please provide this explanation and rationale.

*Traffic model (TAMDM) data for 2019 and 2040 will be included in the Draft 2040 General Plan EIR. We currently have volume data and forecasts for arterial segments, including corresponding arterial Levels of Service for 2019 and 2040. We do not yet have data for intersections. As noted in response (7)(c)(1) above, the LOS “E” designation for the three segments listed reflects either existing (2019) conditions or projected conditions in 2040, taking into consideration regional growth and growth in San Rafael consistent with General Plan 2040. The Northgate Walk analysis was a project-level analysis (rather than a plan-level analysis) and used a different traffic model and method of calculating impacts.*

- d) Unlike highway interchanges and Downtown intersections, no rationale is given for why these intersections/segments should be exempted from LOS studies. How does the City account for these degraded traffic conditions? What commitment will be made to avoid further degradation?

*The intersections at which LOS "E" is deemed acceptable would not be exempted from LOS studies. Projects in the vicinity of these intersections will still be required to evaluate existing and projected conditions at these intersections. Such evaluations could lead to requirements for specific improvements or modifications. These improvements/modifications would be made in order to maintain Level of Service "E", given that LOS "D" is infeasible. Even where LOS "F" is the standard, improvements may still be required to maintain functionality and reduce further delays (see response to (7)(b)(2)).*

- e) On what data will the "TBD" LOS exemptions be based? When will these determinations be made?

*To clarify, the "TBD's" would not be exemptions, but rather lower acceptable service levels (e.g., longer delays) for specific intersections based on existing (2020) and projected (2040) conditions. We are still awaiting intersection LOS forecasts for 2040. These are being determined using the TAM model with the same data inputs that were used to develop the 2040 forecasts for arterial segments. We anticipate receiving this data later in July. We will provide the "TBD" list as soon as it is updated.*

#### Additional Supplemental Questions from RGM

#### 8) Program M-2.5B LOS Exceptions

This section adds specific guidelines for the City Council for granting LOS Exceptions. We recommend the section be improved as follows:

- a) Section b) should be clarified to state that all of the three bulleted conditions must be fulfilled in order for the City Council to grant an exception.

*The intent is that all three of the bulleted conditions be met. We will clarify this.*

- b) The third bullet should mandate consistency not only with the Guiding Principles of GP2040 but also with the Foundation of San Rafael as a thriving City, including Open Space Preservation, Sense of Community, Great Neighborhoods, and Historic Legacy.

*We concur with this recommendation and will make this change.*

- c) Please replace “should” with “shall.”

*The word “should” does not appear in Program M-2.5.*

9) Other LOS Questions

- a) What considerations have been given to heavy traffic flows at other times of the day, such as 3 p.m. when construction worker commute and school traffic is heaviest?

*The General Plan traffic analysis is a 20-year programmatic citywide analysis conducted in a regional context. As such, it focuses on “worst case” conditions, which occur during the AM and PM peak hours. Analysis of mid-afternoon conditions would be most appropriate for specific projects located in areas where there are either different peak hours, or issues associated with a specific nearby traffic generator (such as a high school, university, etc.). Other peak periods might also be considered in towns with unusual peak travel characteristics (e.g., weekend peaks at beaches or tourist attractions, etc.).*

- b) Why does the proposed LOS level not distinguish between a.m. and p.m. peak hours?

*Both are considered collectively as our community experiences traffic in both peak periods and the planned transportation improvements address both peaks.*

- 9) Wrap Up: How will this memo be presented to the City Council on July 6<sup>th</sup>? What decisions will the City Council have to make?

*The staff report for the July 6 meeting will be available for public review and posted to the website on July 1. The Council will be asked to accept staff’s recommendations for VMT screening criteria and thresholds for use in CEQA. They will also review and comment on proposed Policy M-2.5 (and related programs) regarding the continued use of LOS for merit review of proposed development projects. This would be a preliminary review of Policy M-2.5, as this discussion would continue later in the year after General Plan 2040 is released as a public review draft and considered at hearings before the Planning Commission and City Council. We also anticipate returning to the City Council later in 2020 with a list of proposed transportation improvement projects and a proposed update to the traffic mitigation fee.*



**SAN RAFAEL**  
THE CITY WITH A MISSION

## NOTICE OF ONLINE PUBLIC HEARING – CITY COUNCIL

You are invited to view and participate online for the City Council meeting on the following proposed project:

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**PROJECT: REPORT ON TRAFFIC METHODOLOGIES FOR GENERAL PLAN 2040** – On June 19, 2019 and December 2, 2019, the San Rafael City Council was provided informational reports covering State-mandated changes (effective mid-2020) on how traffic and circulation is to be analyzed in future environmental documents (California Environmental Quality Act) and the General Plan 2040 Environmental Impact Report (EIR). The State Law requires that local jurisdictions phase out the use of the current “Level of Service” (LOS) method of review for environmental documents, replacing it with a “Vehicle Miles Traveled” (VMT) methodology. The December 2, 2019 informational report to the City Council explains the differences between the two traffic methodologies and can be viewed at <https://t.ly/uINP>. As follow-up to the December 2, 2019 informational report, the City Council will review and be requested to provide feedback on: a) VMT screening and significance criteria for future development project review; and b) maintaining LOS as a tool for reviewing new development and monitoring local intersection and arterial operations. File Nos.: GPA16-001 and P16-013.

*As required by State law (California Environmental Quality Act), the General Plan 2040 is subject to environmental review. An Environmental Impact Report (EIR) is being prepared to assess the impacts of the General Plan 2040, which will include traffic methodologies. The Draft EIR will be completed and released for public review this summer.*

**MEETING DATE/TIME/LOCATION: Monday, July 6, 2020, 7:00 p.m. COVID-19 ADVISORY NOTICE** Consistent with Executive Orders No.-25-20 and No. N-29-20 from the Executive Department of the State of California and the Marin County March 16, 2020 Shelter in Place Order, the San Rafael City Council meeting of July 6, 2020, will not be physically open to the public and the meeting will be streamed live to YouTube at <https://www.youtube.com/cityofsanrafael>. Instructions on how to participate online, will be available on the YouTube channel.

**FOR MORE INFORMATION:** Contact Barry Miller, General Plan Project Manager at (415) 485-3423 or [barry.miller@cityofsanrafael.org](mailto:barry.miller@cityofsanrafael.org). **City offices are currently closed to public walk in, but you can contact the planner for more information.** You can also view the staff report after 5:00 p.m. on the Friday before the meeting at <http://www.cityofsanrafael.org/meetings>.

**WHAT WILL HAPPEN:** The City Council will consider public comment/testimony and provide feedback and direction on VMT and LOS policy direction.

**HOW TO PROVIDE PUBLIC COMMENTS:** You can send written correspondence by email to the address above prior to the meeting, you can comment online in real-time on YouTube. If you do not have access to internet, contact the City Clerk to discuss alternative options for remote participation at 415-485-3066.

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*Any records relating to an agenda item, received by a majority or more of the Council less than 72 hours before the meeting, shall be available for inspection online. Sign Language interpreters may be requested by calling (415) 485-3066 (voice), emailing [Lindsay.lara@cityofsanrafael.org](mailto:Lindsay.lara@cityofsanrafael.org) or using the California Telecommunications Relay Service by dialing “711”, at least 72 hours in advance of the meeting. Copies of documents are available in accessible formats upon request.*