Agenda Item # 8.1
For Planning Commission Meeting of: July 9, 2026

CITY OF SANTA ROSA
PLANNING COMMISSION

TO:	CHAIR AND MEMBERS OF THE PLANNING COMMISSION
FROM:	DAN HENNESSEY, DIRECTOR TRANSPORTATION AND PUBLIC WORKS DEPARTMENT
SUBJECT:	TRANSPORTATION IMPACT ANALYSIS REQUIREMENTS: PURPOSE, LIMITATIONS, AND CONSIDERATIONS FOR UPDATING LOCAL GUIDELINES
AGENDA ACTION:	RECEIVE PRESENTATION

RECOMMENDATION

The Planning and Economic Development and Transportation and Public Works Departments recommend that the Planning Commission receive a presentation about Transportation Impact Analyses. The item is provided for information only and no formal action will be taken.

BACKGROUND

Transportation impact analyses are technical studies used to estimate how a proposed development may affect the transportation system. In California, such analyses may evaluate both operational traffic conditions and vehicle miles traveled (VMT), depending on the applicable regulatory and policy framework. These studies generally rely on traffic counts, travel-demand assumptions, forecasting models, and accepted engineering methodologies to estimate future transportation conditions with and without a proposed project. Jurisdictions are also responsible for establishing significance thresholds and analysis requirements that reflect adopted policies, community priorities, and applicable legal requirements.

Historically, transportation studies focused heavily on vehicle delay and intersection level of service. Following changes to the California Environmental Quality Act (CEQA), VMT has become the primary transportation metric for evaluating environmental impacts under CEQA, while operational traffic analyses continue to be used by many local agencies for transportation planning, infrastructure programming, and project review purposes. As a result, transportation impact analyses may serve multiple purposes, including environmental review, infrastructure planning, and assessment of project design.

Transportation analyses are forecasting tools rather than direct measurements of future conditions. Their conclusions depend on assumptions regarding future development patterns, travel behavior, roadway networks, and background growth. While these studies provide useful information to decision-makers, they are best understood as estimates intended to inform professional judgment rather than precise predictions of future transportation conditions.

ANALYSIS

Transportation impact analyses provide several important benefits to staff and applicants during project review. They offer a consistent framework for estimating project-generated travel demand, identifying locations where transportation conditions may warrant further evaluation, and assessing the potential effectiveness of operational or infrastructure improvements. By applying standardized methodologies across multiple projects, transportation studies can help staff and decision-makers evaluate projects in a predictable and transparent manner.

For transportation engineering staff, however, the value of a transportation analysis often differs from how such studies are perceived by the public. Transportation professionals generally use these studies as screening and planning tools rather than as definitive forecasts. A study may help identify whether a project is likely to generate relatively little travel demand or whether it may warrant closer examination due to its scale, location, or access characteristics. The study can also provide a structured basis for discussing transportation improvements and mitigation measures. In this respect, transportation analyses support professional judgment but do not replace it.

Transportation analyses also have important limitations. Travel demand forecasting necessarily requires assumptions regarding future population growth, economic activity, travel behavior, transportation network conditions, and land use development patterns. Small changes in these assumptions can produce materially different results. Furthermore, transportation models are generally more reliable for identifying broad trends and relative impacts than for predicting precise future traffic volumes or operational conditions at a specific location and time. Numerical outputs may therefore appear more precise than the underlying data and assumptions can support.

These limitations are particularly relevant for smaller projects. In many cases, the projected transportation effects of a development are small relative to normal daily fluctuations in traffic volumes, seasonal variation, changes in travel behavior, or background growth occurring throughout the community. Detailed analyses of projects with comparatively minor transportation impacts may produce extensive technical documentation while providing limited additional information useful to decision-makers. Beyond a certain point, additional analysis may increase the volume of technical information without materially reducing uncertainty regarding future transportation conditions.

The transportation profession has also recognized that traffic studies can sometimes become focal points in broader land use debates. Professional organizations, including the Institute of Transportation Engineers (ITE) and American Planning Association (APA), have noted that transportation analyses are frequently used to support positions that extend beyond the actual predictive capability of the analysis. Individual metrics, assumptions, or model outputs may be selectively cited, often without full consideration of the study's assumptions, limitations, or broader findings, as support for broader conclusions regarding growth, neighborhood character, or community change. This does not mean the analyses lack value; rather, it underscores the importance of understanding both what the studies can reliably demonstrate and what they cannot.

For this reason, transportation staff generally consider transportation analyses to be one component of the overall decision-making process. The studies are most effective when used to identify significant transportation issues, inform infrastructure planning, and support consistent project review. They are less effective when interpreted as precise forecasts of future conditions or as the sole basis for determining whether a project should proceed.

Transportation analysis requirements can also influence land use outcomes over time. When transportation impacts are evaluated primarily through measures of vehicle delay or intersection level of service, projects in established urban areas often appear to have greater transportation impacts because they are located within already-constrained transportation networks. In contrast, development at the urban edge may generate less localized congestion in the short term because it occurs adjacent to roadways with available capacity. As a result, transportation review frameworks that emphasize vehicle delay can unintentionally favor dispersed development patterns and roadway expansion over compact infill development. Transportation analysis frameworks are therefore not value-neutral; the metrics selected for analysis can influence which types of projects are encouraged, discouraged, or required to provide mitigation.

The transportation profession and state policy have increasingly recognized that expanding roadway capacity to address localized congestion often induces additional vehicle travel and can result in renewed congestion over time. For this reason, many agencies have shifted toward transportation performance measures that more directly reflect broader community objectives, including reducing vehicle travel, supporting multimodal transportation, improving safety, and encouraging efficient land use patterns. Transportation impact analysis requirements should therefore be considered not only as technical review procedures, but also as tools that can shape development patterns and transportation investments over the long term.

Additionally, transportation impact analysis requirements are not solely technical standards; they also reflect community priorities and adopted policy objectives. Decisions regarding when transportation studies are required, what metrics are evaluated, and which impacts warrant further analysis and/or mitigation inherently involve judgments

about the transportation and land use outcomes a community seeks to achieve. As a result, transportation impact analysis guidelines should be aligned with the goals and policies established in a jurisdiction's adopted planning documents.

The City's General Plan and related planning documents consistently support compact, connected infill development patterns, multimodal transportation networks, and investments that improve safety and accessibility for people walking, bicycling, using transit, and driving. These policies recognize that transportation system performance is measured by more than vehicle delay alone and that achieving broader community objectives may require balancing multiple transportation considerations. Accordingly, transportation analysis requirements should focus staff and applicant resources on identifying issues most relevant to the City's adopted goals, including transportation safety, network connectivity, and access to multimodal travel options, while avoiding analytical requirements that provide limited value for decision-making or that inadvertently discourage desired infill development patterns.

To summarize, staff views transportation impact analyses as important technical tools that are most effective when applied proportionally and strategically. Requiring analysis where meaningful transportation issues may exist helps ensure informed decision-making. Conversely, requiring detailed analysis for projects unlikely to generate substantial transportation impacts may increase cost, burden staff, and add administrative complexity without providing commensurate public benefit.

FISCAL IMPACT

This briefing has no effect on the General Fund.

ENVIRONMENTAL IMPACT

This action is exempt from the California Environmental Quality Act (CEQA) because it is not a project which has a potential for resulting in either a direct physical change in the environment, or a reasonably foreseeable indirect physical change in the environment, pursuant to CEQA Guideline section 15378.

BOARD/COMMISSION/COMMITTEE REVIEW AND RECOMMENDATIONS

A similar presentation was made to the Design Review and Preservation Board on July 2, 2026.

CONTACT

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