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July 15, 2025

Via Email and Overnight Mail

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Re: **Antioch Planning Commission Hearing, Agenda Item 6-2;
Slatten Ranch Townhomes Project (TM-01, AR-23-01)**

Dear Chair Riley, Vice-Chair Webber, Commissioners, Mr. Scudero, and Ms. Merideth:

We are writing on behalf of Contra Costa Residents for Responsible Development (“Contra Costa Residents”) to provide comments on Agenda Item 6-2, the Slatten Ranch Townhomes Project (TM-01, AR-23-01) (“Project”) proposed by DeNova Homes, Inc. (“Applicant”). The Project consists of a vesting tentative map to create 17 residential lots for 17 three-story buildings, containing 129 townhome-style condominium homes. The Project site is a 6.41 acre site located on the east side and northern end of Slatten Ranch Road, bounded by Wicklow Way on the south and Empire Avenue on the east in the City of Antioch (“City”).

The City contends that the Project previously has been analyzed under the California Environmental Quality Act¹ (“CEQA”) and that further evaluation is not required pursuant to CEQA Guidelines section 15183.² Specifically, the City

¹ Pub. Res. Code (“PRC”) §§ 21000 et seq.; 14 Cal. Code Regs. §§ 15000 et seq. (“CEQA Guidelines”).

² February 2024 Slatten Ranch Townhomes Section 15183 Consistency Memorandum (“15183 Consistency Memorandum”), pg. 1.

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contends that the Project was adequately analyzed in the Antioch Housing, Environmental Hazards, and Environmental Justice Elements Project Environmental Impact Report (“Housing Element EIR”) certified by the City in February 2023, and that additional environmental review is therefore not required for the Project pursuant to section 15183. These conclusions are set forth in the 15183 Consistency Memorandum, which purports to “determine if project-specific impacts would occur that are not adequately covered in [the Housing Element EIR]. To the extent the Housing Element policies and/or actions substantially mitigate a particular project impact, the impact shall not be considered peculiar, pursuant to 15183(f), thus, eliminating the need for further environmental review.”³

The City’s conclusion is not supported by substantial evidence in the record and further CEQA review is required. The City’s reliance on section 15183 to avoid any project-specific environmental review is misplaced, as none of the Project’s specific impacts were studied in the Housing Element EIR, and the 15183 Consistency Memorandum lacks any analysis of Project-specific impacts and does not identify any applicable Housing Element policies and/or actions applicable to this Project that will substantially mitigate any Project-level impact. Moreover, the Project will result in new or more significant impacts that are peculiar to the Project site. As a result, the Planning Commission lacks substantial evidence to recommend approval of the Project.

In particular, Contra Costa Residents’ transportation expert found that the Project is likely to have significant vehicle miles traveled (“VMT”) impacts, and the 15183 Consistency Memorandum improperly “screened” the Project from a quantitative VMT analysis. Similarly, Contra Costa Residents’ noise expert found that the Project will have significant construction noise impacts peculiar to this Project site and which were not addressed in the Housing Element EIR. Finally, neither the Consistency Memorandum nor the Housing Element EIR performed any emissions modeling to determine the scope of potential air quality and public health impacts from the Project’s construction and operational emissions, in violation of CEQA. The City therefore may not properly rely on CEQA Guidelines section 15183 to avoid further environmental review.

We prepared these comments with the assistance of acoustics, noise, and vibration expert Jack Meighan of Wilson Ihrig⁴ and transportation expert Norman

³ 15183 Consistency Memorandum, pg. 10.

⁴ Mr. Meighan’s Comments (“Meighan Comments”) and CV are attached hereto as **Attachment A**

Marshall.⁵ As explained below, the Project will have potentially significant air quality, public health, noise and transportation impacts that are peculiar to the project and were not analyzed at a project-level in the Housing Element EIR, or are more severe than previously analyzed by the City. These impacts are not reduced to less than significant levels by the mitigation measures in the Housing Element EIR or any other standard conditions of approval, and therefore require disclosure and mitigation in a project-level Environmental Impact Report (“EIR”) before the City can consider approval of the Project.

I. STATEMENT OF INTEREST

Contra Costa Residents is an unincorporated association of individuals and labor organizations that may be adversely affected by the potential public and worker health and safety hazards, and the environmental and public service impacts of the Project. The coalition includes the International Brotherhood of Electrical Workers Local 302, Plumbers & Steamfitters Local 159, Sheet Metal Workers Local 104, Sprinkler Fitters Local 483, along with their members, their families, and other individuals who live and work in the City of Antioch and Contra Costa County.

Contra Costa Residents’ individual members live, work, recreate, and raise their families in the City of Antioch and surrounding communities. Accordingly, they would be directly affected by the Project’s environmental, health, and safety impacts. Individual members may also work on the Project itself. They will be first in line to be exposed to any health and safety hazards that exist on site.

Contra Costa Residents also has an interest in enforcing environmental laws that encourage sustainable development and ensure a safe working environment for its members. Environmentally detrimental projects can jeopardize future jobs by making it more difficult and more expensive for businesses and industries to expand in the region, and by making the area less desirable for new businesses and new residents. Indeed, continued environmental degradation can, and has, caused construction moratoriums and other restrictions on growth that, in turn, reduce future employment opportunities.

II. LEGAL BACKGROUND

CEQA has two basic purposes, neither of which has the City satisfied in this

⁵ Mr. Marshall’s Comments (“Marshall Comments”) and CV are attached hereto as **Attachment B**.

case. First, CEQA is designed to inform decision makers and the public about the potential, significant environmental impacts of a project before harm is done to the environment.⁶ The EIR is the “heart” of this requirement,⁷ and has been described as “an environmental ‘alarm bell’ whose purpose it is to alert the public and its responsible officials to environmental changes before they have reached ecological points of no return.”⁸ To fulfill this purpose, the discussion of impacts in an EIR must be detailed, complete, and “reflect a good faith effort at full disclosure.”⁹ An adequate EIR must contain facts and analysis, not just an agency’s conclusions.¹⁰

Second, CEQA directs public agencies to avoid or reduce environmental damage when possible by requiring imposition of mitigation measures and by requiring the consideration of environmentally superior alternatives.¹¹ CEQA imposes an affirmative obligation on agencies to avoid or reduce environmental harm by adopting feasible project alternatives or mitigation measures to address all potentially significant impacts identified in the agency’s CEQA analysis.¹² Without an adequate analysis and description of feasible mitigation measures, it would be impossible for agencies relying upon an EIR or other environmental document to meet this obligation.

Following preliminary review of a project to determine whether an activity is subject to CEQA, a lead agency is required to prepare an initial study to determine whether to prepare an EIR or negative declaration, identify whether a program EIR, tiering, or other appropriate process can be used for analysis of the project’s environmental effects, or determine whether a previously prepared EIR could be used with the project, among other purposes.¹³ CEQA requires an agency to analyze the potential environmental impacts of its proposed actions in an EIR except in certain limited circumstances.¹⁴ A CEQA exemption may be invoked only if expressly authorized by the CEQA statute or guidelines and if there is no

⁶ Cal. Code Regs., tit. 14, § 15002, subd. (a)(1) (“CEQA Guidelines”); *Berkeley Keep Jets Over the Bay v. Bd. of Port Comm’rs.* (2001) 91 Cal.App.4th 1344, 1354 (“*Berkeley Jets*”); *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

⁷ *No Oil, Inc. v. City of Los Angeles* (1974) 13 Cal.3d 68, 84.

⁸ *County of Inyo v. Yorty* (1973) 32 Cal.App.3d 795, 810.

⁹ CEQA Guidelines, § 15151; *San Joaquin Raptor/Wildlife Rescue Center v. County of Stanislaus* (1994) 27 Cal.App.4th 713, 721-722.

¹⁰ *See Citizens of Goleta Valley v. Bd. of Supervisors* (1990) 52 Cal.3d 553, 568.

¹¹ CEQA Guidelines, § 15002, subd. (a)(2) and (3); *Berkeley Jets*, 91 Cal.App.4th, at p. 1354; *Laurel Heights Improvement Ass’n v. Regents of the University of Cal.* (1998) 47 Cal.3d 376, 400.

¹² Pub. Resources Code, §§ 21002-21002.1.

¹³ CEQA Guidelines, §§ 15060, 15063, subd. (c).

¹⁴ See, e.g., Pub. Resources Code, § 21100.

possibility of a significant effect on the environment. Exemptions must be narrowly construed and are not to be expanded beyond the scope of their plain language.¹⁵

CEQA Guidelines Section 15183 provides an exemption for projects which are consistent with the development density established by existing zoning, community plan or general plan policies for which an EIR was certified, *except as necessary to evaluate whether there are project-specific significant impacts which are peculiar to the project or project site*.¹⁶ In relying on section 15183 to approve a project, a lead agency may not forgo further analysis of potentially significant impacts unless it makes certain findings. An agency is required to perform further analysis as to impacts that (1) are peculiar to the proposed project or parcel, (2) were not analyzed as significant effects in a prior EIR for the zoning, community or general plan with which the project is consistent, (3) are potentially significant off-site or cumulative impacts that were not discussed in the prior EIR, or (4) are previously identified significant impacts which, due to substantial new information not known at the time the EIR was certified, are determined to have a more severe impact than discussed in the prior EIR.¹⁷

Under section 15183(f), an effect of a project on the environment is not considered peculiar to the project or project site if “uniformly applied development policies or standards have been previously adopted ...with a finding that the development policies or standards will substantially mitigate the environmental effect when applied to future projects, unless substantial new information shows that the policies or standards will not substantially mitigate the environmental effect.”¹⁸

Agency determinations under Guidelines section 15183 are reviewed under the substantial evidence standard.¹⁹ In determining whether an agency’s findings concerning the use of a statutory exemption from CEQA may be upheld, courts review the administrative record to see that substantial evidence supports each element of the exemption.²⁰ This includes the determination that “uniformly applied development policies or standards” will substantially mitigate the project’s

¹⁵ *Castaic Lake Water Agency v. City of Santa Clarita* (1995) 41 Cal.App.4th 1257.

¹⁶ 14 CCR § 15183(a).

¹⁷ 14 CCR § 15183(b)(1)-(4).

¹⁸ 14 CCR § 15183(f).

¹⁹ *Lucas v. City of Pomona* (2023) 92 Cal.App. 5th 508, 538, citing *Concerned Dublin Citizens v. City of Dublin* (2103) 214 Cal.App.4th 1301, 1311; see also, *Hilltop Group v. County of San Diego* (2024) 99 Cal.App.5th 890, 909-10.

²⁰ *Lucas*, 92 Cal.App.5th at 538.

environmental effects.²¹ Agency findings must specifically address the effect of uniform policies and standards on potential environmental impacts.²²

Section 15168's two-step inquiry of a program EIR's applicability to later activities holds that "if a later activity would have effects that were not examined in the program EIR, a new initial study would need to be prepared leading to either an EIR or a negative declaration." The City insists that, pursuant to sections 15162 and 15183, the Project is within the scope of the program EIR and no subsequent EIR is required. "Whether a later activity is within the scope of a program EIR is a factual question that the lead agency determines based on substantial evidence in the record."

Here, the Housing Element EIR analyzed impacts at a program level, and did not analyze quantify, or disclose Project-level impacts for issues including transportation, air quality and public health, and noise.

III. THE PROJECT IS NOT EXEMPT FROM FURTHER CEQA REVIEW AND AN EIR IS REQUIRED

The City contends that the Housing Element EIR provides the basis for its determination that no further environmental review of the Project's impacts is required. The 15183 Consistency Memorandum notes that the Project's density of 20.1 dwelling units per acre ("du/ac") is consistent with the development density established in the Housing Element EIR, i.e., 20-25 du/ac, and purports to evaluate whether the Project will have any effects peculiar to the Project or Project site.²³ It goes on to state that "[t]o the extent that the Housing Element policies and/or actions substantially mitigate a particular project impact, the impact shall not be considered peculiar, pursuant to [CEQA Guidelines section] 15183(f), thus, eliminating the requirement for further environmental review."²⁴

However, while the Consistency Memorandum recites the requirements of section 15183, it does not actually analyze whether the Project will have any effects peculiar to the Project or the Project site. Neither the Housing Element EIR nor the 15183 Consistency Memorandum examine the Project-level effects on environmental impacts such as air quality, health risks, transportation and noise.

²¹ 14 CCR § 15183(f).

²² *Hilltop Group*, 99 Cal.App.5th at 918.

²³ 15183 Consistency Memorandum, pg. 10.

²⁴ *Id.*

Nor does the Consistency Memorandum identify any “Housing Element policies and/or practices” that apply to the Project to substantially mitigate the Project’s impacts. As discussed below, the City lacks substantial evidence to support the necessary findings to exempt the Project from CEQA review, and the City must prepare and circulate for public review an EIR that analyzes the Project’s potentially significant impacts.

A. The City Improperly Failed to Analyze the Project’s Significant Transportation Impacts

CEQA requires analysis of a project’s transportation impacts via analysis of the project’s vehicle miles traveled (“VMT”).²⁵ The Housing Element EIR evaluated the VMT impacts of all of the potential new housing sites in the City (including the site for the Slatten Ranch Project) and found a significant impact on VMT.²⁶ To address these impacts, the Housing Element EIR adopted Mitigation Measure TRANS-1, which provides that individual housing development projects (like this one) *that do not screen out from VMT impacts analysis shall provide a quantitative VMT analysis.*²⁷ Individual projects which result in a significant VMT impact are required to implement travel demand management measures and physical measures to reduce VMT to a less-than-significant level.²⁸ The Housing Element EIR lists seven criteria that are used to screen projects out of conducting project-level VMT analysis: (1) CEQA-exempt projects, (2) small projects, (3) local-serving uses, (4) proximity to a major transit stop, (5) projects located in low VMT areas, (6) affordable housing, and (7) transportation projects.²⁹ These criteria screen out projects from performing a full VMT analysis because projects meeting these criteria are presumed to have less-than-significant VMT impacts absent substantial evidence to the contrary.³⁰

The Housing Element EIR makes clear that it did not analyze VMT impacts from individual housing projects like this one. Nor does the 15183 Consistency Memorandum for this Project analyze the Project’s VMT impacts. Instead, the City asserts that because the 15183 Consistency Memoranda concludes that the Project qualifies for the Guidelines section 15183 exemption, the Project “screens out” from

²⁵ 14 CCR § 15064.3.

²⁶ Housing Element EIR, pg. IV.B-27.

²⁷ *Id.*

²⁸ *Id.*

²⁹ *Id.*, pgs. IV.B-21—IV.B-22.

³⁰ *Id.*

having to perform a quantitative VMT analysis as required under Housing Element EIR mitigation measure TRANS-1. Specifically, the 15183 Consistency Memorandum states:

“As demonstrated through this 15183 Consistency Memorandum, the proposed project would not result in significant impact that is peculiar to the project or project site, a significant effect that was not identified in the Housing Element EIR, or a substantially more severe significant effect related to transportation beyond what was identified in the Housing Element EIR. Therefore, pursuant to Section 15183 of the CEQA Guidelines, the proposed project qualifies for exemption from further environmental review under CEQA. Because the proposed project would be considered exempt from CEQA, Mitigation Measure TRANS-1 is not applicable.”

The City’s position is legally and logically flawed. The City’s argument employs circular reasoning by claiming that because the Project is exempt from CEQA, it does not need to conduct a VMT analysis, citing the Housing Element EIR screening criteria. This reasoning is fundamentally flawed because the argument’s premise (“the Project is exempt from CEQA”) *assumes* the conclusion rather than supporting it. The City argues that an exemption from CEQA means an exemption from VMT analysis, but the CEQA exemption itself is predicated on the absence of significant environmental impacts peculiar to the Project, including transportation impacts which a VMT analysis is designed to determine. In other words, the City claims that it need not evaluate the Project’s potentially significant VMT impacts because the Project is exempt from CEQA, but the exemption determination itself rests on unsupported assumptions regarding the lack of Project-specific peculiar impacts. The City lacks any evidence to support the conclusion that the Project will not have significant VMT impacts peculiar to the Project or Project site because it performed no Project-specific VMT analysis. By bypassing the VMT analysis this way, the City avoids an analysis that could reveal significant impacts, and preclude the use of the section 15183 exemption. This approach undermines the purpose of CEQA, which is to ensure that potential environmental impacts are identified, disclosed and mitigated.

While the Consistency Memorandum relies solely on the “CEQA Exemption” screening criterion, the Project does not qualify for any of the other screening criteria set out in the Housing Element EIR. The Project is not a “Small Project,”

defined as having 10,000 square feet or less³¹ of non-residential space or 10 residential units or less. The Project will not consist of “Local-Serving Uses,” as this screening criteria is intended to apply to commercial uses and is not relevant to residential projects.³² The Project does not qualify for the “Proximity to a Major Transit Stop” VMT screening criteria, as this criteria is limited to the 0.5 mile (walking radius) surrounding the Antioch BART and Antioch Amtrak stations, and the Housing Element EIR found that none of the housing sites analyzed fall within this boundary.³³ The Project does not include any affordable housing, and therefore does not screen out from VMT analysis on that basis. Nor is the Project a “Transportation Project.” Finally, the Project is not located in a “Low VMT Area.” Indeed, as transportation expert Norman Marshall explains, the Project site is located in an area of the City where home-based VMT exceeds the City’s significance thresholds.³⁴ This makes it very likely that the Project will have significant VMT impacts requiring mitigation.³⁵

The Project has none of the characteristics that suggest low VMT impacts that would allow it to be screened from a VMT analysis. As discussed above, the City’s failure to perform a quantitative VMT analysis prevents an understanding of the extent to which the Project’s VMT is expected to exceed the significance threshold, or the nature of mitigation required to reduce such impacts to below the threshold. The City’s conclusion lacks the support of substantial evidence because it failed to perform any Project site-specific analysis of VMT impacts or to determine to what extent these impacts are peculiar to the Project or Project site, nor has it demonstrated that the Project can be screened from performing a quantitative VMT analysis. The City must prepare a Project-specific EIR that includes a quantitative VMT analysis and appropriate mitigation.

B. The City Lacks Substantial Evidence to Support its Conclusions With Respect to Air Quality and Public Health Impacts

The City has not performed any emissions modeling to determine potential impacts of Project construction or operations; neither the 15183 Consistency Memorandum nor the Housing Element EIR analyzed any Project site-specific air

³¹ *Id.*

³² *Id.* at pg. IV.B-24.

³³ *Id.*

³⁴ Marshall Comments, pgs. 2-3.

³⁵ Marshall Comments, pgs. 2-5.

quality impacts or identified any sensitive receptors near the Project site. Under CEQA Guidelines section 15168(c), these air quality and public health impacts are effects that were not examined in the Housing Element EIR, requiring a new initial study leading to either an EIR or negative declaration. The 15183 Consistency Memorandum includes a cursory discussion of the Project's potential air quality impacts, as follows:

“The proposed project would be consistent with the Housing Element and, thus, was anticipated by the City and considered under the Housing Element EIR analysis. Accordingly, the proposed project would not result in any new significant effects related to air quality. However, the Housing Element EIR requires mitigation measures related to construction emissions of criteria air pollutant emissions from future housing developments (AIR-1), operational emissions of criteria air pollutant emissions from future housing developments (AIR-2), and health risks related to the generation of toxic air contaminants (TACs) and particulate matter (PM) 2.5 microns in diameter (PM_{2.5}) during construction and operation of future housing developments (AIR-3a and AIR-3b).”³⁶

However, the Consistency Memorandum goes on to state that none of the Housing Element EIR air quality mitigation measures are applicable to this Project.³⁷ Based on the Project's size, location and characteristics, none of the Housing Element EIR's air quality mitigation measures would apply to this Project. Therefore, none of the Project's air quality impacts will be mitigated by “uniformly applied development policies or standards.”³⁸ The City nevertheless concludes that “[o]verall, based on the above, the proposed project would not result in a significant impact that is peculiar to the project or the project site, was not identified as a significant effect in the Housing Element EIR, and would not result in a more severe adverse impact than the significant effects previously identified within the Housing Element EIR.” This conclusion lacks the support of any evidence, let alone substantial evidence as required by CEQA.

The Housing Element EIR expressly recognized that the use of construction equipment during construction of individual housing developments like the Project

³⁶ 15183 Consistency Memorandum, pg. 12.

³⁷ *Id.*

³⁸ *See* CEQA Guidelines § 15183.

can pose health risks related to the generation of TACs and PM_{2.5}.³⁹ DPM is a known toxic air contaminant (“TAC”) carcinogen that contains numerous harmful compounds. Diesel exhaust has been linked to a range of serious health problems including an increase in respiratory disease, lung damage, cancer, and premature death.^{40,41,42} Fine DPM is deposited deep in the lungs in the smallest airways and can result in increased respiratory symptoms and disease; decreased lung function, particularly in children and individuals with asthma; alterations in lung tissue and respiratory tract defense mechanisms; and premature death.⁴³ Exposure to DPM increases the risk of lung cancer. It also causes non-cancer effects including chronic bronchitis, inflammation of lung tissue, thickening of the alveolar walls, immunological allergic reactions, and airway constriction.⁴⁴ DPM is a TAC that is recognized by state and federal agencies as causing severe health risk because it contains toxic materials, unlike PM_{2.5} and PM₁₀.⁴⁵ Indeed, the California Office of Health Hazard Assessment recommends assessing cancer risk from construction emissions for all projects, like this one, for construction projects lasting longer than six months.⁴⁶

³⁹ Housing Element EIR, pgs. IV.C-21—23.

⁴⁰ California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Staff Report, June 1998; see also California Air Resources Board, Overview: Diesel Exhaust & Health, <https://ww2.arb.ca.gov/resources/overview-diesel-exhaust-and-health#:~:text=Diesel%20Particulate%20Matter%20and%20Health&text=In%201998%2C%20CARB%20identified%20DPM,and%20other%20adverse%20health%20effects.>

⁴¹ U.S. EPA, Health Assessment Document for Diesel Engine Exhaust, Report EPA/600/8-90/057F, May 2002.

⁴² Environmental Defense Fund, Cleaner Diesel Handbook, Bring Cleaner Fuel and Diesel Retrofits into Your Neighborhood, April 2005; http://www.edf.org/documents/4941_cleanerdieselhandbook.pdf, accessed July 5, 2020.

⁴³ California Air Resources Board, Initial Statement of Reasons for Rulemaking, Proposed Identification of Diesel Exhaust as a Toxic Air Contaminant, Staff Report, June 1998.

⁴⁴ Findings of the Scientific Review Panel on The Report on Diesel Exhaust as adopted at the Panel’s April 22, 1998 Meeting.

⁴⁵ Health & Safety Code § 39655(a) (defining “toxic air contaminant” as air pollutants “which may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. A substance that is listed as a hazardous air pollutant pursuant to subsection (b) of Section 112 of the federal act (42 U.S.C. Sec. 7412 (b)) is a toxic air contaminant.”)

⁴⁶ See OEHHA Risk Assessment Guidelines, Guidance Manual for Preparation of Health Risk Assessments (February 2015), at pg. 8-18, available at <https://oehha.ca.gov/sites/default/files/media/downloads/crnrr/2015guidancemanual.pdf>

Despite the Housing Element EIR's express recognition of the health risks from construction equipment emissions of TACs from construction of projects like this one, the City failed to perform a quantitative health risk analysis to evaluate these peculiar impacts. Because the City has asserted that none of the air quality mitigation measures in the Housing Element EIR applies to this Project, all such impacts will be completely unmitigated. The City therefore may not rely on the section 15183 exemption to approve this Project, and an EIR must be prepared and circulated for public review to evaluate Project's air quality and public health impacts.

C. The City Lacks Substantial Evidence to Support its Conclusions with Respect to the Project's Noise Impacts

The City has not performed any site-specific analysis of the Project's potential noise impacts. Neither the Housing Element EIR nor the 15183 Consistency Memorandum includes any analysis of ambient noise in the area of the Project site, modeling of the Project's construction or operational noise impacts, or identification of sensitive receptors near the Project site. The 15183 Consistency Memorandum contains no discussion whatsoever regarding whether the Project may have peculiar noise impacts necessitating further CEQA review. Under CEQA Guidelines section 15168(c), these Project-specific noise impacts were not examined in the Housing Element EIR, requiring a new initial study leading to either an EIR or negative declaration.

The Housing Element EIR recognizes that for individual projects like this one, "construction activities could generate exterior noise levels that exceed the City's noise objectives established under General Plan Policy 11.8.2."⁴⁷ The Housing Element EIR also states that "[i]ndividual housing developments...would result in a potentially significant impact if they cause a new exceedance of the General Plan noise objectives, or an audible (3.0 dBA) increase in areas where the General Plan noise objectives are already exceeded as the result of existing development."⁴⁸ General Plan Policy 11.8.2 (f) requires a detailed noise attenuation study to be prepared by a qualified acoustical engineer to determine appropriate mitigation and ways to incorporate such mitigation into project design and intervention. Finally, the Housing Element EIR points out that General Plan Policy 11.8.2 requires development adjacent to occupied noise sensitive land uses to implement a construction-related noise mitigation plan that should depict the

⁴⁷ Housing Element EIR, pg. IV.L-12.

⁴⁸ Housing Element EIR, pg. IV.L-10.

location of construction equipment and how the noise from this equipment will be mitigated during construction through the use of noise reduction methods listed in Policy 11.8.2(o).⁴⁹

Therefore, while the City expressly recognizes that individual housing projects like this one may have significant noise impacts on existing nearby sensitive receptors and requires studies and mitigation to reduce noise impacts, the 15183 Consistency Memo simply assumes without any analysis or evidence that the proposed Project “would not result in new significant impacts or substantially more significant impacts related to” impacts including noise.⁵⁰ It does not analyze or even consider whether the Project would “cause a new exceedance of the General Plan noise objectives, or an audible (3.0 dBA) increase areas where the General Plan noise objectives are already exceeded.” Nor does it consider whether Housing Element policies and/or actions might substantially mitigate the Project’s noise impacts. At a minimum, to demonstrate consistency with the Housing Element EIR, it must consider Project impacts in relation to General Plan Policy noise objectives, and must prepare a construction-related noise mitigation plan depicting the location of construction equipment and how the noise from this equipment will be mitigated during construction. Without any actual analysis, or consideration of any applicable uniformly applied development policies or standards, there is no support whatsoever for the conclusion that the Project will not have peculiar noise impacts.

Moreover, as discussed in the attached comments by noise expert Jack Meighan, the 15183 Consistency Memorandum lacks any measurement or disclosure of ambient noise conditions in the area of the Project site.⁵¹ It is therefore impossible to know whether the Project will cause significant increases over ambient noise conditions that are peculiar to the Project or Project site. This violates CEQA’s requirement that a lead agency consider both the “absolute noise level” associated with a project as well as the increase in the level of noise that will result from a project.⁵² In addition, Mr. Meighan modeled potential Project construction noise impacts to residents at the nearest sensitive receptor, located 180 feet from the Project site.⁵³ Mr. Meighan’s analysis reveals potentially significant

⁴⁹ Housing Element EIR, pg. IV.L-12.

⁵⁰ 15183 Consistency Memorandum, pg. 14.

⁵¹ Meighan Comments, pg. 7.

⁵² *Gardiner Farms, LLC v. County of Kern* (2020) 45 CA5th 814, 887, 893; *Keep Our Mountains Quiet v. County of Santa Clara* (2015) 236 CA4th 714, 733.

⁵³ Meighan Comments, pgs. 4-5.

impacts from construction noise, impacts that the City has not evaluated or disclosed. Mr. Meighan's comments provide substantial evidence that the Project will have significant construction noise and vibration impacts that will not be mitigated even if the Housing Element EIR and General Plan noise policies and standards are applied.⁵⁴

Since the City has performed no analysis whatsoever of potential Project noise impacts, it lacks substantial evidence to support the conclusion that the Project will not have Project-specific impacts peculiar to the Project or Project site. Therefore, the City cannot rely on the 15183 CEQA exemption. The City must prepare an EIR that adequately analyzes the Project's potentially significant noise impacts by establishing ambient noise levels for the Project site, comparing them against applicable noise significant thresholds, and proposing mitigation for any significant impacts found.

IV. THE CITY LACKS SUBSTANTIAL EVIDENCE TO MAKE THE REQUIRED FINDINGS TO APPROVE THE PROJECT'S ENTITLEMENTS

The Project requires the City to approve a Vesting Tentative Subdivision Map ("VTSM") for condominium purposes that would subdivide the project site for the development of 17 townhome buildings, containing a total of 129 residential units.⁵⁵ However, as discussed above, the City fails to adequately analyze or mitigate several new project-specific environmental impacts that were not addressed by the Housing Element EIR. As a result, the City cannot make the requisite findings to approve the Project's VTSM.

California's Subdivision Map Act precludes the approval of a tentative map where the design or improvement of the proposed subdivision is not consistent with the applicable general plan, is likely to cause substantial environmental damage, or is likely to cause serious public health problems.⁵⁶

Additionally, Antioch Municipal Code Section 9-4.323 states that a VTSM may be made conditional or denied if any of the following is determined:

⁵⁴ Meighan Comments, pgs. 2-7.

⁵⁵ Staff Report for the Antioch Planning Commission Regular Meeting of July 16, 2025, pg. 1

⁵⁶ Government Code § 66474(b), (e) and (f).

- A failure to do so would place the residents of the subdivision or the immediate community, or both, in a condition dangerous to their health or safety, or both; or
- The condition or denial is required in order to comply with state or federal laws.

As detailed in our comments and those of our noise and transportation experts, there is substantial evidence that the Project may result in several potentially significant environmental impacts, including: (1) construction noise, (2) VMT, and (3) air quality and related health risks. These impacts remain unaddressed and could pose serious risks to public health and safety—both for future subdivision residents and the surrounding community. Therefore, the City cannot make the required findings under the Subdivision Map Act and Antioch's Municipal Code to approve the VTSM until all of the Project's potentially significant impacts are thoroughly analyzed and effectively mitigated.

V. CONCLUSION

As discussed herein, the City lacks substantial evidence to rely on a CEQA Guidelines section 15183 exemption for Project approval. The Project will result in potentially significant project-level impacts which are peculiar to the Project and Project site and will require mitigation. Therefore, the Project cannot be approved until the City complies with CEQA by preparing an EIR.

Sincerely,



Richard M. Franco

Attachments
RMF:acp

ATTACHMENT A



WI #24-001.32

July 12, 2025

Alaura R. McGuire
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

**SUBJECT: Slatten Ranch Townhomes Section 15183 Consistency Memorandum
Antioch, CA
Review and Comments on the Initial Study Noise Analysis**

Dear Ms. McGuire

As requested, we have reviewed the information and noise impact analysis for the Slatten Ranch Townhomes Project in Antioch, CA. The project consists of construction and operation/occupancy of 135 townhome units at the southeast corner of Slatten Ranch Road and Wicklow Way. This letter is based on the Section 15183 Consistency Memorandum prepared by Raney Planning and Management, dated February 2024 and the City of Antioch Housing Element EIR. The Project site is surrounded by noise-sensitive receivers, most notably existing single-family houses, the closest being at 1991 Orfanos Ranch Drive.

Wilson Ihrig is an acoustical consulting firm that has practiced exclusively in the field of acoustics since 1966. During our 58 years of operation, we have prepared hundreds of noise studies for Environmental Impact Reports and Statements. We have one of the largest technical laboratories in the acoustical consulting industry. We also utilize industry-standard acoustical programs such as Roadway Construction Noise Model (RCNM), SoundPLAN, and CadnaA. In short, we are well qualified to prepare environmental noise studies and review studies prepared by others.

Adverse Effects of Noise¹

Although the health effects of noise are not taken as seriously in the United States as they are in other countries, they are real and, in many parts of the country, pervasive.

Noise-Induced Hearing Loss. If a person is repeatedly exposed to loud noises, he or she may experience noise-induced hearing impairment or loss. In the United States, both the Occupational Health and Safety Administration (OSHA) and the National Institute for Occupational Safety and

¹ More information on these and other adverse effects of noise may be found in *Guidelines for Community Noise*, eds B Berglund, T Lindvall, and D Schwela, World Health Organization, Geneva, Switzerland, 1999. (<https://www.who.int/publications/i/item/a68672>)

Health (NIOSH) promote standards and regulations to protect the hearing of people exposed to high levels of industrial noise.

Speech Interference. Another common problem associated with noise is speech interference. In addition to the obvious issues that may arise from misunderstandings, speech interference also leads to problems with concentration fatigue, irritation, decreased working capacity, and automatic stress reactions. For complete speech intelligibility, the sound level of the speech should be 15 to 18 dBA higher than the background noise. Typical indoor speech levels are 45 to 50 dBA at 1 meter, so any noise above 30 dBA begins to interfere with speech intelligibility. The common reaction to higher background noise levels is to raise one's voice. If this is required persistently for long periods of time, stress reactions and irritation will likely result.

Sleep Disturbance. Noise can disturb sleep by making it more difficult to fall asleep, by waking someone after they are asleep, or by altering their sleep stage, e.g., reducing the amount of rapid eye movement (REM) sleep. Noise exposure for people who are sleeping has also been linked to increased blood pressure, increased heart rate, increase in body movements, and other physiological effects. Not surprisingly, people whose sleep is disturbed by noise often experience secondary effects such as increased fatigue, depressed mood, and decreased work performance.

Cardiovascular and Physiological Effects. Human's bodily reactions to noise are rooted in the "fight or flight" response that evolved when many noises signaled imminent danger. These include increased blood pressure, elevated heart rate, and vasoconstriction. Prolonged exposure to acute noises can result in permanent effects such as hypertension and heart disease.

Impaired Cognitive Performance. Studies have established that noise exposure impairs people's abilities to perform complex tasks (tasks that require attention to detail or analytical processes) and it makes reading, paying attention, solving problems, and memorizing more difficult. This is why there are standards for classroom background noise levels and why offices and libraries are designed to provide quiet work environments.

Introduction

Under Section 15183 of the California Code of Regulations, a project that is consistent with development density established by a General Plan for which an EIR has been certified is exempt from CEQA review except for project-specific impacts peculiar to the project or project site. Per 15183(f), an impact is not considered peculiar if uniformly applied development standards or policies have been previously adopted by the City with a finding that the development standards or policies would substantially mitigate the impact when applied to future projects, unless substantial new information shows otherwise.

According to the Consistency Memorandum, the City considered uniformly applied development standards and policies in the the Draft Environmental Impact Report entitled Antioch Housing, Environmental Hazards, and Environmental Justice (EJ) Elements (Housing Element DEIR)². None of these policies is mentioned in the Consistency Memo, and there is no evidence that they would mitigate the Project's noise impacts in any event. The Housing Element DEIR's operational noise

² https://www.antiochca.gov/fc/community-development/planning/housing-element/DHEIR-DEIR_22_0902.pdf

section states “General Plan Policy 11.8.2 (f) requires a detailed noise attenuation study to be prepared by a qualified acoustical engineer to determine appropriate mitigation and ways to incorporate such mitigation into project design and implementation.” And that “compliance with Code of Ordinance 9-5.1901 (A) and General Plan Policy 11.8.2 (f) would ensure that future development under the Project would not result in a substantial temporary or permanent increase in ambient noise levels from stationary sources, and this impact would be less than significant” (Housing Element DEIR page IV.L-13).

Similarly, for construction noise, General Plan Policy 11.8.2 “requires development adjacent to occupied noise sensitive land uses to implement a construction-related noise mitigation plan and requires that all construction equipment utilize noise reduction features.” Additionally, the construction-related noise mitigation plan should “depict the location of construction equipment and how the noise from this equipment will be mitigated during construction through the use of noise reduction methods” that are listed in General Plan Policy 11.8.2 (m) (DEIR page IV.L-12).

General Plan 11.8.2 (f) and (m) proceed to list several design guidelines that reduce noise. None of these are guaranteed to reduce noise, depending on the unique characteristics of each site. In Section (m), mufflers are already included in construction noise source models of the cited FTA database, which takes its source values from measurements of modern equipment already equipped with mufflers. Nighttime construction restrictions do not mitigate daytime noise levels. Strategic staging will reduce the length of unnecessary noise impacts, but will not mitigate the worst-case construction noise scenarios when necessary activities occur adjacent to sensitive uses. Similarly for section (f), most of these best practices do not mitigate worst-case noise and are already included in modeling assumptions. Strategic project design and orientation will reduce some potential impacts. However, this does not preclude there being operational noise impacts, either due to the constraints set by the geometry of each individual site plan, or project orientation that was set by considerations other than efficiency of reducing on-site noise.

The Housing Element DEIR establishes that the general plan will reduce noise to less than significant if followed, but the same DEIR cites the general plan requirements that projects which can result in the “development of proposed uses could result in a significant increase in noise a detailed noise attenuation study to be prepared by a qualified acoustical engineer to determine appropriate mitigation and ways to incorporate such mitigation into project design and implementation” (DEIR page IV.L-13). Those steps have not been taken here, and we believe that this project has the potential to result in a significant increase in noise and vibration, and thus a detailed analysis is required, as detailed in this letter.

Construction Noise Impacts are Potentially Significant.

To estimate construction noise, the Federal Highway Administration’s Roadway Construction Noise Model (RCNM)³ was used for this analysis. Typically, multiple pieces of equipment are used in a construction noise analysis, based on a realistic estimation of a construction environment where multiple activities occur simultaneously. Up to three pieces of equipment were modeled at once as a conservative estimate, based on typical construction procedures and timelines. The one exception to this was pile driving, which is a typically more intense procedure than most construction methods.

³ https://www.fhwa.dot.gov/ENVIRonment/noise/construction_noise/rcnm/rcnmcover.cfm

Program default usage factors, or the percentage of time the equipment generally operates, were used for all pieces of analyzed equipment. Source levels typically used in a construction noise analysis are shown in Table 1.

Table 1: Typical Construction Equipment Noise Levels

Equipment	Lmax Sound Level at 50 feet (dBA)	Utilization %
Backhoe	77.6	40%
Compactor (ground)	80.0	20%
Compressor (air)	78.0	40%
Concrete Mixer Truck	79.0	40%
Concrete Pump Truck	81.0	20%
Concrete Saw	89.6	20%
Crane	81.0	16%
Dozer	81.7	40%
Excavator	80.7	40%
Forklift	75.0	10%
Pneumatic Tools	85.0	50%
Generator	81.0	50%
Mounted Impact Hammer (hoe ram)	90.0	20%
Impact Pile Driver	95.0	20%
Front End Loader	79.0	40%
Paver	77.0	50%
Roller	80.0	20%
Tractor	84.0	40%
Welder / Torch	73.0	40%
Source: RCNM 1.1		

The results of this analysis at the closest sensitive receiver, which is the 1991 Orfanos Ranch Drive residence approximately 180 feet southeast of the project boundary⁴, are shown in Table 2.

Table 2: Modeled Noise Levels from the Proposed Project and Nearest Sensitive Receiver

Noise Source(s)	Modeled Noise Level (dBA)
Impact Pile Driver Only	77
Impact Pile Driver + Pneumatic Tools + Concrete Saw	79
Concrete Saw + Pneumatic Tools	75

⁴ This is measured via google earth to the project site

City of Antioch General Plan⁵ section 11.6.2i-n addresses construction noise. It limits construction hours to 7am to 7pm Monday through Saturday. However, during daytime hours, no limits are set. Even if the city does not set its own construction noise daytime limits, the IS should set thresholds based on other similar documents. For example, the County of Los Angeles code has a construction noise limit of 75 dBA⁶. Certainly, that has no jurisdiction for this project, but other government agencies and other municipalities do have daytime construction noise limits. It is the responsibility of the project applicant to find an applicable guideline to use and determine if noise levels will create an adverse impact on the community. If the applicant finds, chooses and properly cites another threshold that they feel is more appropriate, it is within their right to do so. Many such thresholds are based on ambient noise levels, which are not present here. Either way, the IS must be revised to include such a threshold to evaluate, identify, and potentially mitigate construction noise impacts.

All three modeled scenarios yield noise levels that match or exceed the 75 dBA construction noise guideline. As it currently stands, this is an exceedance of the recommended construction noise threshold which would require mitigation, such as a temporary soundwall. A study should be developed, consistent with the General Plan Policy 11.8.2, that shows how implementation of recommended barriers reduce noise levels below significance limits.

Construction Vibration Impacts are Potentially Significant.

There are separate criteria for evaluating building damage and human response. Caltrans⁷ has provided guidance to evaluate potential impacts from construction activities. The Caltrans guideline for building response and vibration annoyance also have separate criteria for transient and continuous sources. These are summarized in Table 3 and Table 4. For the residences closest to this project, Caltrans guidance limits the maximum peak particle vibration (PPV) to 0.5 in/sec for building damage and 0.04 in/sec PPV for human annoyance.

Table 3: Caltrans Vibration Damage Potential Criteria

Different Building Types	Transient Sources (in/sec PPV)	Continuous/Frequent Intermittent Sources (in/sec PPV)
Historic and some old buildings	0.5	0.25
Older residential structures	0.5	0.3
New residential structures	1.0	0.5

⁵ https://www.antiochca.gov/fc/community-development/planning/Antioch_Adopted_General_Plan.pdf

⁶ https://codelibrary.amlegal.com/codes/los_angeles/latest/lamc/0-0-0-193925

⁷ Caltrans, *Transportation and Construction Vibration Guidance Manual*, April 2020. Tables 19 and 20. (<https://dot.ca.gov/-/media/dot-media/programs/environmental-analysis/documents/env/tcvgm-apr2020-a11y.pdf>)

Table 4: Caltrans Vibration Annoyance Potential Criteria

Human Response	Transient Sources (in/sec PPV)	Continuous/Frequent Intermittent Sources (in/sec PPV)
Barely perceptible	0.04	0.01
Distinctly perceptible	0.25	0.04
Strongly perceptible	0.9	0.10
Severe	2.0	0.4

Using the following equation found in the Caltrans *Transportation and Construction Vibration Guidance Manual*, the vibration at the closest sensitive receivers can be calculated⁸.

$$PPV_{\text{Equipment}}(\text{Distance}) = PPV_{\text{Ref}}(25/\text{Distance})^{1.3} \text{ (in/sec)}$$

The closest receiver to the project is the residence located approximately 180 feet to the southeast of the project boundary. Using the reference values presented in the Caltrans document, projected construction vibration levels can be modeled in Table 5.

Table 5: Construction Vibration Levels Compared to Typical Thresholds

Equipment	Reference PPV (in/sec) at 25 ft ⁹	PPV (in/sec) at 180 ft	Caltrans Distinctly Perceptible Human Response Level for Continuous/Frequent Intermittent Sources (in/sec PPV)	Potential Impact?
Vibratory pile driving (typical range)	0.644	0.05	0.04	Yes

Site preparation work could generate significant vibration impacts for human annoyance at buildings adjacent to the project site. Mitigation might not be sufficient to resolve these significant impacts. As such, an EIR should be produced to include a detailed study exploring alternative methods and mitigation, which could include banning pile driving activities.

Baseline Noise not Established.

CEQA requires evaluation of whether a project would cause a “substantial temporary or permanent increase in ambient noise levels.” Without knowing how loud the environment is, it is impossible to

⁸ Caltrans, *Transportation and Construction Vibration Guidance Manual*, April 2020. Table 18 and Eq. 12.

⁹ Caltrans, *Transportation and Construction Vibration Guidance Manual*, April 2020. Table 18.

determine if the new project will increase noise in the surrounding community. Baseline noise measurements are the preferred way to determine background noise sources. These measurements serve as a crucial reference point for evaluating the potential noise impacts of proposed projects or activities. Without establishing the baseline noise conditions before any new development occurs, decision-makers cannot effectively determine whether the project complies with noise regulations nor identify any potential adverse effects on the surrounding environment and communities. Given the proximity to both local streets and highway SR-4 along with noise from nearby residences, as well as shielding from nearby structures, noise levels should be physically measured to be accurately determined.

The Federal Transit Administration's 2018 Transit Noise and Vibration Impact Assessment Manual¹⁰ (FTA Manual) Appendix E recommends a minimum of three one-hour Equivalent Sound Level (Leq) noise measurements (peak-hour roadway traffic, typical midday conditions, and typical nighttime conditions) to estimate the Day-Night Sound Level (Ldn) at site, which can be used to establish baseline noise conditions for the project, including the Community Noise Equivalent Level (CNEL). An EIR should be prepared with these baseline noise measurements to properly describe the noise environment.

Conclusions

Considering the potentially significant impacts from construction and operational noise and vibration on the surrounding community, it is imperative that an EIR be conducted to disclose and analyze these potentially significant impacts. Failure to evaluate these impacts would be a violation of CEQA's core purpose of providing a transparent and comprehensive assessment of a project's environmental effects.

Very truly yours,
WILSON IHRIG

A handwritten signature in blue ink, appearing to read 'Jack Meighan', is written over a horizontal line.

Jack Meighan
Associate

meighan - updated slatten ranch noise analysis.docx

¹⁰ https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/research-innovation/118131/transit-noise-and-vibration-impact-assessment-manual-fta-report-no-0123_0.pdf



JACK MEIGHAN

Associate

Jack joined Wilson Ihrig in 2021 and is an experienced acoustics engineer with expertise in projects involving rail transit systems, highways, CEQA analysis, environmental noise reduction, mechanical drawing reviews, and construction noise and vibration mitigation. He has hands-on experience with project management, including client coordination and presentations, as well as in designing, developing, and testing MATLAB code used in acoustics applications. Additionally, his expertise includes taking field measurements, developing test plans and specifying, purchasing, setting up and repairing acoustic measurement equipment. He has experience in using Traffic Noise Model (TNM), CadnaA, EASE, Visual Basic, LabView, and CAD software.

Education

- B.S. in Mechanical Engineering, University of Southern California, Los Angeles, CA
-

Project Experience

Metro Regional Connector, Los Angeles CA

Planned, took, and processed measurements as part of a team to determine the effectiveness of floating slab trackwork for a new subway in downtown Los Angeles that travels below the Walt Disney Concert Hall and the Colburn School of Music.

Rodeo Credit Enterprise CEQA Analysis for New Construction, Palmdale, CA

Wrote an accepted proposal and executed it for a noise study project to determine noise mitigation requirements on a new housing development. Led all aspects of the project and managed the budget during all phases of project completion. Completed 5 separate projects of this type for this developer.

Blackhall Studios, Santa Clarita, CA

Led the vibration measurement effort for a new soundstage directly adjacent to an existing freight and commuter rail line. Tested equipment, processed data, and analyzed results to determine the vibration propagation through the soil to the proposed soundstage locations, and was part of the team that developed mitigation techniques for the office spaces directly next to the rail line.

Octavia Residential Condos CEQA Study, San Francisco, CA

Calculated the STC ratings for the proposed windows to meet Title 24 requirements, modeled the acoustic performance of floor and ceiling structures, researched noise codes, helped with a mechanical design review, and wrote a report summarizing the results for a new Condominium project being developed in San Francisco.

San Diego International Airport Terminal I Replacement, CA

Conducted interior noise and vibration measurements, analyzed measurement data to help determine project criteria, modeled the existing and future terminals in CadnaA, and was part of a team that did a complete HVAC analysis of the entire terminal, as part of a CEQA analysis where a new terminal for the airport is being designed.

Five Points Apartments Noise Study, Whittier, CA

Took measurements, researched sound data and solutions, and recommended mitigation for a new apartment complex that was located next to an existing car wash, as part of a CEQA review.

USC Ellison Vibration Survey, Los Angeles, CA

Conducted vibration measurements as part of a survey to determine the effectiveness of vibration isolation platforms that are used to insulate cell growth in a cancer research facility. Determined the effectiveness and presented this information to the client. Researched and recommended a permanent monitoring system so the client could view data in real time.

TEN50 Condos 'Popping' Noise Investigation, Los Angeles, CA

Was part of a team that investigated the noise source of an unwanted popping noise in luxury condos in Downtown Los Angeles. Helped isolate the noise source location with accelerometers to determine where vibrations were occurring first and used an acoustic camera to determine where in the condo the noise was coming from.

2000 University Project, Berkely, CA

Wrote a construction noise monitoring plan based on environmental noise calculations, wrote a report summarizing the results, and attending a meeting with the client to discuss options.

Bay Area Rapid Transit (BART) On-Track, CA, San Francisco Bay Area, CA*

Day to day project manager, responsible for meetings, presentations, and coordination with the client for an ongoing noise study on the BART system. Developed MATLAB code to process measurements and determine areas where high corrugation was present, contributing to excessively high in-car noise levels. Performed noise measurements inside both the right of way and the vehicle cabin, in addition to rail corrugation measurements.

California I-605/SR-60 Interchange Improvement, Los Angeles, CA*

Developed a noise model of the area that predicted sound levels for abatement design, in addition to conducting noise measurements and analysis. Led the Team in use of the FHWA Traffic Noise Model Software for the project, involving three major highways and two busy interchanges extending over 17 miles in southern California.

Sound Transit On-Track, Seattle, WA*

Took measurements, fixed equipment, and developed software in MATLAB to process Corrugation Analysis Trolley measurements as part of an ongoing noise study on the Sound Transit Link system. Tested vibration data to determine the best measurement and processing techniques to store the data in an online database for in-car measurements.

LA Metro CRRC Railcar Testing, Los Angeles, CA*

Led the effort to plan the measurements, determine measurement locations and finalize the test plan. Formulated a method to capture speed data directly from legacy train vehicles. Executed noise and vibration specification measurements for new rail cars delivered by CRRC.

City of Los Angeles, Pershing Square Station Rehabilitation Noise Monitoring, CA*

Built noise models, wrote a construction noise plan, and assisted in on-site construction noise issues as they arose for a renovation of the Pershing Square metro station in downtown Los

Angeles. Trained construction personnel in techniques for noise reduction and how to conduct noise monitoring measurements to meet project specifications.

City of Orange Metrolink Parking Garage Construction Monitoring, CA*

Wrote an adaptive management vibration monitoring plan, set up equipment to monitor live vibration levels, and generated weekly reports as part of an effort to build a new parking garage. Designed, planned, and completed measurements to predict and mitigate pile driving construction impacts at three historic building locations adjacent to the construction site. Coordinated with the client whenever an on-site problem arose.

LA Metro Westside Subway Construction, Los Angeles, CA*

Planned, organized, and processed noise measurements for the Purple Line extension construction. Implemented both long term microphones to measure noise levels and accelerometers to measure vibration levels in existing subway tunnels. Oversaw noise monitoring at sensitive construction sites for the project and worked with the contractor to find ways to reduce construction noise levels by approximately 10dB.

Montreal Réseau Express Métropolitain, Canada*

Conducted vibration propagation measurements used to create models to predict operational vibration levels for an under-construction transit line. Managed equipment, solved problems in the field, and wrote parts of the report summarizing the findings of the acoustic study.

NHCRP Barrier*

Took on-highway measurements and wrote, designed, developed, and tested MATLAB code to identify specific spectrograms to use for analyses for a project evaluating barrier reflected highway traffic noise differences in the presence of a single absorptive or reflective noise barrier.

Siemens Railcar Testing for Sound Transit, Seattle, WA*

Measured in-car noise and vibration for new rail cars delivered by Siemens. Developed new internal techniques for measurements based on the written specifications. Contributed to the team that helped identify issues that new cars had in meeting the Sound Transit specifications for noise and vibration. Participated in developing the test plan and specified then acquired new equipment for the measurement.

Toronto/Ontario Eglinton Crosstown Light Rail, Final Design, Canada*

Assisted in vibration propagation measurements, analysis, and recommendations for mitigation for a 12-mile light-rail line both on and under Eglinton Avenue. Set up and ran equipment for at-grade measurements with an impact hammer for underground measurements with an impact load cell that was used during pre-construction borehole drilling.

** Work done prior to working for Wilson Ihrig*

ATTACHMENT B



794 Sawnee Bean Road
Thetford Center VT 05075

Norman Marshall, President
(802) 356-2969

nmarshall@smartmobility.com

July 15, 2025

Rick Franco
Adams Broadwell Joseph & Cardozo
601 Gateway Boulevard, Suite 1000
South San Francisco, CA 94080

Subject: Slatten Ranch Townhomes

Dear Mr. Franco,

I have reviewed vehicle miles traveled (VMT) impacts of the Slatten Ranch Townhomes Section 15183 Consistency Memorandum ("Memorandum") dated February 2024 and the Staff Report for the Antioch Planning Commission Meeting of July 16, 2025. I make the following findings:

- 1) The City of Antioch's Housing Element EIR identifies the project location as being in an area with Home-Based VMT exceeding the threshold. The project is therefore likely to have significant VMT impacts.
- 2) Housing Element Measure TRANS-1 requires: "Individual housing project development proposals that do not screen out from VMT impact analysis shall provide a quantitative VMT analysis." A quantitative VMT analysis required for this project.
- 3) Housing Element Measure TRANS-1 further requires: "Projects which result in a significant impact shall include travel demand management measures and physical measures to reduce VMT to a less-than-significant level." If the quantitative VMT analysis finds a significant VMT impact for the proposed project, mitigation is required to reduce VMT to less than a significant level.

The Memorandum states:

Pursuant to Mitigation Measure TRANS-1 as set forth in the Housing Element EIR, individual housing project development proposals that do not screen out from a VMT impact analysis are required to provide a quantitative VMT analysis; however, the Housing Element EIR provides that any project that is exempt from CEQA is not required to conduct a VMT analysis. As demonstrated through this 15183 Consistency Memorandum, the proposed project would not result in a significant impact that is peculiar to the project or project site, a significant effect that was not previously identified in the Housing Element EIR, or a substantially more severe significant effect related to transportation beyond what was identified in the Housing Element EIR. Therefore, pursuant to Section 15183 of the CEQA Guidelines, the proposed project qualifies for exemption from further environmental review under CEQA. Because the proposed project would be considered exempt from CEQA, Mitigation Measure TRANS-1 is not applicable. (p. 13)

The claim that Measure TRANS-1 is “not applicable” is false because the Housing Element EIR clearly shows the Slatten Ranch Townhomes site with “VMT above significance threshold.” This site was not included in the September 2022 Housing Element DEIR Housing Element Sites Inventory (Table II-4, p. II-14 – III-23). It was added in to the revised FEIR Table III-4 dated December 2022 as site #183 (p. III-13 – III-21) This addition is illustrated in the figure below.

Parts of Figure III-5 – DEIR on the Left, FEIR on Right with Arrow Pointing to Project Site



The Housing Element FEIR mapped Home-Based VMT for 2020 and 2040 as Figures IV-B-5 and IV-B-6 (reproduced below).

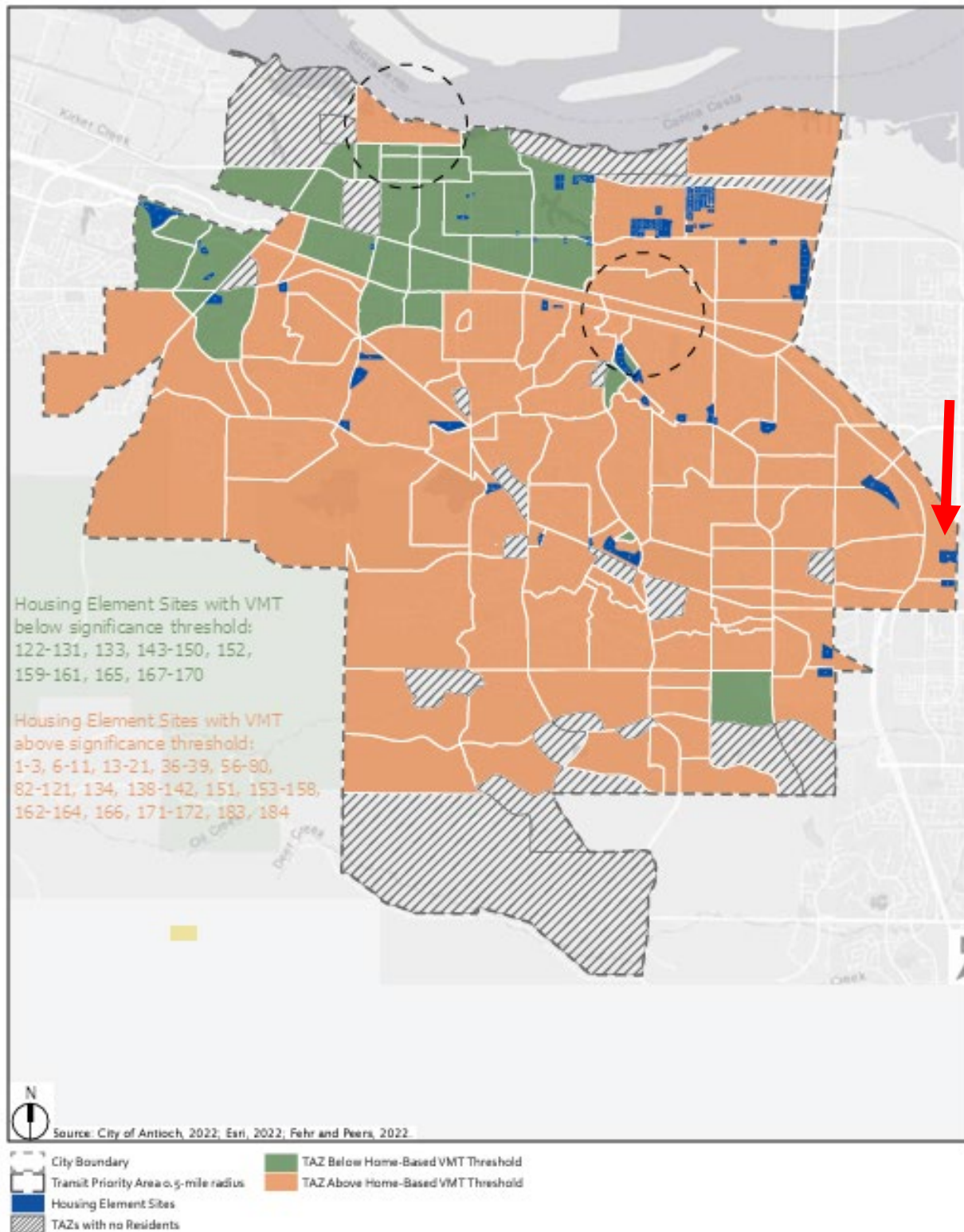


Figure IV.B-6
Housing Element Home-Based VMT (2020)
Antioch Housing, Environmental Hazards, and EJ Elements EIR

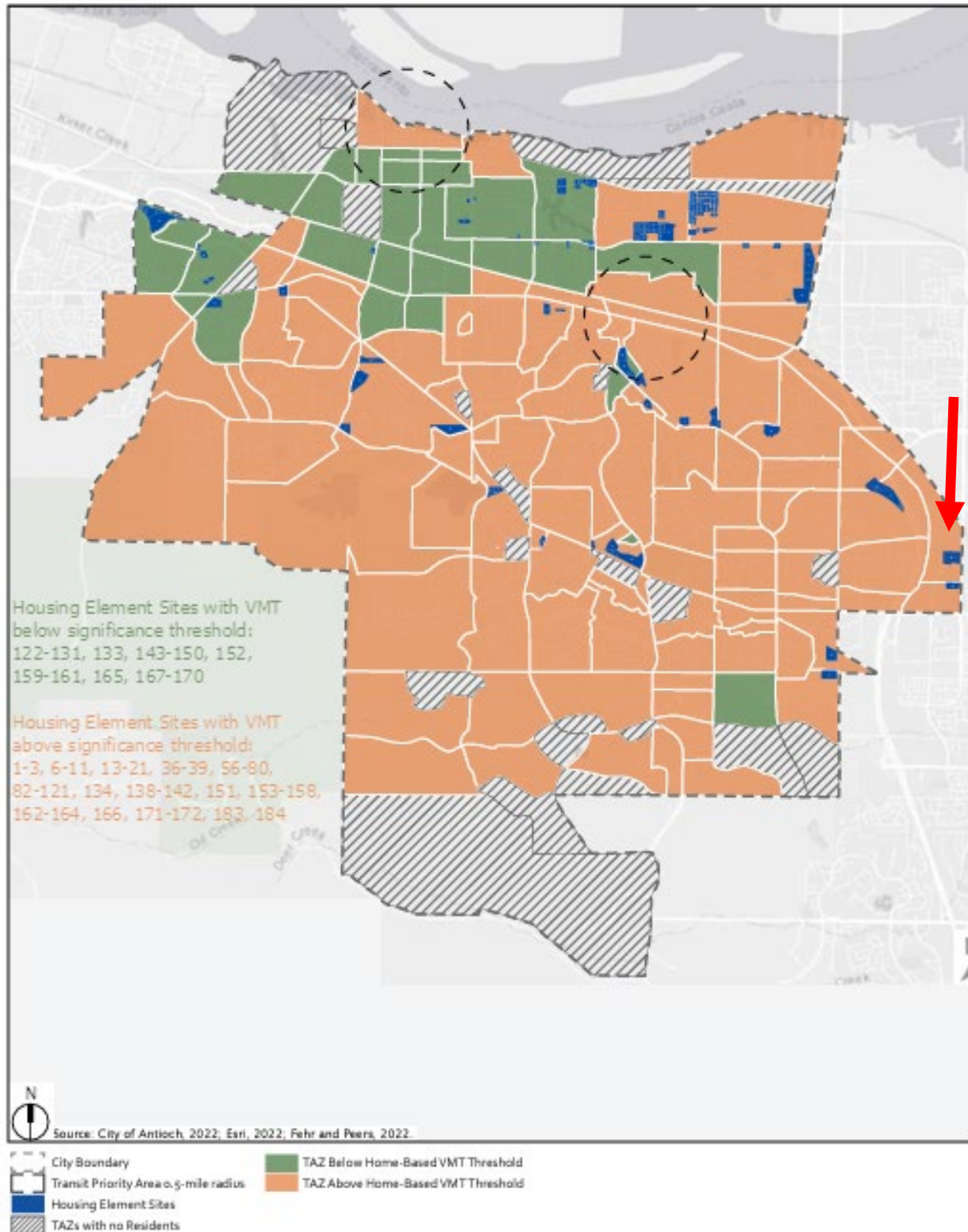


Figure IV.B-7
Housing Element Home-Based VMT (2040)

As shown in the graphics above, the proposed project site is located in an area with VMT above the significance threshold in both 2020 and 2040. Therefore, it is very likely that this project will have significant VMT impacts.

Housing Element FEIR Measure TRANS-1 states:

TRANS-1: Implement VMT Reduction Measures. Individual housing project development proposals that do not screen out from VMT impact analysis shall provide a quantitative VMT analysis using the methods applied in this EIR, with modifications if appropriate based on future changes to City of Antioch practices and CCTA VMT analysis methodology guidelines. Projects which result in a significant impact shall include travel demand management measures and physical measures to reduce VMT to a less-than-significant level. Measures may include, but are not limited to, those described below, which have been identified as potentially VMT reducing in the California Air Pollution Control Officers Association (CAPCOA) Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity. Potential VMT reduction estimates are included below, but detailed requirements, calculation steps, and limitations are described in the CAPCOA Handbook. In addition, application of one or more measures is generally expected to result in a net VMT reduction of 10 percent or less for development projects in suburban settings such as Antioch.

- Unbundle parking costs (i.e., sell or lease parking separately from the housing unit). Effectiveness: up to 15.7 percent reduction in GHG from VMT per the CAPCOA Handbook.
- Provide car-sharing, bike sharing, or scooter sharing programs. Effectiveness: 0.15 to 0.18 percent reduction in GHG from VMT for car share, 0.02 to 0.06 percent for bike share, and 0.07 percent for scooter share, per the CAPCOA Handbook. The higher car share and bike share values are for electric car and bike share programs.
- Subsidize transit passes for residents of affordable housing. Effectiveness: up to 5.5 percent reduction in GHG from VMT per the CAPCOA Handbook.

In addition to the on-site measures noted above, individual housing projects that are above the VMT threshold could potentially contribute to future VMT mitigation fee programs, banks, or exchanges. No regional VMT mitigation programs currently exist; however, the CCTA is currently evaluating different mitigation program frameworks which may lead to a Countywide or sub-regional VMT mitigation program. Should such a program be implemented, development projects could potentially pay into a fee program or purchase mitigation credits to achieve needed VMT mitigation instead of, or in addition to, on-site TDM measures. (p. III-3 – III-4)

The Slatten Ranch Townhomes project does not “screen out from VMT impact analysis.” Therefore, a quantitative VMT analysis is required. If the quantitative VMT analysis determines that there will be a significant impact – as appears highly likely given the FEIR mapping – travel demand management measures are required.

The Memorandum fails to include the required quantitative VMT analysis or to discuss travel demand management.

Instead, the Memorandum claims that Mitigation Measure TRANS-1 is not applicable because the proposed project is “exempt from CEQA” pursuant to Section 15183 of the CEQA Guidelines (p. 13). In particular, the Memorandum claims that

“ . . . the proposed project would not result in a significant impact that is peculiar to the project or project site, a significant effect that was not previously identified in the Housing Element EIR, or a substantially more severe significant effect related to transportation beyond what was identified in the Housing Element EIR.”

This misapplies Section 15183. The Housing Element EIR does not exempt all Housing Element Inventory sites from VMT analysis. Instead, it explicitly states that some of the sites in the Housing Element Inventory would result in significant VMT impacts that must be quantified and mitigated. Mitigation Measure TRANS-1 provides:

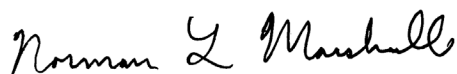
Individual housing project development proposals that do not screen out from VMT impact analysis shall provide a quantitative VMT analysis using the methods applied in this EIR . .

Projects which result in a significant impact shall include travel demand management measures and physical measures to reduce VMT to a less-than-significant level.

There is no reasonable reading of the Housing Element EIR that exempts all of the sites in the Inventory from CEQA or that exempts them from the analysis and mitigation required by Measure TRANS-1.

A quantitative VMT analysis is required for this project. If the quantitative VMT analysis determines that there will be a significant impact – as appears highly likely given the FEIR mapping – travel demand management measures are required to reduce VMT to less than a significant level.

Sincerely,

A handwritten signature in black ink that reads "Norman L. Marshall". The signature is written in a cursive, flowing style.

Norman L. Marshall

Resume

NORMAN L. MARSHALL, PRESIDENT

nmarshall@smartmobility.com

EDUCATION:

Master of Science in Engineering Sciences, Dartmouth College, Hanover, NH, 1982

Bachelor of Science in Mathematics, Worcester Polytechnic Institute, Worcester, MA, 1977

PROFESSIONAL EXPERIENCE: (37 Years, 23 at Smart Mobility, Inc.)

Norm Marshall helped found Smart Mobility, Inc. in 2001. Prior to this, he was at RSG for 14 years where he developed a national practice in travel demand modeling. He specializes in analyzing the relationships between the built environment and travel behavior and doing planning that coordinates multi-modal transportation with land use and community needs.

Regional Land Use/Transportation Scenario Planning

Portland Area Comprehensive Transportation System (PACTS) – the Portland Maine Metropolitan Planning Organization. Updating regional travel demand model with new data (including AirSage), adding a truck model, and multiclass assignment including differentiation between cash toll and transponder payments.

Loudoun County Virginia Dynamic Traffic Assignment – Enhanced subarea travel demand model to include Dynamic Traffic Assignment (Cube). Model being used to better understand impacts of roadway expansion on induced travel.

Vermont Agency of Transportation-Enhanced statewide travel demand model to evaluate travel impacts of closures and delays resulting from severe storm events. Model uses innovative Monte Carlo simulations process to account for combinations of failures.

California Air Resources Board – Led team including the University of California in \$250k project that reviewed the ability of the new generation of regional activity-based models and land use models to accurately account for greenhouse gas emissions from alternative scenarios including more compact walkable land use and roadway pricing. This work included hands-on testing of the most complex travel demand models in use in the U.S. today.

Climate Plan (California statewide) – Assisted large coalition of groups in reviewing and participating in the target setting process required by Senate Bill 375 and administered by the California Air Resources Board to reduce future greenhouse gas emissions through land use measures and other regional initiatives.

Chittenden County (2060 Land use and Transportation Vision Burlington Vermont region) – led extensive public visioning project as part of MPO's long-range transportation plan update.

Flagstaff Metropolitan Planning Organization – Implemented walk, transit and bike models within regional travel demand model. The bike model includes skimming bike networks including on-road and off-road bicycle facilities with a bike level of service established for each segment.

Chicago Metropolis Plan and Chicago Metropolis Freight Plan (6-county region)— developed alternative transportation scenarios, made enhancements in the regional travel demand model, and used the enhanced

model to evaluate alternative scenarios including development of alternative regional transit concepts. Developed multi-class assignment model and used it to analyze freight alternatives including congestion pricing and other peak shifting strategies.

Municipal Planning

City of Grand Rapids – Michigan Street Corridor – developed peak period subarea model including non-motorized trips based on urban form. Model is being used to develop traffic volumes for several alternatives that are being additionally analyzed using the City's Synchro model

City of Omaha - Modified regional travel demand model to properly account for non-motorized trips, transit trips and shorter auto trips that would result from more compact mixed-use development. Scenarios with different roadway, transit, and land use alternatives were modeled.

City of Dublin (Columbus region) – Modified regional travel demand model to properly account for non-motorized trips and shorter auto trips that would result from more compact mixed-use development. The model was applied in analyses for a new downtown to be constructed in the Bridge Street corridor on both sides of an historic village center.

City of Portland, Maine – Implemented model improvements that better account for non-motorized trips and interactions between land use and transportation and applied the enhanced model to two subarea studies.

City of Honolulu – Kaka'ako Transit Oriented Development (TOD) – applied regional travel demand model in estimating impacts of proposed TOD including estimating internal trip capture.

City of Burlington (Vermont) Transportation Plan – Led team that developing Transportation Plan focused on supporting increased population and employment without increases in traffic by focusing investments and policies on transit, walking, biking and Transportation Demand Management.

Transit Planning

Regional Transportation Authority (Chicago) and Chicago Metropolis 2020 – evaluated alternative 2020 and 2030 system-wide transit scenarios including deterioration and enhance/expand under alternative land use and energy pricing assumptions in support of initiatives for increased public funding.

Capital Metropolitan Transportation Authority (Austin, TX) Transit Vision – analyzed the regional effects of implementing the transit vision in concert with an aggressive transit-oriented development plan developed by Calthorpe Associates. Transit vision includes commuter rail and BRT.

Bus Rapid Transit for Northern Virginia HOT Lanes (Breakthrough Technologies, Inc and Environmental Defense.) – analyzed alternative Bus Rapid Transit (BRT) strategies for proposed privately-developing High Occupancy Toll lanes on I-95 and I-495 (Capital Beltway) including different service alternatives (point-to-point services, trunk lines intersecting connecting routes at in-line stations, and hybrid).

Roadway Corridor Planning

I-30 Little Rock Arkansas – Developed enhanced version of regional travel demand model that integrates TransCAD with open source Dynamic Traffic Assignment (DTA) software, and used to model I-30 alternatives. Freeway bottlenecks are modeled much more accurately than in the base TransCAD model.

South Evacuation Lifeline (SELL) – In work for the South Carolina Coastal Conservation League, used Dynamic Travel Assignment (DTA) to estimate evaluation times with different transportation alternatives in coastal South Caroline including a new proposed freeway.

Hudson River Crossing Study (Capital District Transportation Committee and NYSDOT) – Analyzing long term capacity needs for Hudson River bridges which a special focus on the I-90 Patroon Island Bridge where a microsimulation VISSIM model was developed and applied.

PUBLICATIONS AND PRESENTATIONS (partial list)

DTA Love: Co-leader of workshop on Dynamic Traffic Assignment at the June 2019 Transportation Research Board Planning Applications Conference.

Forecasting the Impossible: The Status Quo of Estimating Traffic Flows with Static Traffic Assignment and the Future of Dynamic Traffic Assignment. *Research in Transportation Business and Management* 2018.

Assessing Freeway Expansion Projects with Regional Dynamic Traffic Assignment. Presented at the August 2018 Transportation Research Board Tools of the Trade Conference on Transportation Planning for Small and Medium Sized Communities.

Vermont Statewide Resilience Modeling. With Joseph Segale, James Sullivan and Roy Schiff. Presented at the May 2017 Transportation Research Board Planning Applications Conference.

Assessing Freeway Expansion Projects with Regional Dynamic Traffic Assignment. Presented at the May 2017 Transportation Research Board Planning Applications Conference.

Pre-Destination Choice Walk Mode Choice Modeling. Presented at the May 2017 Transportation Research Board Planning Applications Conference.

A Statistical Model of Regional Traffic Congestion in the United States, presented at the 2016 Annual Meeting of the Transportation Research Board.