Appendix F

UCLA Health Sports Medicine Institute
5210 Pacific Concourse Tenant Improvements Project

VMT Study

Fehr & Peers

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Memo

Date: September 19, 2025

To: Tina Andersen, T&B Planning, Inc.

From: Dongyang Lin, Sarah Brandenberg, Fehr & Peers

Subject: UCLA Sports Medicine Institute VMT Study

This technical memorandum documents the Vehicle Miles Traveled (VMT) analysis conducted by Fehr & Peers for the proposed UCLA Sports Medicine Institute (the "Project") located at 5210 Pacific Concourse in unincorporated Los Angeles County. The Governor's Office of Planning and Research (OPR)[1] *Technical Advisory on Evaluating Transportation Impacts in California Environmental Quality Act (CEQA)* (December 2018) was used as a guide for the VMT analysis for the proposed Project. The Project description, estimated trip generation, and results of the VMT analysis are described in further detail below.

Project Description

The Project proposes the renovation of an existing approximately 170,000-gross-square-foot (gsf) two-story life sciences building located at the southwest corner of the intersection of Pacific Concourse Drive and La Cienega Boulevard in unincorporated Los Angeles County. This project will create a Sports Medicine Institute, relocate an off-campus UCLA Clinical Microbiology Laboratory, and create a community fill pharmacy and specialty pharmacy. **Table 1 summarizes the proposed Project uses**. The Project will be served by the existing parking on the site.

[1] Effective July 1, 2024, the Governor's Office of Planning and Research was renamed the Governor's Office of Land Use and Climate Innovation (LCI).

Table 1. Project Land Use Information

Department or Use	GSF	Total GSF[1]	Percentage
Sports Medicine Institute		71,300	41.9%
Ambulatory Surgery (8 to 12 Operating Rooms)	21,200		
Patient Prep and Recovery	10,400		
Sterile Processing Department	5,500		
Medical Clinic (30 Bays)	13,900		-
Advanced Imaging	13,000		
Physical Therapy	5,950		
ASC Pharmacy	1,350		
Clinical Microbiology Laboratory		35,850	21.1%
Specialty Pharmacy[2]		38,400	22.6%
Amenities (Café, Conference Room)		3,050	1.8%
General Services (Administrative Offices, Storage, Medical Support)		7,400	4.4%
Support Space (Lobby, Security, Common Restrooms, Utility Areas, Building Circulation)		14,000	8.2%
Total		**170,000**	**100%[3]**

[1] All floor areas include circulation space located within each department, with the exception of security and conference uses. Floor areas for the clinic, imaging, and physical therapy also include their respective patient waiting areas.
[2] Includes approximately 5,000 GSF of shelled space, to be built out in a future phase.
[3] Percentages may not tally exactly due to rounding.

Trip Generation

The number of vehicle trips generated by the Project was estimated based on the latest edition (12th Edition) of the Institute of Transportation Engineers (ITE) Trip Generation Manual. Given the proposed land use characteristics, the trip generation rates for Medical Office Building (Stand-Alone) were applied to the Sports Medicine Institute component, as it involves patient care and diagnostic services. For the Specialty Pharmacy, which operates as a fulfillment center and does not serve patients directly, trip generation rates for Research and Development Center were applied. These rates were also used for other non-patient generating components of the Project, including the Clinical Microbiology Laboratory, amenities, and general support spaces. According to ITE, the Research and Development Center land use category encompasses areas such as offices and light fabrication facilities, making it appropriate for these ancillary uses. Additionally, since the Project is located within approximately one-

half mile of the existing Metro C-Line Aviation/LAX Station, trip reductions for walk, bike, and transit modes were applied using the Mixed-Use Development (MXD) methodology to reflect the share of trips made by non-auto travel (**Table 2**).

Fehr & Peers developed the MXD methodology in partnership with the Unites States Environmental Protection Agency (EPA) to improve accuracy in estimating project trip internalization and net external trip generation for mixed land use projects. The MXD methodology adjusts standard ITE trip rates to reflect the internalization and site-specific attributes of mixed-use developments, and estimates the percent of walking, biking, and transit trips generated by the site. The MXD model was developed not only to better capture travel behavior for projects with a mix of uses, but also to adequately account for the effects of compact development, site design, walkability, transit, and regional accessibility. While the Project is not a mixed-use development, the MXD model can be used to estimate the Project's external trip reductions for non-automobile modes. The model incorporates several variables to determine the number and share of external trips by these modes, including vehicle ownership rates, the percentage of regional employment accessible within a 30-minute transit trip, and intersection density. These variables are tailored to the site and derived from sources such as the American Community Survey[2], the EPA Smart Location Database[3], and regional travel demand models.

The MXD model has been approved for use by the EPA.[4] It has also been peer-reviewed in the American Society of Civil Engineers (ASCE) Journal of Urban Planning and Development, peer-reviewed in a 2012 Transportation Research Board (TRB) paper evaluating various smart growth trip generation methodologies, recommended by San Diego Association of Governments (SANDAG) for use on mixed-use smart growth developments, promoted in an American Planning Association (APA) Planning Advisory Service (PAS) which recommended it for evaluating traffic generation of mixed-use and other forms of smart growth, including in-fill and transit oriented development.[5, 6, 7, 8, 9]

As shown in Table 2, the total number of vehicle trips generated by the Project site was reduced by 4.5% on a daily basis, 5.2% in the AM peak hour, and 3.1% in the PM peak hour to reflect trips made by walking, biking, and transit.

The estimated trips generated by the existing research and development (R&D) use on the Project site were applied as a trip credit to account for travel demand that would no longer occur. Therefore, the

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[2] United States Census, American Community Survey. https://www.census.gov/programs-surveys/acs.html

[3] United States Environmental Protection Agency, Smart Location Database. https://www.epa.gov/smartgrowth/smart-location-mapping#SLD

[4] Trip Generation Tool for Mixed-Use Developments (2012). www.epa.gov/dced/mxd_tripgeneration.html

[5] Ewing, R. et al. (2010) Traffic Generated by Mixed-Use Developments—Six-Region Study Using Consistent Built Environmental Measures. *Journal of Urban Planning and Development, 137(3), 248–261.*

[6] Shafizadeh, K. et al. (2012) Evaluation of the Operation and Accuracy of Available Smart Growth Trip Generation Methodologies for Use in California. *Presented at 91st Annual Meeting of the Transportation Research Board, Washington, D.C.*

[7] SANDAG Smart Growth Trip Generation and Parking Study. http://www.sandag.org/index.asp?projectid=378&fuseaction=projects.detail

[8] Walters, J. et al. (2013) Getting Trip Generation Right – Eliminating the Bias Against Mixed Use Development. *American Planning Association*.
Gard, J. et al. (2020) Still Getting Trip Generation Right: Revalidating MXD+. *American Planning Association*.

[9] The MXD model has also been used successfully in multiple certified EIRs in California.

Project is anticipated to generate 2,048 net new daily vehicle trips, with 133 new AM peak hour trips and 219 new PM peak hour trips.

TABLE 2
UCLA SPORTS MEDICINE INSTITUTE (5210 PACIFIC CONCOURSE DRIVE)
PROJECT TRIP GENERATION ESTIMATES

Land Use	ITE Land Use Code	Size	Daily	AM Peak Hour			PM Peak Hour				AM Peak Hour Trips			PM Peak Hour Trips		
			Fitted Curve Equation/Rate [a]	Fitted Curve Equation/Rate [a]	In%	Out%	Fitted Curve Equation/Rate [a]	In%	Out%	Daily Trips	Total	In	Out	Total	In	Out
PROPOSED PROJECT																
Medical Office Building (Stand-Alone) *for Sports Medicine Institute*	720	71.3 KSF	T = 40.60(X) - 75.15	Ln(T) = 0.90 Ln(X) + 1.33	78%	22%	T = 3.70(X) - 5.75	30%	70%	2,820	176	137	39	258	77	181
Less: Walk/Bike/Transit Adjustment [b]			*4.5%*		*5.2%*	*5.2%*		*3.1%*	*3.1%*	*(127)*	*(9)*	*(7)*	*(2)*	*(8)*	*(2)*	*(6)*
Research and Development Center [c] *for Laboratory, Specialty Pharmacy, and Other Uses*	760	98.7 KSF	9.47	0.48	78%	22%	0.45	25%	75%	935	47	37	10	44	11	33
Less: Walk/Bike/Transit Adjustment [b]			*4.5%*		*5.2%*	*5.2%*		*3.1%*	*3.1%*	*(42)*	*(3)*	*(2)*	*(1)*	*(1)*	*0*	*(1)*
TOTAL PROJECT EXTERNAL VEHICLE TRIPS										*3,586*	211	165	46	293	86	207
EXISTING USE ADJUSTMENT																
Research and Development Center	760	170 KSF	9.47	0.48	78%	22%	0.45	25%	75%	1,610	82	64	18	77	19	58
Less: Walk/Bike/Transit Adjustment [b]			*4.5%*		*5.2%*	*5.2%*		*3.1%*	*3.1%*	*(72)*	*(4)*	*(3)*	*(1)*	*(3)*	*(1)*	*(2)*
TOTAL EXISTING VEHICLE TRIPS										*1,538*	78	61	17	74	18	56
NET INCREMENTAL EXTERNAL TRIPS										**2,048**	**133**	**104**	**29**	**219**	**68**	**151**

Notes

[a] Source: Institute of Transportation Engineers (ITE), Trip Generation, 12th Edition, 2025. The General Urban/Suburban setting was chosen to refelct the surrounding area context. ITE defines General Urban/Suburban as an area associated with almost homogeneous vehicle-centered access. The area can be fully developed (or nearly so) at low-medium density with a mix of residential and commercial uses.

Based on ITE Trip Generation Handbook 3rd Edition (Figure 4.2 Process for Selecting Average Rate or Equation in Trip Generation Manual Data), the Fitted Curve Equation was applied to Medical Office Building (Stand-Alone). This equation represents a single-variable regression analysis that defines the optimal mathematical relationship between the independent and dependent variables. For linear relationships, the format is: T = aX + b. For logarithmic relationships, the format is: Ln(T) = a Ln(X) + b. In these equations, T denotes the number of vehicle trips (dependent variable), and X represents the land use size (independent variable) as specified in the table. Since Fitted Curve Equations are not available for the Research and Development Center land use, the Average Rate method was applied instead.

[b] The Project is located within 1/2 mile of the existing Metro C-Line Aviation/LAX Station. Trip reductions for walk, bike, and transit modes were applied using the Mixed-Use Development (MXD) methodology to reflect the share of trips made by non-auto travel.

[c] ITE Description for Research and Development Center: A research and development center is a facility or group of facilities devoted almost exclusively to research and development activities. The types of businesses included in this land use category vary significantly. Research and development centers may include offices and light fabrication areas.

VMT Analysis

The following sections describe relevant considerations for conducting VMT analyses, including initial screening of projects to determine whether a less-than-significant VMT impact determination can be readily made, or if a more extensive evaluation of VMT-related transportation impacts is necessary to determine the potential for significant impacts.

Regulatory Context

On September 27, 2013, Governor Jerry Brown signed SB 743 into law, which initiated a process to change transportation impact analyses completed in support of California Environmental Quality Act (CEQA) documentation. SB 743 eliminates the vehicular level of service (LOS) as a basis for determining significant transportation impacts under CEQA and provides a new performance metric, VMT. As a result, the State has shifted from measuring a project's impact to drivers (LOS) to measuring the impact of driving (VMT) as it relates to achieving State goals of reducing greenhouse gas (GHG) emissions, encouraging infill development, and improving public health by promoting active transportation. To help Lead Agencies with SB 743 implementation, OPR produced a *Technical Advisory* that provides recommendations on VMT impact thresholds and considerations on the level of VMT analysis that is required based on a project's characteristics.

VMT Screening

The first step of a VMT assessment is to determine what type of analysis, if any, is needed. OPR's *Technical Advisory* suggests three screening criteria that agencies can use to identify if a project is expected to cause a less-than-significant impact without conducting a detailed study: project size, project accessibility to transit, and project location in a low VMT area. The project size criteria is not applicable to the proposed Project, because it is anticipated to generate approximately 2,048 net new daily vehicle trips, above the small project threshold of 110 daily trips. The latter two screening criteria are relevant to assessing whether a VMT analysis is required for the Project. The applicable screening criteria are detailed below and applied for each component of the Project to determine if the Project has the potential to result in a VMT impact.

TRANSIT PRIORITY AREA (TPA) SCREENING

Projects located in proximity to a major transit stop or along a high-quality transit corridor may be screened out from conducting a VMT analysis due to their location in a transit priority area (TPA) because they are presumed to have a less-than-significant impact absent substantial evidence to the contrary. The California Public Resources Code defines these three terms as follows:

- Major transit stop (CA Public Resource Code, §21064.3)
  - An existing rail or bus rapid transit station.
  - A ferry terminal served by either a bus or rail transit service.
  - The intersection of two or more major bus routes with a frequency of service interval of 20 minutes or less during the morning and afternoon peak commute periods. *(This definition was amended from an interval of 15 minutes to 20 minutes as of January 2025.)*
- High-quality transit corridor (CA Public Resource Code, §21155)
  - A corridor with fixed route bus service with service intervals no longer than 15 minutes during peak commute hours.

- Transit priority area (CA Public Resources Code §21099)
    - An area within one-half mile of a major transit stop that is existing or planned, if the planned stop is scheduled to be completed within the planning horizon included in a Transportation Improvement Program or applicable regional transportation plan.

OPR's *Technical Advisory* states that a project located near a transit station can be presumed to have a less-than-significant impact if it satisfies CEQA Guidelines Section 15064.3(b)(1) by being located within one-half mile of a major transit stop or an existing stop along a high-quality transit corridor. However, this presumption does not apply if the project does not meet additional considerations recommended by OPR *Technical Advisory*. To qualify for transit proximity screening, a project site is required to have a Floor Area Ratio (FAR) of 0.75 or higher. The FAR of the Project is 0.4.[10] Therefore, although the Project is located within one-half mile of the existing Metro C-Line Aviation/LAX Station (**Figure 1**), its FAR is below 0.75 and the Project is **not screened out** on this criterion.

[10] FAR calculated based on 9.2 acre site and 170,000 square foot building.

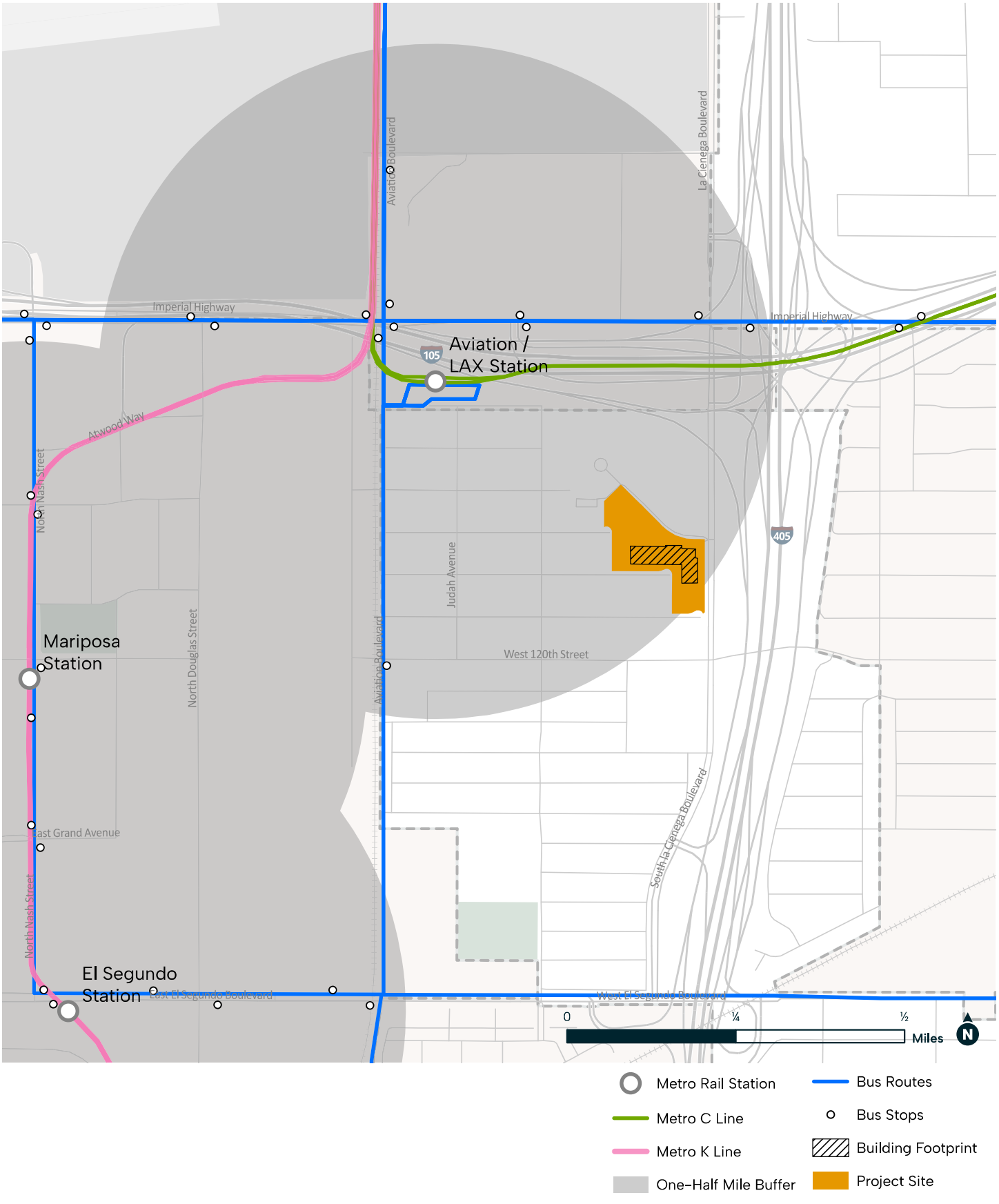

FIGURE 1

Transit Service in Project Vicinity

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LOW VMT AREA SCREENING

OPR guidance states that projects located within a low VMT generating area may be presumed to have a less-than-significant impact absent substantial evidence to the contrary. A low VMT generating area generally has higher density, a mix of land uses, and provides opportunities for people to walk to nearby uses instead of usually driving. Low VMT areas are defined as areas that are currently generating VMT below the VMT threshold. Based on the VMT impact threshold recommended by OPR, low VMT is defined as an area that generates VMT on a per capita basis that is 15% or more below the baseline VMT.

To determine if the Project site is located in a low VMT area, VMT data from the 2024 SCAG Regional Travel Demand Forecasting Model (SCAG model) was obtained for the Project site and for the SCAG region. Given the Project's non-residential land uses, Home-Based Work VMT per Employee is the appropriate VMT metric and was obtained from the SCAG model. For non-residential land uses, vehicle trips between home and work are accounted for and then divided by the number of employees within the geographic area to produce Home-based Work VMT per Employee.

In the SCAG region, a low VMT area for non-residential uses generates no more than 10.77 daily Home-Based Work VMT per Employee (15% below the regional baseline of 12.67 daily Home-Based Work VMT per Employee). For non-residential uses in the SCAG traffic analysis zone (TAZ) that represents the Project site, the daily Home-Based Work VMT per Employee is 10.87, which is higher than the low VMT threshold (See **Attachment A** for the SCAG model TAZ boundary). Therefore, the Project site does not qualify as a low VMT area, which means that the Project is **not screened out** on this criterion.

As a result of VMT screening, a more extensive VMT analysis is necessary and is presented in the next section.

Project VMT Impact Analysis

PROJECT VMT IMPACT THRESHOLD

Per OPR's *Technical Advisory*, "*a proposed project exceeding a level of 15 percent below existing regional VMT per employee may indicate a significant transportation impact.*" **Table 4** presents the existing SCAG regional Home-Based Work VMT per Employee and the associated threshold. The VMT impact threshold of 10.77 represents a 15 percent reduction from the regional VMT of 12.67. If the Project results in a daily Home-Based Work VMT per Employee above 10.77, it will indicate a significant VMT impact.

Table 3. Regional VMT and VMT Impact Threshold for Non-Residential Projects

VMT Metrics	Existing Conditions	
	SCAG Regional VMT	VMT Impact Threshold[1]
Home-Based Work VMT per Employee	12.67	10.77

Source: 2024 SCAG Regional Travel Demand Forecasting Model, Fehr & Peers, 2025
Note: The VMT Impact Threshold is 15% below the regional VMT.

PROJECT VMT IMPACT ANALYSIS

Fehr & Peers used the 2024 SCAG model to conduct the Project's VMT impact analysis. This version of this SCAG model is an activity-based model that relies on socio-economic data (SED) to forecast travel throughout the region. The land use changes proposed as part of the Project were converted into changes in employment and incorporated into the TAZ that represents the Project site. Fehr & Peers converted the existing R&D use into number of employees using the regional *median square feet per employee factor* documented in SCAG's *Employment Density Study Summary Report.*[11] The UCLA project team provided the Project's proposed number of employees.

Table 5 presents results from SCAG model for the Project's estimated occupancy year of 2028. The Project is forecasted to generate approximately 6,200 daily Home-Based Work VMT, which equates to 10.46 daily Home-Based VMT per Employee. In comparison to the VMT impact threshold of 10.77, the **Project is projected to generate less daily Home-Based Work VMT per Employee than the impact threshold and thus would not result in a significant VMT impact.**

Table 4. Project VMT Impact Analysis

Metric	Result
Proposed Project Daily Home-Based Work VMT	6,200
Proposed Project Number of Employees	593
Proposed Project Daily Home-Based Work VMT per Employee	10.46
VMT Impact Threshold	10.77
Project compared to Impact Threshold	**-0.31**
VMT Impact?	**No**

Source: Fehr & Peers, 2025

[11] Southern California Association of Governments, Employment Density Study Summary Report, 2001. Prepared by THE NATELSON COMPANY, INC.

Travel Demand Management

Since the Project would result in a less-than-significant VMT impact, mitigation measures are not required. Nevertheless, UCLA Health has a *Sustainable Transportation Program* that provides alternative transportation options to help employees get to work safely with the lowest possible impact to the environment.[12] This program provides travel demand management strategies that will further reduce the Project's VMT. The following strategies will be implemented for the proposed Project (but were not quantitatively accounted for in the VMT analysis presented above):

- **Pedestrian Access Improvements:** Given the roadway connectivity in the Project area, the walking distance between Metro C-Line Aviation/LAX Station and the Project site using public pedestrian rights-of-way is approximately 0.9 mile. To enhance pedestrian connectivity and facilitate walking and biking between the station and the Project site, Project employees will be provided access via a gate behind 5230 Pacific Concourse Drive, at W. 116th Street and S. Isis Avenue. Per the property Covenants, Conditions, and Restrictions, the gate is unlocked during business hours, and employees will have a code for after-hours access. This access will reduce the walking distance from the station to the Project site to approximately 0.5 mile.
- **Subsidized Transit Passes:** Employees will be eligible for UCLA Transportation's Bruin Commuter Transit Benefit program, which offers discounted quarterly transit passes including one free quarterly transit pass for seven transit agencies, including Los Angeles Metro bus and rail lines.
- **Carpooling:** The UCLA Transportation Trip Planner[13] will assist employees in forming carpools based on similar commute patterns (areas and working hours). Carpool groups can apply for a Staff Carpool Permit[14] to reduce parking costs.
- **Vanpooling:** UCLA Health will contract with Enterprise to provide vanpool services to the Project site from locations potentially including Palmdale, Santa Clarita, etc., if there is sufficient demand from Project employees.
- **Zero Emission Vehicles (ZEV):** In alignment with the UC Sustainable Practice Policy[15], the Project will support ZEV commuting by providing 28 Electric Vehicle (EV) chargers in exceedance of the CalGreen requirements. While this measure does not reduce VMT, it contributes to greenhouse gas emissions reduction.

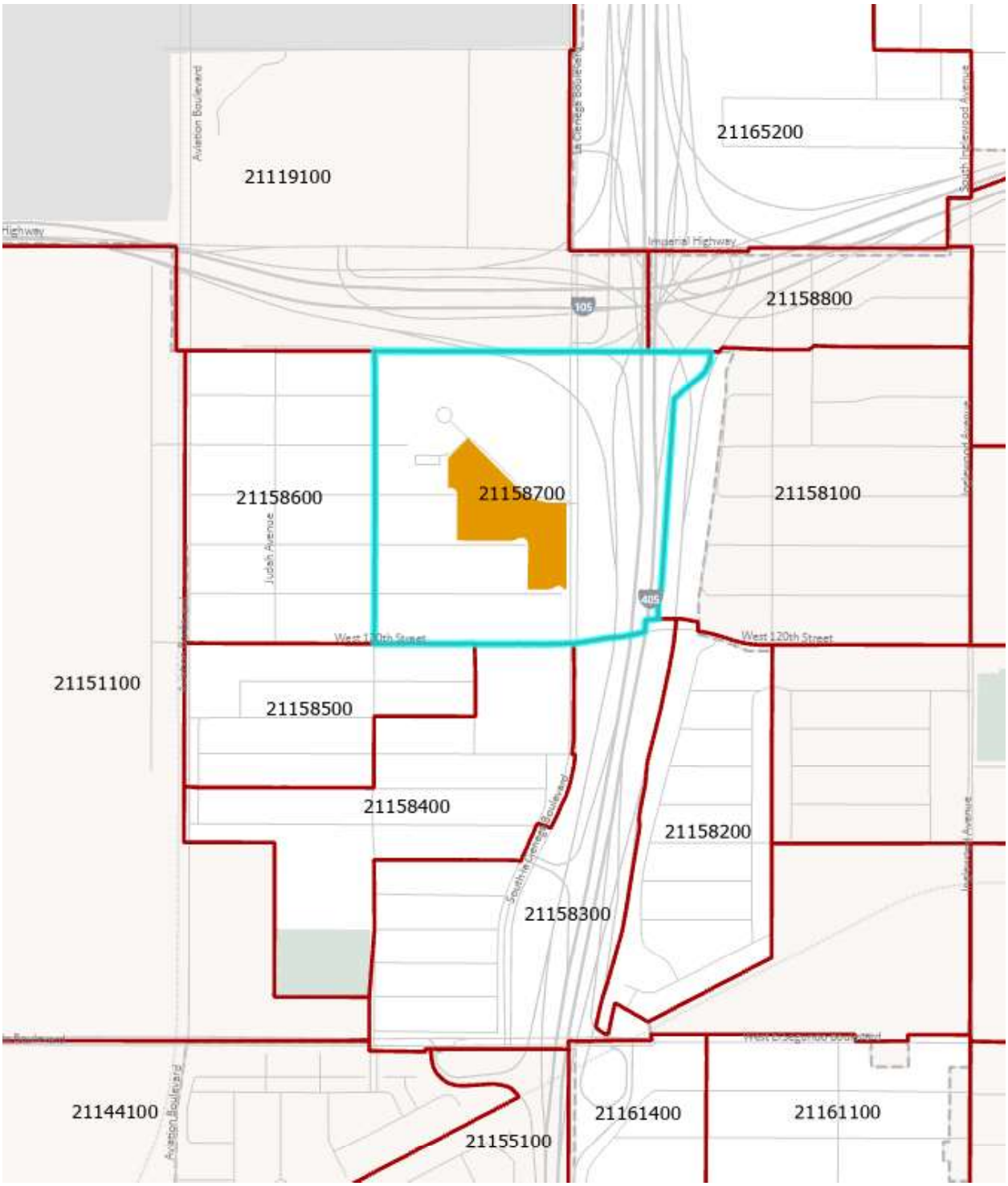
[12] Sustainable Transportation - Sustainability | UCLA Health: https://www.uclahealth.org/sustainability/our-progress/sustainable-transportation

[13] UCLA Trip Planner | Transportation: https://transportation.ucla.edu/ucla-trip-planner

[14] Faculty and Staff Parking Permits | Transportation: https://transportation.ucla.edu/campus-parking/faculty-and-staff#carpool

[15] Sustainable Practices: https://policy.ucop.edu/doc/3100155/SustainablePractices

Attachment A – SCAG Model Traffic Analysis Zones (TAZs) in Project Area



Note: TAZ 21158700 contains the Project site (in orange).