Appendix 2-4

Proposed Transportation Demand Management Plan

Fehr & Peers

Berkeley Space Center at NASA Research Park

Transportation Demand Management Plan

Prepared for:
Moffett Partners, LLC

Submitted:
Spring 2026

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Introduction

This Transportation Demand Management (TDM) Plan has been developed for the proposed Berkeley Space Center (BSC), herein referred to as the "project." The BSC would be located at the National Aeronautics and Space Administration's Ames Research Center (NASA ARC) in California. The TDM Plan identifies a set of strategies, measures, and incentives to encourage future tenant employees, students, residents, and visitors to walk, bicycle, ride transit, or carpool when commuting to and from the Project Site. To accomplish this goal, this plan presents a range of proven strategies and measures.

Project Description

Moffett Partners, LLC, a joint venture of the UC Regents and SKSP NRP, LLC, is proposing a master-planned mixed-use academic and research project on an approximately 39-acre site. The Project includes extensive multimodal transportation infrastructure to serve the anticipated growth in daily users.

UC Berkeley and NASA have prepared a joint Environmental Impact Report/Environmental Impact Statement in accordance with the California Environmental Quality Act (CEQA) and National Environmental Policy Act (NEPA) for the proposed project that evaluates the following:

- **CEQA Proposed Project** (NEPA Build Alternative 1), which would create approximately 2.3 million square feet of Research and Office Uses, Conference Uses, Active Uses, Student/Faculty Housing, and Short-Term Lodging for visitors and conference attendees. The CEQA Proposed Project would include approximately 2 million square feet for Research and Office Uses, 25,000 square feet for Conference Uses, 90,000 square feet for Active Uses (discussed further below), 130,000 square feet for Student/Faculty Housing, and 75,000 square feet for Short-Term Lodging.
- **CEQA Reduced Density Alternative** (NEPA Build Alternative 2), which would create approximately 1.4 million square feet of Research and Office Uses, Conference Uses, Active Uses, Student/Faculty Housing, and Short-Term Lodging for visitors and conference attendees. Compared to the CEQA Proposed Project, the CEQA Reduced Density Alternative would provide less space for Research and Office Uses. The CEQA Reduced Density Alternative would include approximately 1.1 million square feet for Research and Office Uses, 25,000 square feet for Conference Uses, 90,000 square feet for Active Uses, 130,000 square feet for Student/Faculty Housing, and 75,000 square feet for Short-Term Lodging.

The Project refers to both the CEQA Proposed Project and the CEQA Reduced Density Alternative. Likewise, this TDM Plan applies to both the CEQA Proposed Project and the CEQA Reduced Density Alternative.

The details of the project's design elements are described in the proposed Berkeley Space Center Development Guidelines. The Design Guidelines are included as part of the Berkeley Space Center Master Plan, which established the overall project's vision and design principles for the project.

Project Setting

The Project Site is on federal land within the NASA ARC, an approximately 2,000-acre facility located between U.S. 101 and the southwestern edge of San Francisco Bay. The City of Mountain View borders the NASA ARC to the north and southwest, and the City of Sunnyvale borders the NASA ARC to the southeast and east. **Figure 1** shows the Project Site and its location within the NASA ARC in the southwestern portion of the NASA ARC campus near the Bayshore/NASA Santa Clara Valley Transportation Authority (VTA) light rail station.

The Project Site is bounded by Wescoat Road to the north and Cody Road to the east. Cody Road would be realigned to the east as part of the proposed project and would be the eastern boundary of the project site. Because the project site is located within NASA ARC, access to the Project site is currently controlled through security and visitor checkpoints located at the main gate on Clark Road or at the gate located on Ellis Street. Once through the controlled gates, vehicle, bicycle, and pedestrian access to the Project site are provided by Wescoat Road, Cody Road, Dailey Road, and Edquiba Road. The conceptual land-use plan is shown in **Figure 2**.

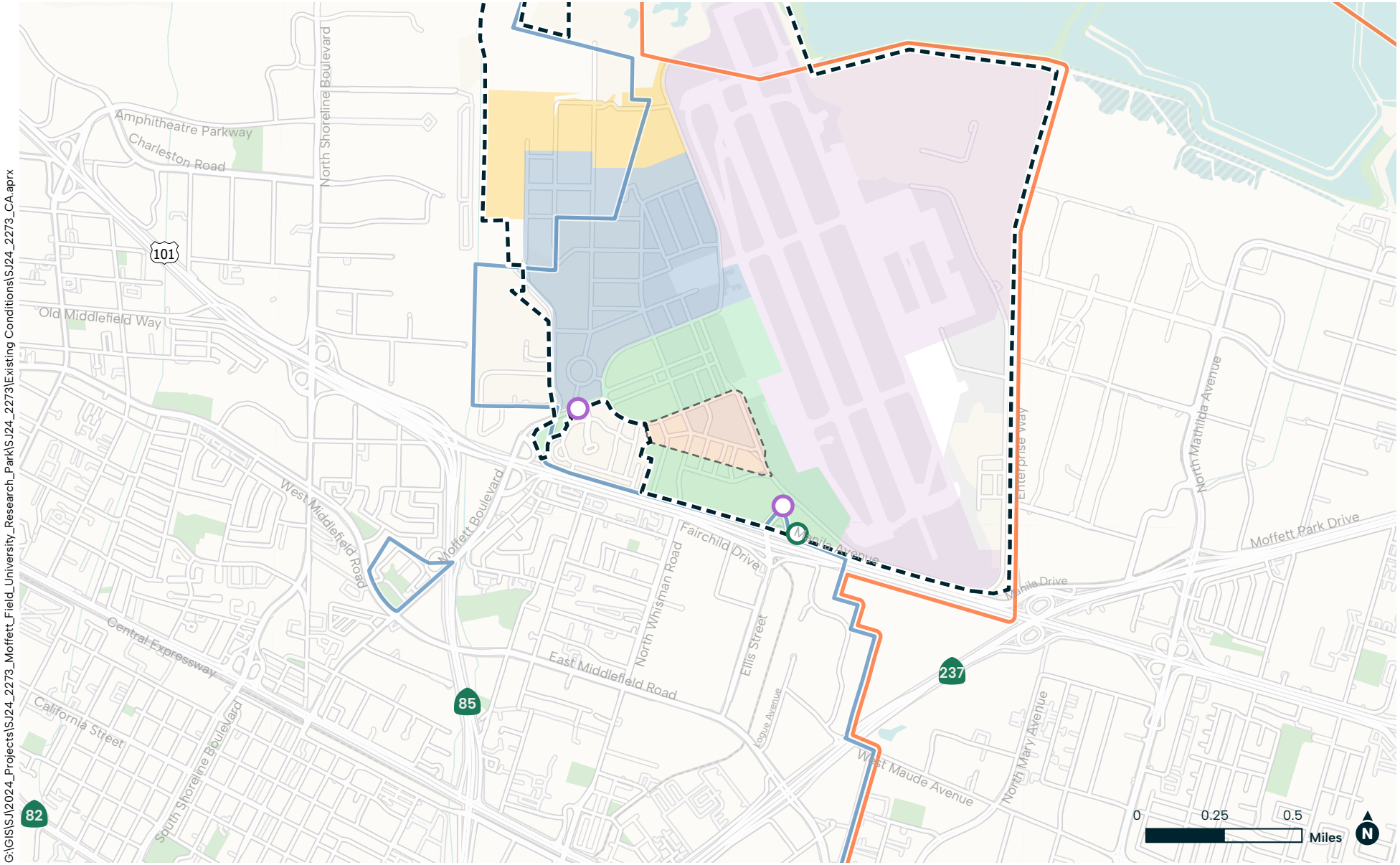

FIGURE 1

Project Location

Source: SKS, 2025.

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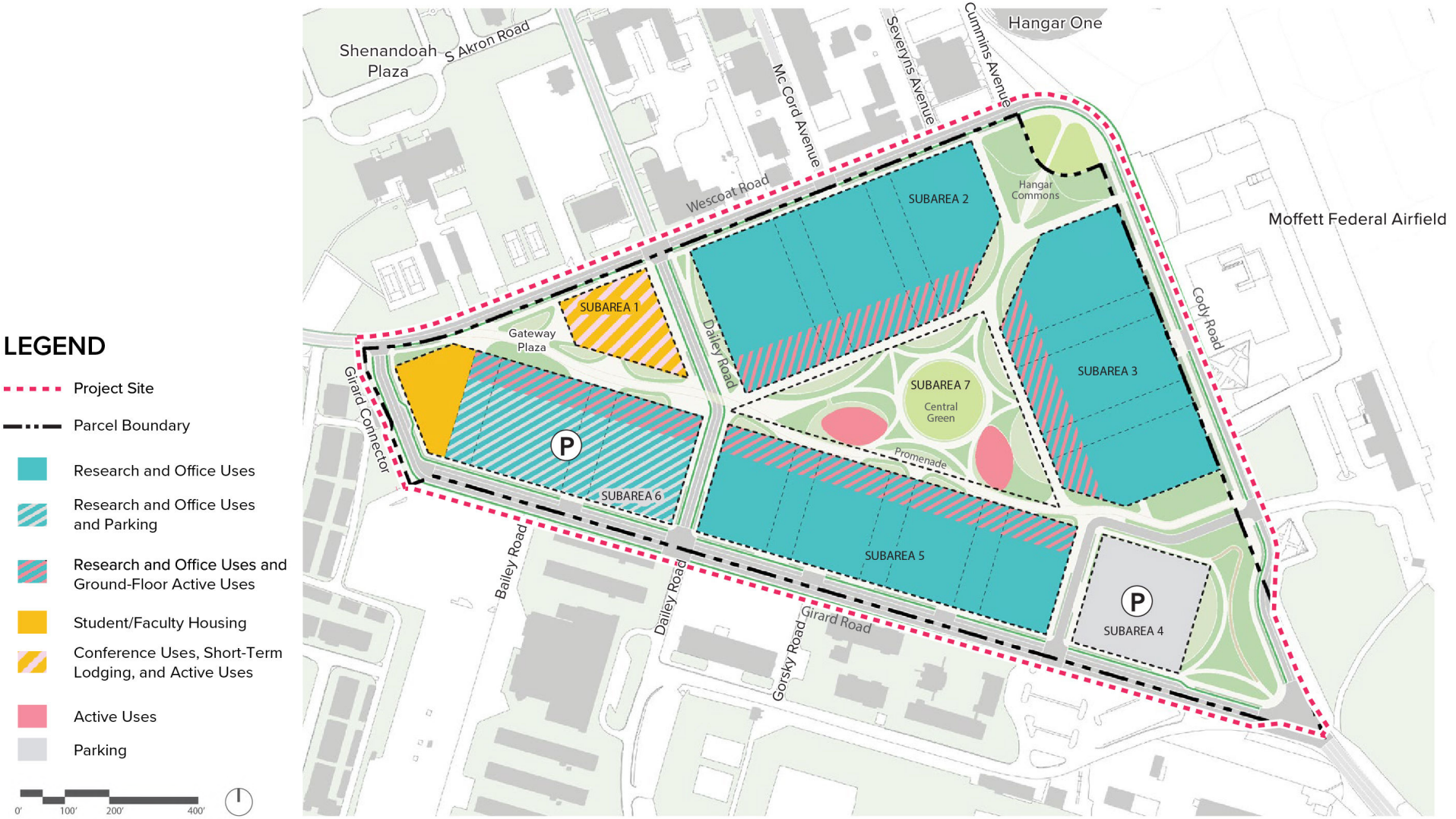

Note: Images are conceptual until after project approval. The proposed project would include utility improvements and building demolition outside of the Project Site, but within the Limits of Work; the Limits of Work are depicted on Figure 2-2. The parcel boundary includes the leased premises; it is provided for informational purposes only.

Source: Project Proponent 2024.

Data Source: SKS, 2025

FIGURE 2

Conceptual Land Use Plan

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Roadway Connections

Freeways

U.S. Route 101 (US 101) is a north-south interstate highway located south of the Project Site that extends between State of Washington in the north and Los Angeles in the south. In the project 2north of Moffett Boulevard, and one express lane in each direction south of Moffett Boulevard. The express lanes operate from 5:00 a.m. to 8:00 p.m. on weekdays. The posted speed limit is 65 miles per hour. US 101 provides access to the project via interchanges at Ellis Street and Moffett Boulevard.

State Route 237 (SR 237) is an east-west freeway southeast of the Project Site that extends between Mountain View in the west and I-880 in Milpitas in the east. It provides two travel lanes in each direction west of Mathilda Avenue and three travel lanes, including an express lane in each direction east of Mathilda Ave. The express lane is in effect from 5:00 a.m. to 8:00 p.m. on weekdays. SR 237 has a posted speed limit of 55 miles per hour in both directions. It provides access to the project via an interchange at Mathilda Avenue.

State Route 85 (SR 85) is a state-operated freeway located southwest of the project area that extends between US 101 in Southern San José in the south and US 101 in Mountain View in the north. In the project vicinity, it provides two mixed-flow travel lanes and one high occupancy vehicle (HOV) lane in each direction. The HOV lanes operate from 5:00 a.m. to 9:00 a.m. and from 3:00 p.m. to 7:00 p.m. on weekdays. The posted speed limit on SR 85 is 65 miles per hour. It provides access to the project area via an interchange at Moffett Boulevard.

Major Roadways

Moffett Boulevard is a north-south arterial with two travel lanes in each direction, Class II bike lanes, and a posted speed limit of 40 miles per hour. It extends between NASA ARC main gate in the north and Central Expressway in the south. South of Central Expressway, Moffett Boulevard continues as Castro Street. Moffett Boulevard connects the project to US 101 and SR 85.

Mathilda Avenue is a north-south arterial with three travel lanes in each direction, Class II bike lanes, and a posted speed limit of 45 miles per hour near the project. It extends between El Camino Real (SR 82) in the south and Caribbean Drive in the north. Mathilda Avenue connects to SR 237 and US 101. It connects to the project through Manila Avenue-West Moffett Park Drive.

Middlefield Road is an east-west arterial with two travel lanes in each direction and a posted speed limit of 35 miles per hour. It extends between Central Expressway in Mountain View in the south and Jefferson Avenue in Redwood City in the north. It connects SR 85, SR 237, and Ellis Street.

Ellis Street is a north-south arterial with two travel lanes in each direction and a posted speed limit of 40 miles per hour. It extends between NASA ARC secondary gate in the north and Middlefield Road in the south. Ellis Street connects the project to US 101.

Local and Collector Roadways

West Moffett Park Drive is an east-west collector road. It is a two-lane roadway with one travel lane in each direction and a Class I bikeway on the north side. The street extends from Enterprise Way to North Mathilda Avenue. It parallels SR 237 and parallels VTA's Orange Line. The posted speed limit is 40 mph.

Manila Avenue is an east-west roadway. It is a two-lane roadway with one travel lane in each direction and a posted speed limit of 20 mph. The street has Class II bike lanes. Manila Avenue extends from Ellis Street to Enterprise Way, where it continues as Moffett Park Drive. It parallels US 101 and the VTA light rail line.

Transit Connections

Existing transit service to the Project Site and its vicinity includes VTA light rail, VTA bus routes, and Caltrain commuter rail service. The existing transit services operating near the Project Site are in **Table 1** and in **Figure 3**.

Table 1: Transit Service

Route	From	To	Nearest Bus Stop	Weekday Operating Hours[1]	Weekday Peak Headway (minutes)	Weekend Operating Hours[1]	Weekend Headway (minutes)
VTA Bus Routes							
21	Stanford Shopping Center	Santa Clara Transit Center	Middlefield Rd at Moffett Blvd and Ellis St	6:00 a.m. -9:30 p.m.	30	8:00 a.m. -9:00 p.m.	45
40	Mountain View Transit Center	Foothill College	Mountain View Transit Center	6:30 a.m. -10:00 p.m.	30	8:30 a.m. -7:00 p.m.	35 - 45
51	NASA ARC	West Valley College	Akron Rd at McCord Ave	6:00 a.m. -7:30 p.m.	30	N/A	N/A
52	Mountain View Transit Center	Foothill College	Mountain View Transit Center	7:00 a.m. -7:00 p.m.	30	N/A	N/A
Rapid 523	Lockheed Martin Transit Center	San José State University	Mathilda Ave at Moffett Park Drive	5:30 a.m. - 11:00 p.m.	20	6:30 a.m. -11:00 p.m.	20 - 30
VTA Light Rail Routes							
Orange Line	Mountain View Station	Alum Rock Station	Bayshore/ NASA Station	5:00 a.m. -12:00 a.m.	15	6:00 a.m. -12:00 a.m.	30
Commuter Rail Service							
Caltrain	San José	San Francisco	Mountain View Station	5:00 a.m. – 12:00 a.m.	10 - 20	7:00 a.m. – 1:30 a.m.	30

Note: [1]Operating hours rounded to the nearest 5 minutes.
Sources: Santa Clara Valley Transportation Authority, Caltrain, Summer 2025.

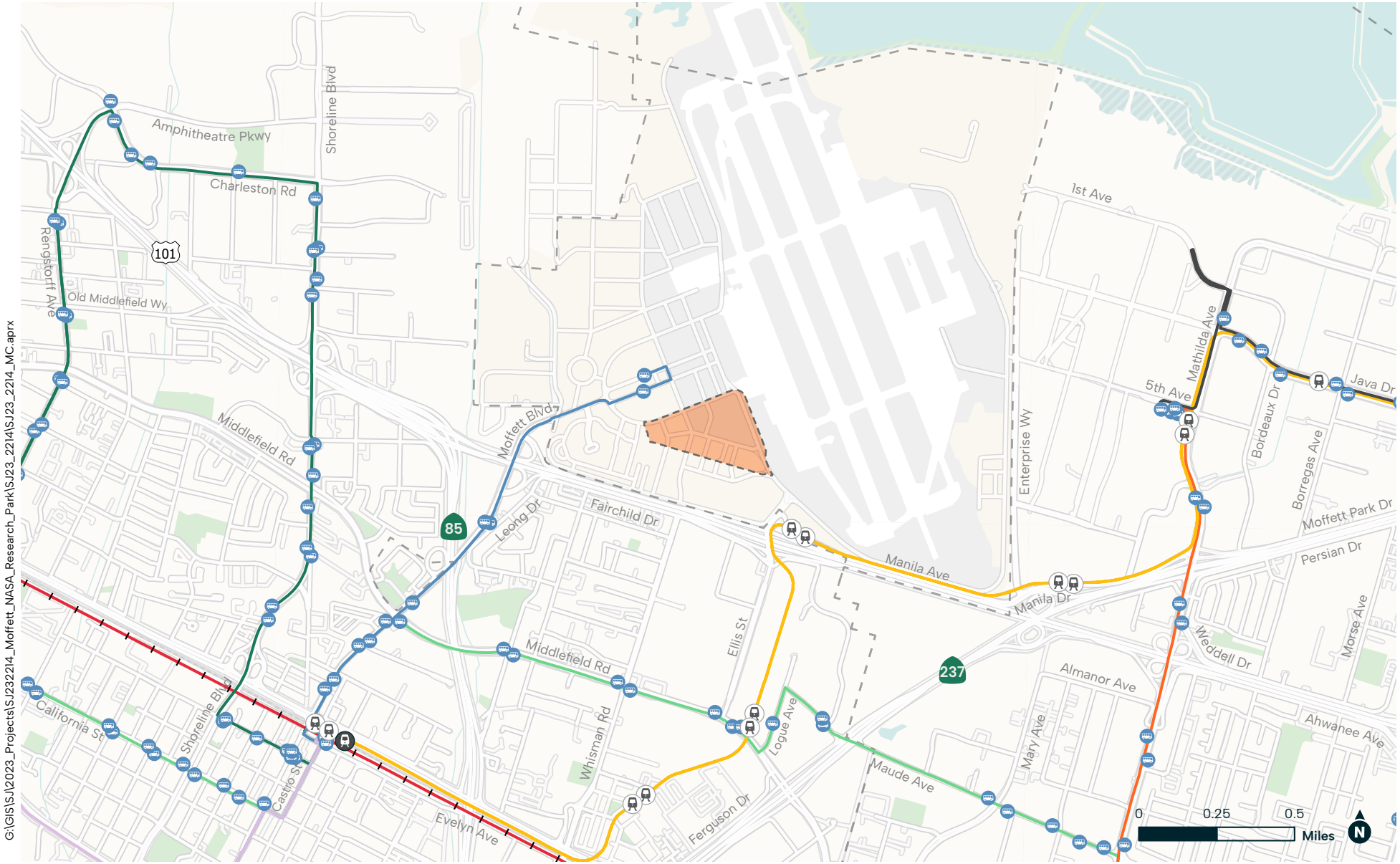

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FIGURE 3

Existing Transit Service

Source: ACE, 2025; Caltrain, 2025; Santa Clara Valley Transportation Authority (VTA), 2025

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VTA BUS LINES

VTA's Bus Route 51 directly serves the Project Site and runs between Moffett Field and West Valley College in Saratoga. It begins at North Akron & McCord and proceeds through Mountain View Transit Center, Castro & El Camino, El Camino Hospital, and various points along Stevens Creek and Foothill corridors before reaching major stops such as De Anza Blvd & Prospect and Saich & Stevens Creek. The service is available only on weekdays with a frequency of 30 to 60 minutes. The total travel time for end-to-end trips is typically 70 minutes. The nearest bus stop is on South Akron Road. It is approximately 600 feet away from the edge of the Project Site and lacks shelter, benches, and other amenities for passengers.

VTA LIGHT RAIL

NASA Research Center has a Light Rail Transit (LRT) station at the Bayshore NASA LRT Station. The stop is about 0.25 to 0.5 miles from the project, which is equivalent to a 5-10 minute walk as shown in **Figure 4**. The station is served by VTA's Orange Line, which operates between downtown Mountain View and Alum Rock in San Jose, with a connection available to Caltrain at the Downtown Mountain View Station and to BART at the Milpitas Station.

Service runs from approximately 5:20 a.m. to 11 p.m. on weekdays. On weekends, service starts slightly later but ends at the same time. Trains arrive approximately every 15 minutes throughout most of the day, with frequency reduced to every 30 minutes during late evening hours.

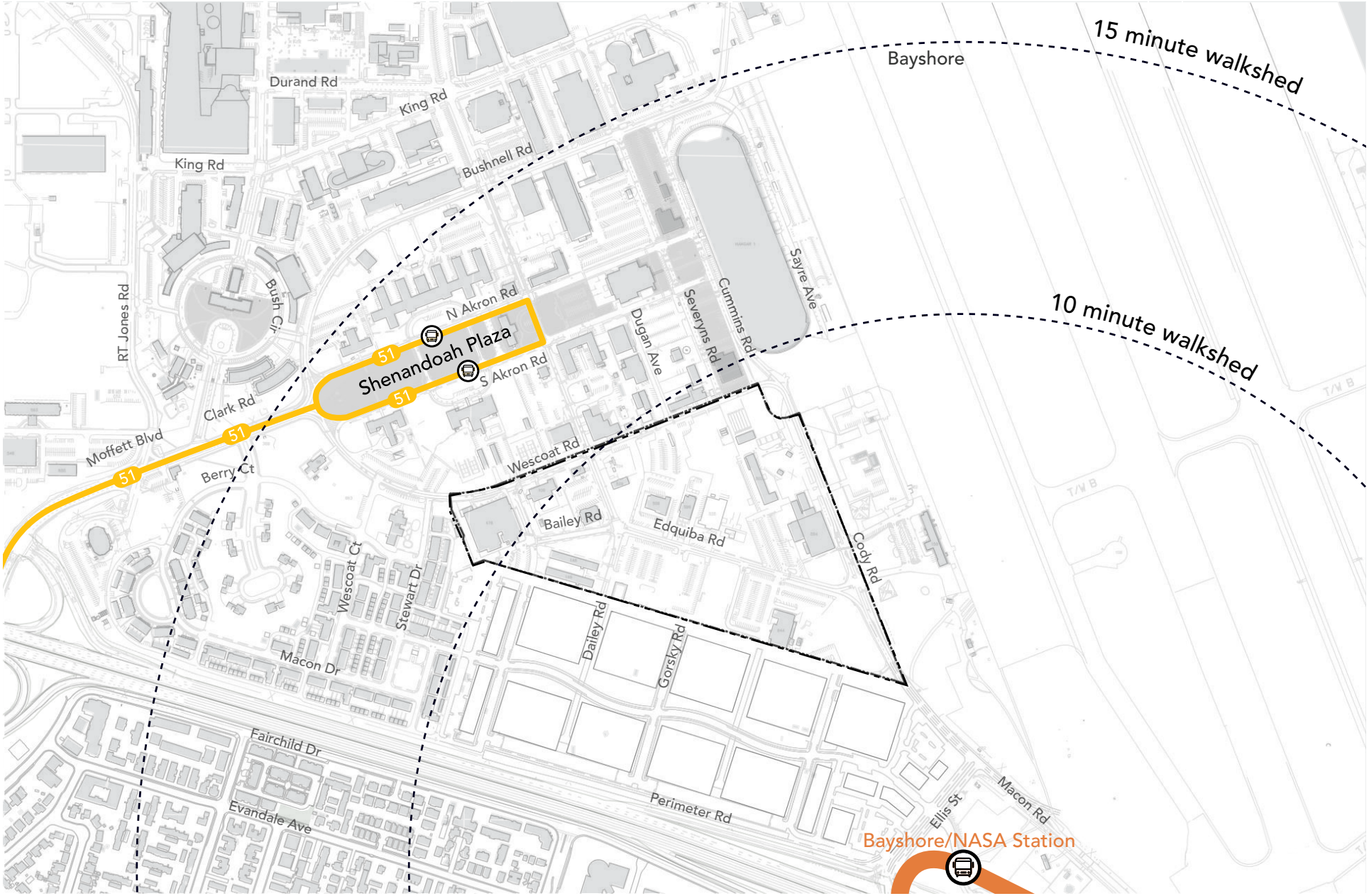

FIGURE 4

VTA Light Rail Orange Line Walkshed

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CALTRAIN

Caltrain provides passenger rail service on the Peninsula between San Francisco and San José, and limited service to Morgan Hill and Gilroy during weekday commute periods. The Downtown Mountain View Caltrain Station serves local and limited trains, with typical headways of 15-minutes during peak times and 30-minute headways during off-peak times. The Caltrain Station is located approximately 1.5 miles southwest of the Project Site. Caltrain commuters can access the project by taking VTA's Orange Line from the Downtown Mountain View Station to the Bayshore NASA LRT Station.

Bicycle and Pedestrian Connections

Pedestrian facilities include sidewalks, crosswalks, trails, and pedestrian signals. There is a general lack of pedestrian facilities at the Project Site. Many roads do not have sidewalks or crosswalks. Furthermore, most roads lack shade structures, which is unappealing for pedestrians and bicyclists.

There are no existing bicycle facilities at the Project Site. Current and planned bicycle facilities in the project vicinity are shown in **Figure 5** and discussed below.

- The Stevens Creek Trail (SCT) is a north-south multi-use pathway connecting from the Bay Trail to Dale Avenue in Sunnyvale. It is a popular pathway for commuting and recreation. There are long-term plans by several adjacent cities to extend it to Cupertino.

- Moffett Boulevard has Class II bicycle lanes between the Steven's Creek Trail and R T Jones Road. Mountain View's AccessMV Plan proposes upgrading Moffett Boulevard with Class IV separated bike lanes between Central Expressway and R T Jones Road.

- The Bay Trail is a regional Class I mixed-use trail along the San Francisco Bay shoreline. Once completed, this 500-miles trail will directly connect to nine Bay Area counties and 47 cities. The existing trail is 1.5 miles north of the Project Site and is accessible via the SCT. Near the Project Site the trail stretches to Santa Clara to the east, Menlo Park to the west, and Union City to the north. The trail is unpaved east of the SCT and mostly paved west of the SCT.

- The Moffett Park neighborhood in Sunnyvale is zoned for increased residential and office space. To accommodate new developments and reduce vehicle trips, the City of Sunnyvale is planning an extensive bicycle network in the area. The City of Sunnyvale's 2020 Active Transportation Plan proposes a continuous multi-use pathway along Moffett Park Drive and Manila Avenue to connect Moffett Field to Moffett Park in Sunnyvale. The section on Moffett Park Drive between Enterprise Way and Borregas Avenue is already completed.

- Ellis Street currently has no bicycle facilities between Fairchild Drive and Manila Avenue. The Mountain View Bicycle Transportation Plan Update proposes a Class I pathway and Class II bike lanes on this section of Ellis Street.

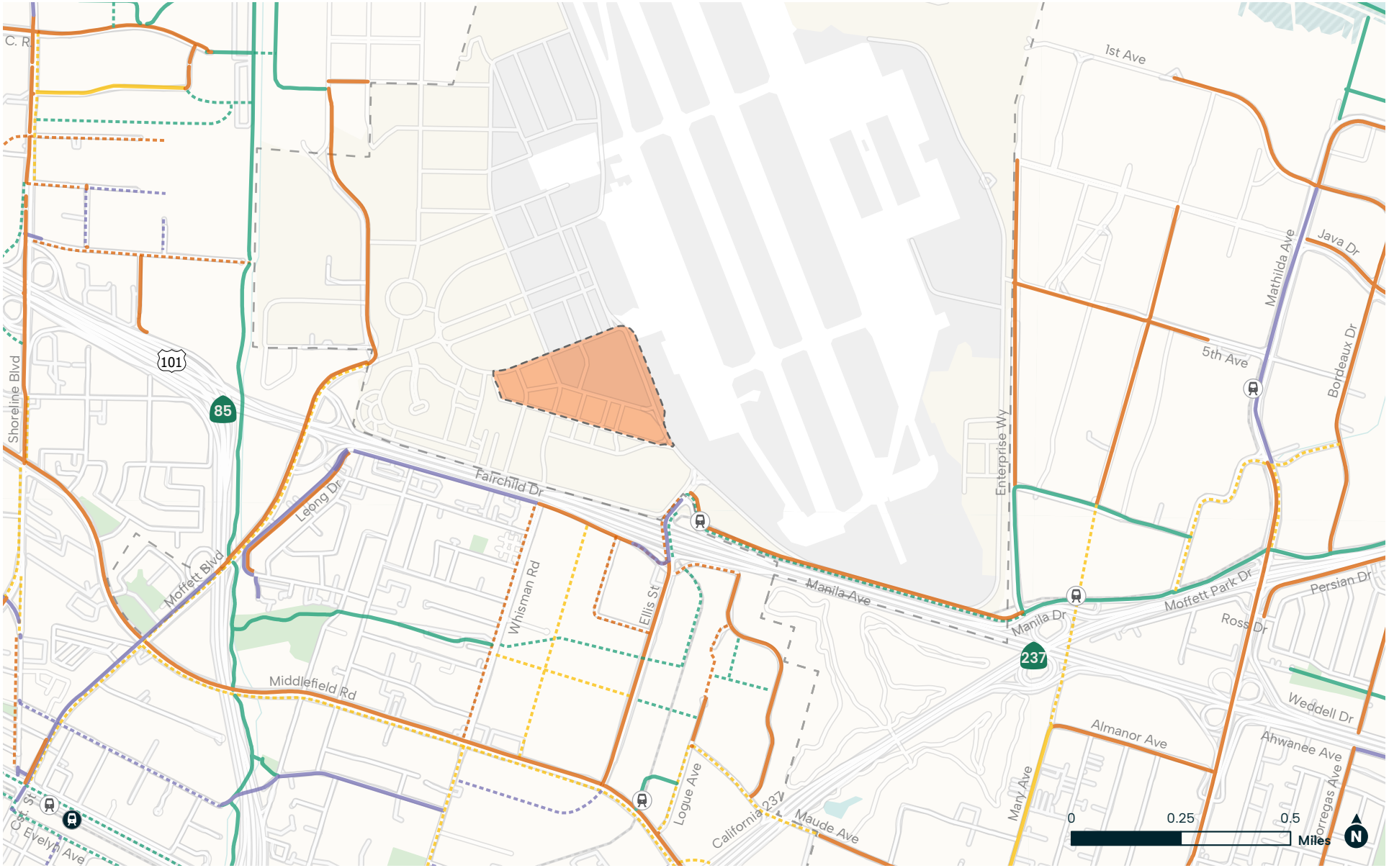

FIGURE 5

Existing and Planned Bicycle Infrastructure

Source: Santa Clara Valley Transportation Authority (VTA), 2025. City of Mountain View, 2025.

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Proposed Transportation Demand Management Program

The Project's TDM Plan is described in two parts. The first part is the Project-Specific TDM Program, which will reduce vehicle trips by at least 22 percent compared to trip generation rates in the Institute of Transportation Engineers' (ITE) *Trip Generation Manual, 11th Edition*. This will be achieved by implementing measures that internalize Project trips and reduce external trips to and from the Project Site. Internalization helps reduce external trips by enabling people to meet their daily travel needs within the Project Site through walking, cycling, transit, or other sustainable travel options. Because ITE trip generation rates do not typically account for these internal, non-vehicular trips, the project's mixed-use design and availability of non-automobile travel options will help reduce vehicle trips below ITE trip generation rates.

The second part is the Mitigated TDM Program. The CEQA Transportation Analysis prepared for the project found that the additional Vehicle Miles Travelled (VMT) generated by the project would exceed the Threshold of Significance, which is based on the average existing total VMT per service population for the Bay Area Region. To mitigate this impact, the Project will reduce VMT by an additional 9 percentage points. VMT and vehicle trip generation are assumed to be directly related. Thus, the reduction of VMT by 9 percentage points will be achieved by reducing daily trip generation by an additional 9 percentage points beyond the 22 percent reduction target. The Mitigated TDM Program would therefore achieve a total of 31 percent trip reduction compared to ITE trip generation rates. The Mitigated TDM Program expands upon many of the Project-Specific TDM Program strategies but also includes additional measures designed to further reduce external vehicle trips.

The project will implement both the Project-Specific TDM and the Mitigated TDM Programs (unless otherwise noted). Both programs are included in the Berkeley Space Center Master Plan. A summary comparing the two programs is listed in **Table 2** below and described in more detail in **Appendix A**.

Table 2: Project-Specific vs Mitigated TDM Programs Comparison

Transportation Demand Program Element	Project-Specific TDM Program (22 percent Vehicle Trip Reduction Target)	Additional Measures Under Mitigated TDM Program (31 percent Vehicle Trip Reduction Target)
TDM Program Management / Transportation Management Association (TMA)	• TMA membership/participation • Designated TDM Coordinator	
Transit and Shuttles	• Site-wide shuttle system connecting to nearby transit hubs • Slightly discounted transit passes • Guaranteed Ride Home program	• Heavily discounted/free transit passes
Bicycles	• On-site Class I and II bike parking in quantities using Moffett Park Specific Plan ratios • Showers and lockers for bike commuters • Bike-share program • Annual bike promotion event • Connected bicycle network on Project Site	• Additional 50% more on-site Class I and II bike parking • Scooter/micromobility parking (20% of total bike parking supply) • Provide bike purchase discounts/subsidies of 25% or more at annual bike promotion event • Support expanding bicycle network
Pedestrians	• Connected pedestrian network on Project Site with pedestrian amenities	• Support expanding pedestrian network
Traffic Calming	• Narrow lanes, add curbs, specialized crosswalk paving, curb extensions, improved street crossings, and planting trees along the roadways on-site	
Carpooling and Carshare	• Carpool/vanpool preferential parking • Central Uber/Lyft/Autonomous Vehicle pick up/drop off area • Carshare program with 10 carshare vehicles	• +5 carshare vehicles, discounted carshare rates available for employees and Student/Faculty Housing residents
Parking Management	• Reduced vehicle parking ratios • Parking cash-out program for employees and residents in Student/Faculty Housing	• Replace parking cash-out program with paid on-site parking for all residents, employees, and visitors
Other	• Support strategies to reduce trips through Advanced Air Mobility	

Source: Fehr & Peers, 2025.

The Project-Specific and Mitigated TDM Programs are expected to achieve their respective trip reduction goals based on an analysis using Fehr & Peers' MXD+ and TDM+ analytical tools. MXD+ estimates the internal and external trips taken by walking, bicycling, or transit in mixed-use developments using a methodology developed in cooperation with the U.S. Environmental Protection Agency (EPA). TDM+ quantifies trip and VMT reduction estimates based on the California Air Pollution Control Officers Association's (CAPCOA) 2021 report *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity.* The strategies used in the analysis are further described in **Appendix B**.

This section describes trip reduction strategies for both the Project-Specific and Mitigated TDM Programs. Key differences are noted where appropriate. The section is grouped according to TDM program element types: Program Management, Transit and Shuttles, Bicycling, Pedestrians, Traffic Calming, Carpooling/Ridesharing/Carsharing, Parking Management, and Advanced Air Mobility.

Program Management

The Project Proponent will become a member of NASA Ames TMA or, if more appropriate, the Mountain View TMA (MTMA). The NASA Ames TMA was established in the early 2000s to run the TDM programs for Moffett Field, manage the parking supply, and support TDM programs from developments in Moffett Field such as this Project. The Project Proponent will designate an employee to serve as a point of contact for the appropriate TMA and collaborate with the TMA to fulfill its TDM goals.

The Project Proponent will designate a part-time on-site TDM Coordinator. The TDM Coordinator will oversee the planning, implementation, and promotion of TDM services and amenities to encourage sustainable travel choices among employees and residents. This includes proactively monitoring and responding to changes in travel demand, adjusting existing measures, and introducing new commute options as needed. The Coordinator will market and promote special programs such as Bike-to-Work Day, organize incentives for ridesharing, bicycling, and walking, and provide personalized travel assistance, including directions, rideshare matching, and alternative transportation information. They will collaborate with local or regional transportation management associations, including the Mountain View Transportation Management Association and the Moffett Park Transportation Management Association, to strengthen outreach and leverage broader commuter networks. Additionally, the TDM Coordinator will support on-site transportation efforts through outreach, program evaluation, and continuous improvement of TDM strategies to ensure program effectiveness and increased participation in sustainable transportation.

Transit and Shuttles

The project will create a new shuttle service, build new transit stops, and offer heavily discounted or free transit passes as summarized in **Table 3**.

Table 3: Project-Specific vs Mitigated TDM Transit Pass Discount Program Comparison

Project-Specific TDM Program	Mitigated TDM Program (supplemental to Project-Specific TDM)
New shuttle service	
Build/relocate new transit stops	
Offer slightly discounted transit passes	Offer heavily discounted/free transit passes

Source: Fehr & Peers, 2025.

Site-Wide Shuttles

As part of the Project-Specific TDM Program, the project will establish a site-wide shuttle system to serve internal travel between major campus buildings, campus housing, and large parking facilities. The shuttle system will also service "last mile" connections between the Project Site and nearby transit hubs, including the Mountain View Caltrain Station and the Bayshore NASA LRT Station. The TDM Coordinator and the TMA will decide whether the shuttle service will be managed by the TMA shuttle program or an independent program.

The program could include a dedicated express shuttle service from the Mountain View Caltrain Station to the Project Site and a short distance autonomous shuttle to/from the Bayshore NASA LRT Station during peak hours. If successful, this autonomous service could eventually expand to include the route to Downtown Mountain View.

The new and relocated transit stops described in the Development Guidelines will include amenities such as sheltered waiting areas and real-time transportation information displays. The transit stops will connect to bicycle and pedestrian pathways while offering nearby access to shared mobility services like carsharing, bike-sharing, ridesharing, and e-scooters.

The MTMA runs the MVGo shuttle service, which provides free connections from the Mountain View Caltrain Station to the North Whisman area via Route A. While the current Route A does not stop near the Project Site, the route could be modified to provide a stop closer to the Project Site. This would

require the Project Proponent to collaborate with the MTMA and potentially become a member of the MTMA.

VTA Bus Service

The Project-Specific TDM Program proposes to coordinate with VTA to reroute VTA's 51 bus from Eastbound on South Akron Road to Eastbound on Wescoat Road and to relocate the bus stop from South Akron Road to the edge of the Project Site on Wescoat Road near Mc Cord Avenue. This relocation combined with increased bus frequency will lead to higher bus ridership. **Figure 6** shows a map of the proposed and existing transit.

Transit Pass Program

Additionally, a site-wide Transit Pass/Subsidy program will be established to provide employees and residents in Student/Faculty Housing with heavily discounted or free transit passes for local buses, light rail, and Caltrain. This will include either discounted calendar-year transit passes or a monthly transit subsidy provided in pre-tax dollars.

Under a discounted calendar-year transit pass program, the Project Proponent would pay VTA and Caltrain a fixed rate per participant (employee or resident) through the VTA SmartPass and Caltrain's GoPass respectively.[1] In return, the transit agencies would provide annual transit passes with unlimited free rides to participants. The number of registered participants can be a subset of the total employee and resident population, and it can be changed annually as the Project Site's population evolves. Higher participant enrollment in these programs decreases the cost per participant, which can reduce overall costs. Plus, the TDM coordinator administering the programs would have access to transit usage reports from the program's participants, which will enable evaluation of the program's effectiveness.

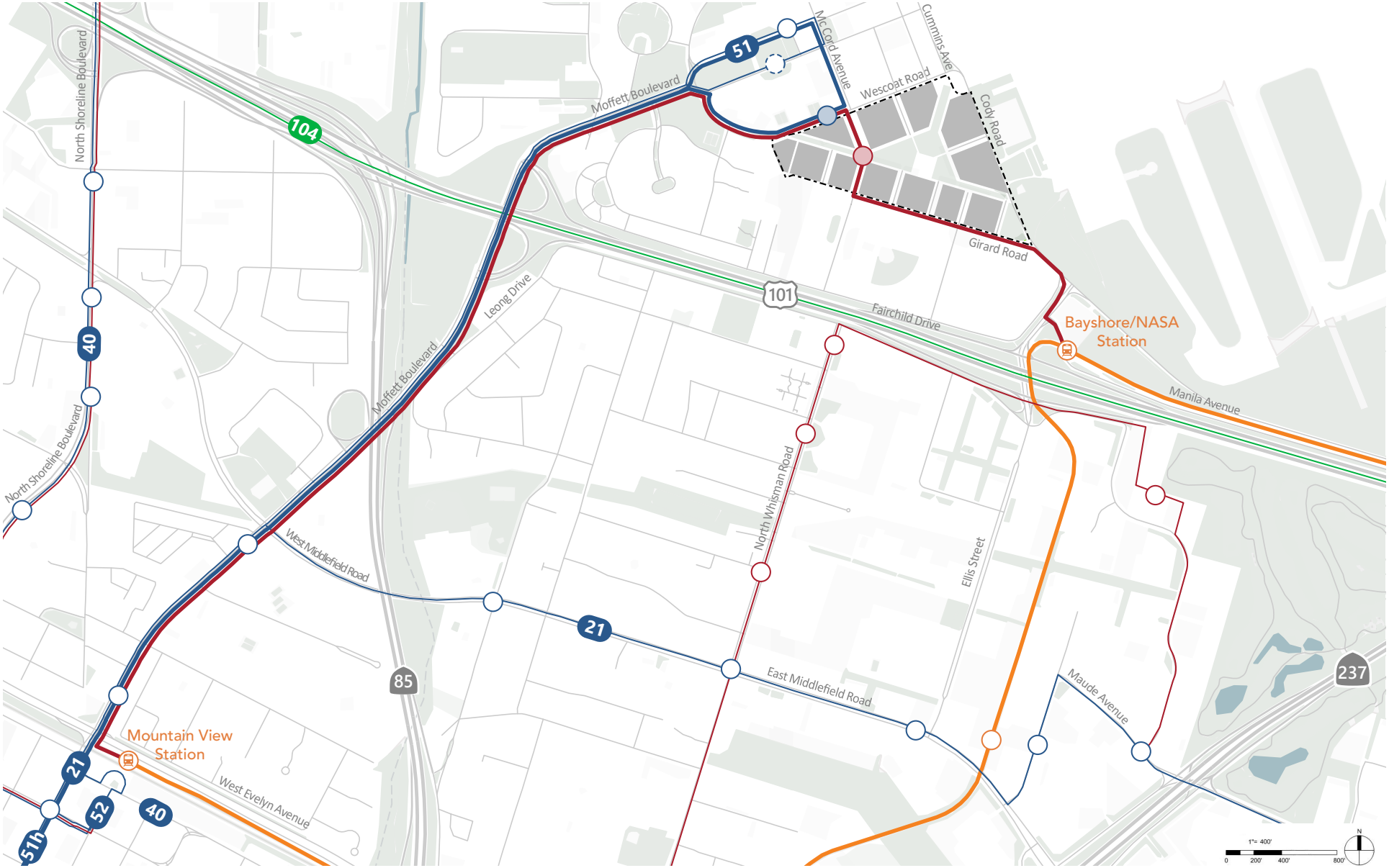
Alternatively, the Project Proponent may offer a monthly transit subsidy in pre-tax dollars. Participants would purchase transit tickets and passes on a website using the subsidy. If a participant's purchases exceed the monthly subsidy, they would pay the difference in pre-tax dollars by having it deducted from their paycheck.

Guaranteed Ride Home Program

The Project-Specific TDM Program requires the project to offer a Guaranteed Ride Home (GRH) program to all employees and residents in Student/Faculty Housing who travel with sustainable modes of transportation. The program will provide reimbursement on the cost to travel home in case of an emergency. Emergency rides home can be taken by taxis, rental cars, carshare vehicles, ridesharing services, transit, or micromobility. This program will cover rides to a person's home in the event of illness or family member crisis, if a carpool ride is unavailable due to unexpected changes in the driver's schedule or vehicle breakdown, if the employee's bicycle is not usable (flat tire, mechanical failure, vandalism, theft), or if the employee is required to work late unexpectedly. Providing a reliable backup option will ease commuters' concerns about switching to sustainable travel.

[1] Instead of providing the VTA SmartPass or the CaltrainGo Pass, the Project Proponent may provide the Clipper® BayPass to participants if it is available.

VTA has a GRH program that is free to join and offers up to $125 in reimbursements per qualified trip. Participants of VTA's GRH program are eligible to receive up to six reimbursements annually or $500 in total reimbursements, whichever comes first. The Project Proponent may use VTA's GRH program or establish an alternate program.



Project Site

Project Proposed Transit Stop

Relocated Transit Stop

Project Proposed Shuttle Route

Project Proposed VTA 51 Route

Existing Transit Stop

VTA Express Service

VTA Local Service

Orange Line

MVgo Service

FIGURE 6

Proposed and Existing Transit Routes

Data Source: MVgo Shuttles Route Map, 2023
Valley Transportation Authority Main Map, 2023

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Bicycles

The project will provide parking and dedicated pathways for bicyclists, people on scooters, and other micromobility users, plus showers, lockers, and other amenities. The project will also establish programs and incentives to promote and encourage sustainable mode share. The key differences between the Project-Specific TDM Program and the Mitigated TDM Program regarding bicycles and micromobility are summarized in **Table 4**.

Table 4: Project-Specific vs Mitigated TDM Bicycle and Micromobility Comparison

Project-Specific TDM Program	Mitigated TDM Program (supplemental to Project-Specific TDM)
On-site Class I and II bike parking quantities using Moffett Park Specific Plan ratio	+50% more bicycle parking and install scooter and other micromobility parking
Showers and lockers for bicycle commuters	
Bike-share program	
Annual bicycle promotion event	Bicycle purchase discounts/subsidies of 25% or more offered during annual bike promotion event
Create connected bicycle network on Project Site	Support efforts to connect the bicycle network to existing and planned multi-use pathways

Source: Fehr & Peers, 2025.

Bicycle and Micromobility Parking

The project will provide safe and convenient bicycle parking consistent with the Development Guidelines. The project proposes to provide short-term bicycle parking spaces and long-term bicycle parking spaces. The project will have easily accessible short-term bicycle parking located within 100 feet of main building entrances. Long-term bicycle parking will be provided in covered and secure structures. Bicycle parking facilities will accommodate various bicycle types, including cargo bikes and e-bikes. The Project-Specific TDM Program requires short-term and long-term bicycle parking in quantities consistent with the ratios from the *2023 Sunnyvale Moffett Park Specific Plan*[2]. The Mitigated TDM Program requires an additional 50 percent short-term and long-term bicycle parking, plus scooter and other micromobility parking. The scooter and other micromobility parking supply will be 20 percent of the total bicycle parking supply. The total quantities of parking spots for bicycles, scooters, and other micromobility are described in the Development Guidelines.

Showers and Lockers for Bicycle Commuters

Showers, changing rooms, and lockers will be provided for bicycle commuters in buildings with office, research or academic uses as part of the Project-Specific TDM Program.

[2] City of Sunnyvale, *Moffett Park Specific Plan*, adopted July 11, 2023. https://www.sunnyvale.ca.gov/business-and-development/planning-and-building/permit-center/specific-plans

Bike-Share Program

Bike-share is a transportation system that provides users with short-term access to bicycles for a fee or membership, allowing them to pick up a bike at one location and return it to another. Employees, residents, and visitors will have access to bike-share to travel within and out of the Project Site. Under the Project-Specific TDM Program, the Project Proponent will partner with a commercial bike-share vender or establish a bike-share program on the Project Site. The Project Proponent may also offer a scooter-share program on-site. Any bicycle, scooter, or other micromobility parking installed for bike-share or scooter-share will count toward the respective bicycle and micromobility parking requirements for the Project-Specific and Mitigated TDM programs.

Annual Bike Promotion Event

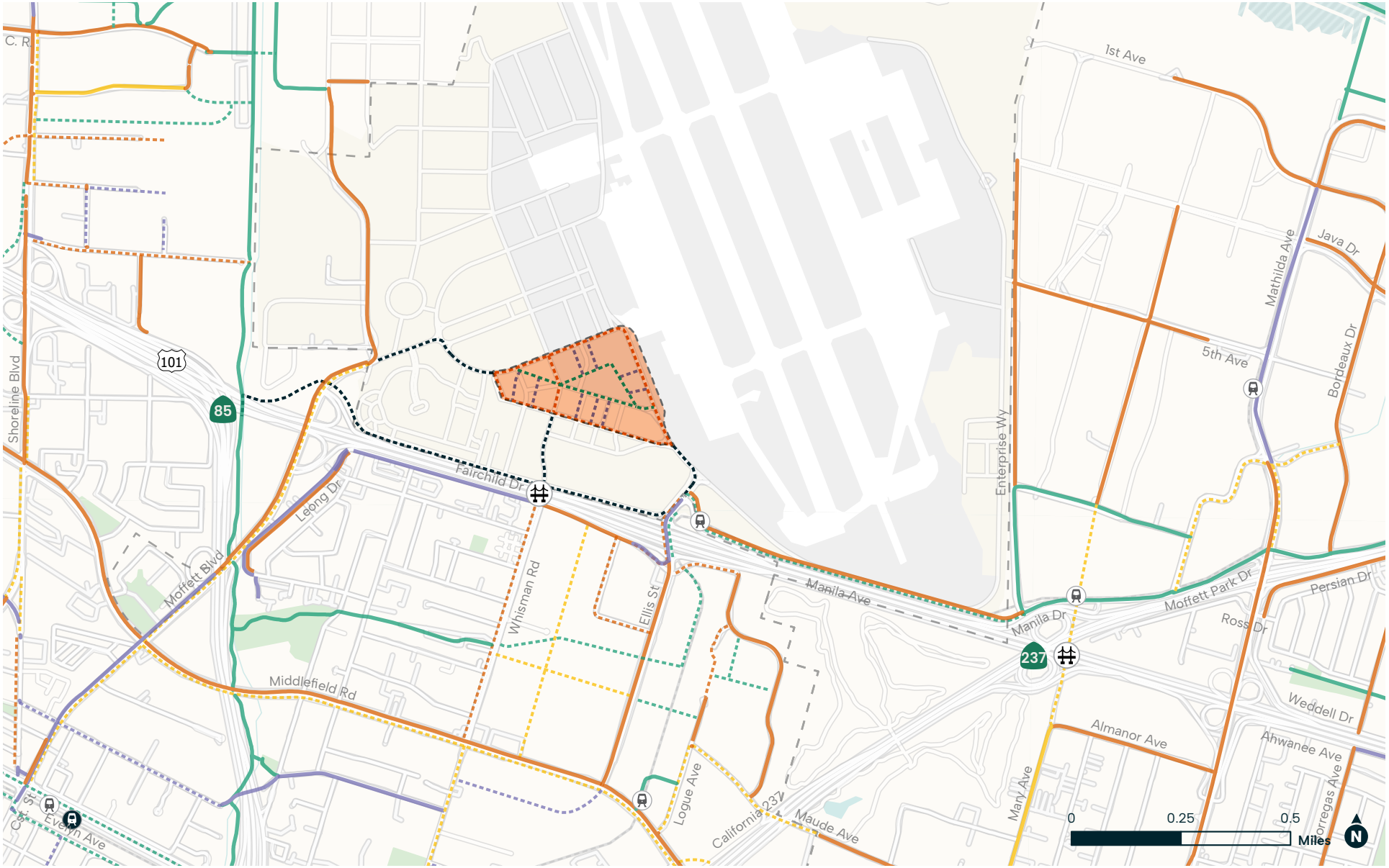
The Project-Specific TDM Program will require an annual bicycle promotion event on the Project Site to encourage bicycling. This may be organized by the Project Proponent or the TMA. With the Mitigated TDM Program, discounts and subsidies of +25 percent will be offered for bike-related purchases at this event.

Bike Network Expansion

Creating safe, convenient, and low-stress bicycle pathways between the Project Site and the regional bicycle network will further reduce vehicle trips. These connections would also allow for better capitalization on increasing e-bike usage which can increase typical bike commuting ranges from 4-5 miles to 10 miles or more. Additionally, a stronger bicycle network will increase the usage of scooters and other micromobility. The bicycle facilities will be suitable for all ages and abilities.

Under the Project-Specific TDM Program, the project will create a bicycle network to provide convenient bicycle/scooter/micromobility connections between destinations within the Project Site as described in the project's Master Plan. and the vision of the Master Plan.

A proposed network map is in **Figure 7**, which includes both the facilities within the Project Site required by the Project-Specific TDM Program, and a regional network connecting the Project Site to important off-site destinations. Building the regional network is not required by the Project's TDM Plan. However, under the Mitigated TDM Program, the Project Proponent will support the implementation of these proposed facilities through proactive planning, public outreach, and collaboration with NASA and the TMA. The Project Proponent may choose to provide voluntary financial contributions for these projects. The proposed regional network is intended to maximize bicyclist safety and comfort by separating bicyclists from vehicles with a combination consisting of mostly Class I multi-use pathways and Class IV protected bike lanes. The proposed regional network would connect the Project Site to the Bayshore / NASA VTA LRT Station via Girard Road, Ellis Street, and Manila Avenue. This pathway would improve transit access and provide an opportunity to add sidewalks and improve ADA accessibility along the route. The regional bicycle network would also connect to several existing and planned Class I multi-use pathways, including the Stevens Creek Trail, the Bay Trail, and Manila Avenue. In the longer-term, the regional network could be greatly enhanced with the construction of a bicycle bridge over US-101 at Whisman Road to connect directly to the Project Site from the south. This connection would allow direct connections to the Hetch Hetchy and Stevens Creek trails.



Note: Only proposed bike facilities and infrastructure within the Project Site are included in the project

Project Site
City Boundaries

VTA Light Rail Stations
Caltrain Station
Potential New Bridge Location

Existing Bike Facilities
- Class I Bike Path
- Class II Bike Lane
- Class III Bike Route
- Class IV Separated Bikeway

Proposed Bike Facilities
- Class I Bike Path
- Class II Bike Lane
- Class III Bike Route
- Class IV Separated Bikeway
- Potential New Bikeways (Exterior)

FIGURE 7

Proposed NASA Bicycle Network

Source: Santa Clara Valley Transportation Authority (VTA), 2025. City of Mountain View, 2025.

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Pedestrians

Under the Project-Specific TDM Program, the project will create a pedestrian network that connects between buildings, streets, and transit stops within the Project Site. The pedestrian facilities on the Project Site will include amenities including trees, furnishings, lighting, specialized crosswalk paving, curb extensions, improved street crossings, and wider sidewalks than typical industry standards.

Traffic Calming

Additionally, the project will implement traffic calming measures on the Project Site to lower vehicle speeds and improve safety for all road users as part of the Project-Specific TDM Program. Traffic calming measures include but are not limited to lane narrowing and installing curbs. The installation of several types of the required pedestrian amenities will also have a traffic calming effect, such as specialized crosswalk paving, curb extensions, improved street crossings, and planting trees along the roadways.

Carpooling, Ridesharing, and Carsharing

Under the Project-Specific TDM Program, the Project Proponent will encourage carpooling, ridesharing, and carsharing to reduce vehicle trips.

The Project Proponent will offer a carshare program at the Project Site for employees, short-term residents, and residents in Student/Faculty Housing to access vehicles as needed. Carshare programs reduce car trips by shifting people from car ownership to shared access. When individuals directly pay each time they use a vehicle, they are less likely to rely on vehicles for every trip and more likely to combine errands, use transit, bike, or walk for shorter journeys. The Project-Specific TDM Program requires a carshare program with at least 10 fleet vehicles, but the Mitigated TDM Program includes an additional 5 vehicles and discounted rates for employees and residents in Student/Faculty Housing as shown in **Table 5**.

Table 5: Project-Specific vs Mitigated TDM Carshare Program Comparison

Project-Specific TDM Program	Mitigated TDM Program (supplemental to Project-Specific TDM)
10 vehicles in fleet	Additional 5 vehicles in fleet, for a total of at least 15 vehicles
No discounted rates	Discounted carshare rates available for employees and residents in Student/Faculty Housing

Source: Fehr & Peers, 2025.

Additionally, the project will establish a central Uber/Lyft/Autonomous Vehicle (AV) pick up/drop off area on Dailey Road as part of the Project-Specific TDM Program.

Parking Management

Under the Project-Specific TDM Program, the project will artificially reduce the parking supply consistent with the project's Development Guidelines compared to industry standard parking supply rates to encourage mode shift. Artificially reducing parking supply is in accordance with the NASA Ames TDM Plan. Additionally, the Project Proponent will implement financial incentives to discourage vehicle trips. **Table 6** describes the two TDM programs.

The Project-Specific TDM Program would require a parking cash-out program where employees and residents in Student/Faculty Housing receive a cash payment equal or greater than the cost of the parking space to forgo their current parking space. However, stronger parking disincentives are required to achieve the Project's trip reduction goal. Therefore, instead of implementing the parking cash-out program, the project will implement paid on-site parking for all single occupancy vehicles of employees, residents, and visitors as part of the Mitigated TDM Program. Parking cost rates will be determined by the Project Proponent and may be adjusted as needed. Carsharing, vanpooling, and carpooling vehicles will be exempt from paying for parking.

The Project Proponent may choose to include elements of UC Berkeley's parking management on their main campus. At UC Berkeley main campus, visitors pay for parking by the hour, and faculty and students can purchase daily, weekly, monthly, semester-long, or annual parking permits. UC Berkeley faculty may pay for parking with pre-tax dollars by enrolling in the Employee Payroll Deduction Program.

Table 6: Project-Specific vs Mitigated TDM Financial Incentives to Reduce Parking

Project-Specific TDM Program	Mitigated TDM Program (supplemental to Project-Specific TDM)
Parking cash-out program for employees and residents in Student/Faculty Housing to forgo their parking space	No parking cash-out, but paid on-site parking for all employees, residents, and visitors instead

Source: Fehr & Peers, 2025.

The Project-Specific TDM Program will require the Project Proponent to develop a parking management program to manage and monitor on-site parking, as well as designating preferential parking for carpool, vanpool, and carshare. The Project Proponent will monitor HOV parking spaces by equipping parking facilities with parking access technology for recognizing multi-passenger vehicles.

Advanced Air Mobility

The project will investigate strategies to reduce trips through Advanced Air Mobility (AAM) as part of the Project-Specific TDM Program. AAM is an air transportation system that uses highly automated aircraft to move people and cargo between places not traditionally served by aviation, including urban, suburban, and rural locations. AAM operations at Moffett NASA Research Park could include the following:

Electric-powered Vertical Take Off/Landing Aircraft

Electric-powered Vertical Take Off/Landing Aircraft (eVTOL) would typically focus on passenger travel and have capacities ranging from 2-6 passengers. Most systems would typically still operate with a licensed pilot on board.

Drone or Autonomous Travel

Smaller drones or autonomous aircraft could operate without a pilot and would typically emphasize the movement of high-value or time sensitive freight or goods. Drones could operate in conjunction with eVTOL at one or more vertiports around the Project Site.

Research indicates that the San Francisco Bay Area could be an early adopter market for AAM because of the high percentage of long-distance or "super" commuters, among other factors such as weather and geography. Additionally, there will be significant demand for drone delivery and passenger travel

to/from UC Berkeley and major airports. Implementation of AAM would require at least one Vertiport on or adjacent to the Project Site. **Figure 8** shows potential Vertiport locations.

AAM is theoretically capable of shifting several hundred daily vehicle trips from roadways at this site, resulting in reducing ground vehicle trips by up to 3 percent. However, AAM are still in early stages of development from a technical, regulatory, and infrastructure standpoint. Therefore, the construction of AAM facilities are not part of the project. Any potential reduction in daily ground trips caused by future AAM usage is not counted towards the 31 percent reduction in daily trip generation required for the project.

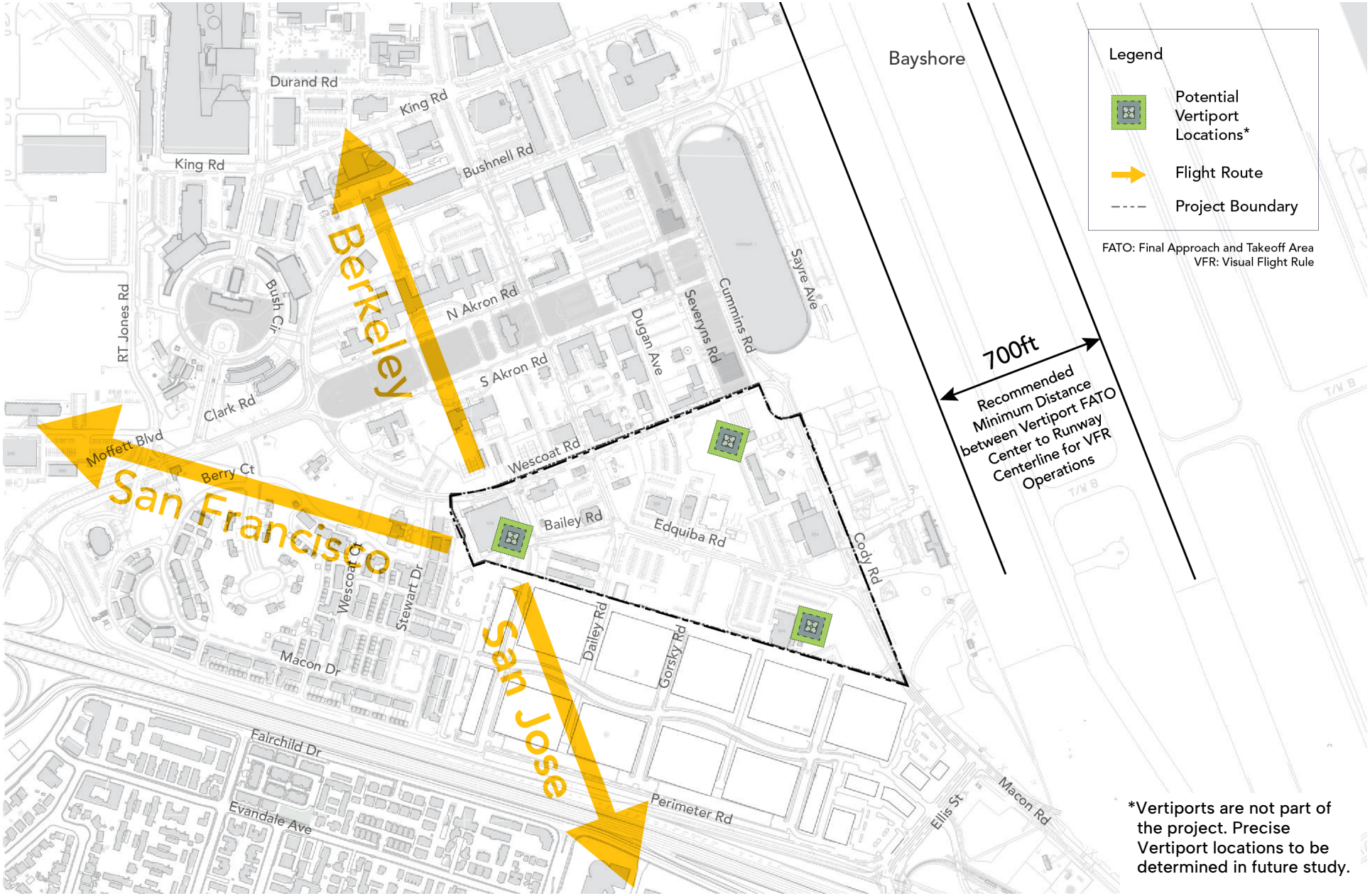

FIGURE 8

Potential Vertiport Locations

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TDM Implementation

The project will be constructed in 4 phases. Phase 1 will build out approximately a quarter of the project square footage, including buildings for Research Uses (Office, Lab and R&D, and Academic) and Active Uses. Phases 2, 3, and 4 will include additional Research Uses and Active Uses. Notably, Phase 2 will also construct the Conference Center and Residential Short-Term Housing, while Phase 4 will construct Student/Faculty Housing. The Project Proponent will implement all strategies from both TDM Programs to an operational level before their respective deadlines shown in **Table 7**. However, each strategy may be scaled up after the deadline has passed. For example, the shuttle system must be operational before Phase 1's Certificate of Occupancy is received, but it could begin with limited service frequency, then increase service frequency as later phases are completed and the Project Site has higher occupancy.

Additional TDM strategies that are not constrained to the Project's construction, such as investigating AAM and supporting the expansion of NASA's bicycle and pedestrian network, will be implemented when opportunities arise.

Table 7: TDM Strategy Implementation Schedule

Project-Specific TDM	Mitigated TDM
Before Phase 1 Construction Completion	
TMA membership	
Before Phase 1 Certificate of Occupancy	
Site wide shuttle system connecting to nearby transit hubs May start with limited service frequency and increase frequency as later phases are completed	**Heavily discounted/free transit passes** The Project Proponent must be enrolled in a discounted calendar-year transit pass program or have a website available for purchasing subsidized transit tickets and passes
Guaranteed Ride Home Program	**Paid on-site parking**
Carshare program with 5 vehicles The Project-Specific TDM requires 10 vehicles in the carshare program in total, with 5 vehicles being available before Phase 1's Certificate of Occupancy	
Preferential parking for carpool/vanpool Preferential parking can be placed in the temporary surface parking lot during Phases 1-3, then moved to the parking garages	
Bike-share program May start as a small bike fleet and be scaled up as later phases are completed	
Central Uber/Lyft/AV pick up/drop off area At least one temporary pick up/drop off area will be established at a central location for Phases 1-4 until the long-term one is built on Dailey Road	
Designate TDM Coordinator	

Project-Specific TDM	Mitigated TDM
Ongoing During Phase 1–4 Implementation	
Additional 5 vehicles to carshare program The additional 5 vehicles may be added during any of the phases, resulting in 10 vehicles total	**Additional 5 vehicles to carshare program** The additional 5 vehicles may be added during any of the phases, resulting in 15 vehicles total
Reduced vehicle parking ratios	**Discounted carshare rates available for employees and residents in Student/Faculty Housing**
Bicycle parking	**Additional bicycle/scooter/micromobility parking**
Annual bike promotion event	**Provide bike purchase discounts/subsidies of 25% or more at annual bike promotion event**
Connected bicycle network	
Showers and lockers for bike commuters	
Connected pedestrian network	
Implement traffic calming measures	

Source: Fehr & Peers, 2025.

Monitoring and Compliance

The Project Proponent will have the opportunity to periodically examine and adjust TDM measures to achieve the desired trip reduction goal. Ineffective or less effective measures may be removed and/or adjusted as long as overall trip reduction targets are met. Approximately one year after Phase 1 receives an issuance of a Certificate of Occupancy and once every 2 years thereafter, the Project Proponent will conduct a daily vehicle trip survey on a weekday on the Project Site. The survey will count vehicles entering and leaving the parking garages and entering and leaving the pick-up/drop off zones. The survey results and trip reduction percentage will be submitted to NASA and the TMA.

If the daily vehicle trips exceed the 31 percent daily trip reduction goal, the project will be deemed non-compliant and the TDM Coordinator will submit a plan to NASA and the TMA detailing modifications to the TDM Program to achieve compliance and a timeline for implementation. The TDM Coordinator may conduct additional surveys to determine travel modes to guide refining the TDM Program. One year after the project is deemed non-compliant, a follow-up vehicle count survey will be conducted. If the vehicle counts still show that the project is non-compliant, NASA or the TMA will impose additional TDM strategies until the project is compliant.

Glossary

Active Uses: Ground-floor or accessible spaces that attract people and activity, such as shops, cafés, or community facilities.

Advanced Air Mobility: Emerging air transportation systems such as drones and Electric Vertical Take Off/Landing (eVTOL) aircraft intended to move people or goods within urban and regional areas.

Autonomous Vehicles: Vehicles capable of sensing their environment and operating without direct human control.

Caltrain GoPass: A transit benefit program that allows unlimited rides on Caltrain for employees or residents within participating organizations or developments.

CEQA: The California Environmental Quality Act, a state law requiring public agencies to assess and disclose the environmental impacts of proposed projects.

CEQA Mitigation: Measures designed to reduce or eliminate the significant environmental impacts identified through the CEQA review process.

Certificate of Occupancy: An official document issued by a local authority confirming that a building complies with applicable codes and is approved for occupancy or use.

Clipper® BayPass: A regional pilot program offering unlimited rides through the Clipper® card on multiple Bay Area transit systems including BART, Caltrain, VTA, Muni, AC Transit, and others.

Development Guidelines: A set of detailed planning and design standards for the project.

Internalization: The reduction of external trip generation by enabling people to meet their daily travel needs within the Project Site through walking, cycling, transit, or other sustainable travel options.

Light Rail Transit (LRT): An electric-powered passenger rail system operating on fixed tracks, typically serving urban areas with frequent stops and moderate passenger capacity.

Master Plan: A plan that describes the spatial vision and principles for the design of the project.

Mixed-use: Development that combines multiple functions, such as residential, commercial, and office, within a single building or area.

NASA Ames Transportation Management Association (TMA): An organization established in the early 2000s to run the TDM programs for Moffett Field, manage the parking supply, and support TDM programs from developments in NASA ARC.

National Aeronautics and Space Administration: The United States' government agency responsible for the nation's civilian space program and for aeronautics and aerospace research.

National Aeronautics and Space Administration's Ames Research Center (NASA ARC): A major NASA research facility located on 500 acres in Mountain View, California.

Santa Clara Valley Transportation Authority (VTA): The public transportation and congestion management agency serving Santa Clara County. VTA operates bus, light rail, and paratransit services.

Short-term Housing: Temporary residential accommodations for staff, researchers, academics, tenants, and their families. These facilities include studio suite-style guest rooms, with a kitchen, ensuite bathroom, and small living area. The project's short-term housing would be available for affiliates of NASA Ames, UC Berkeley, private industry and non-profit organizations.

Single Occupancy Vehicle: A vehicle driven by one person without passengers.

Transportation Demand Management (TDM): A set of strategies and programs that reduce Single Occupancy Vehicles trips by encouraging and enabling alternative modes such as public transit, carpooling, biking, and walking.

TDM Coordinator: A designated individual responsible for implementing and monitoring Transportation Demand Management programs for a site or organization.

Transit Hub: Centralized locations where different modes of transportation converge, making it convenient for users to transfer from one mode to another. They are designed with the idea of integrating transit options and supporting a seamless travel experience.

Vehicle Miles Traveled (VMT): A measurement of the total miles driven by all vehicles within a specific area or time period used to assess transportation efficiency and environmental impact.

VTA SmartPass: A transit pass program offered by the Santa Clara Valley Transportation Authority (VTA) that provides unlimited rides on VTA buses and light rail for eligible employees or residents.

Appendix A. TDM Program Framework

Transportation Demand Program Element	Project-Specific TDM Program (22 percent Vehicle Trip Reduction Target)	Additional Measures Under Mitigated TDM Program	Project-Specific + Mitigated TDM Program (31 percent Vehicle Trip Reduction Target)
TDM Program Management / Transportation Management Association (TMA)	• TMA membership/participation • Designated TDM coordinator overseeing marketing and promotion • Project Proponent responsible for conducting periodic (every 1-2 years) vehicle count surveys; Project Proponent to adjust TDM measures as appropriate to maintain compliance; NASA or TMA to impose additional TDM measures if compliance is not met after one year		• TMA membership/participation • Designated TDM coordinator overseeing marketing and promotion • Project Proponent responsible for conducting periodic (every 1-2 years) vehicle count surveys; Project Proponent to adjust TDM measures as appropriate to maintain compliance; NASA or TMA to impose additional TDM measures if compliance is not met after one year
Transit and Shuttles	• Site-wide shuttle system connecting to nearby transit hubs (operated by TMA or Project Proponent) • Slightly discounted transit passes available to all employees and residents in Student/Faculty Housing • Guaranteed Ride Home program	• Heavily discounted/free transit passes available to all employees and residents in Student/Faculty Housing	• Site-wide shuttle system connecting to nearby destinations and transit hubs (operated by TMA or Project Proponent) • Heavily discounted/free transit passes available to all employees and residents in Student/Faculty Housing • Guaranteed Ride Home program
Bicycles	• On-site Class I and II bike parking in quantities using Moffett Park Specific Plan ratios • Showers and lockers for bike commuters • Bike-share program • Annual bike promotion event • Connected bicycle network on Project Site	• Additional 50% more on-site Class I and II bike parking • Scooter/micromobility parking (20% of total bike parking supply) • Provide bike purchase discounts/subsidies of 25% or more at annual bike promotion event • Support expanding bicycle network to connect to regional multi-use pathways and Bayshore / NASA VTA LRT Station	• 50% more on-site Class I and II bike parking than Moffett Park Specific Plan requires • Scooter/micromobility parking (20% of total bike parking supply) • Showers and lockers for bike commuters • Bike-share program • Annual bike promotion event, with bike purchase discounts/subsidies of 25% or more • Connected bicycle network on Project Site • Support expanding bicycle network to connect to regional multi-use pathways and Bayshore / NASA VTA LRT Station

Transportation Demand Program Element	Project-Specific TDM Program (22 percent Vehicle Trip Reduction Target)	Additional Measures Under Mitigated TDM Program	Project-Specific + Mitigated TDM Program (31 percent Vehicle Trip Reduction Target)
Pedestrians	• Connected pedestrian network on Project Site	• Support expanding pedestrian network to connect to regional multi-use pathways and Bayshore / NASA VTA LRT Station	• Connected pedestrian network on Project Site • Support expanding pedestrian network to connect to regional multi-use pathways and Bayshore / NASA VTA LRT Station
Traffic Calming	• Narrow lanes, add curbs, specialized crosswalk paving, curb extensions, improved street crossings, and planting trees along the roadways on-site		• Narrow lanes, add curbs, specialized crosswalk paving, curb extensions, improved street crossings, and planting trees along the roadways on-site
Carpooling and Carshare	• Carpool/vanpool preferential parking • Central Uber/Lyft/AV pick up/drop off area • Participation in carshare program with at least 10 carshare vehicles	• +5 carshare vehicles • Discounted rates for carshare program available for employees and residents in Student/Faculty Housing	• Carpool/vanpool preferential parking • Central Uber/Lyft/AV pick up/drop off area • Participation in carshare program with at least 15 carshare vehicles; discounted rates available for employees and residents in Student/Faculty Housing
Parking Management	• Reduced vehicle parking ratios consistent with the Development Guidelines • Parking cash-out program for employees and residents in Student/Faculty Housing	• Replace parking cash-out program with paid on-site parking for all residents, employees, and visitors	• Reduced vehicle parking ratios consistent with the Development Guidelines • Paid on-site parking for all residents, employees, and visitors
Other	• Support strategies to reduce trips through AAM such as eVTOL and drone deliveries		• Support strategies to reduce trips through AAM such as eVTOL and drone deliveries

Source: Fehr & Peers, 2025.

Appendix B. TDM Effectiveness

MXD+ Strategy Name		Project-Specific TDM	Mitigated TDM	Project-Specific + Mitigated TDM
Internalization[1]		X		X
TDM+/CAPCOA Strategy[2,3]	**CAPCOA ID**	**Project-Specific TDM**	**Mitigated TDM**	**Project-Specific + Mitigated TDM**
Implement Commute Trip Reduction Marketing	T-7	X		X
Provide Ridesharing Program	T-8	X		X
Implement Subsidized or Discounted Transit Program - All Trips	T-9-A	X	X	X
Provide End-of-Trip Bicycle Facilities	T-10	X		X
Price Workplace Parking	T-12		X	X
Implement Employee Parking Cash-Out	T-13	X		
Construct or Improve Bike Facility	T-19-A	X		X
Expand Bikeway Network	T-20	X		X
Implement Conventional Carshare Program	T-21-A	X		X
Implement Pedal (Non-Electric) Bikeshare Program	T-22-A	X		X
Extend Transit Network Coverage or Hours	T-25	X		X
Total Estimated Trip Generation Reduction		**22%**	**9%**	**31%**

Source: Fehr & Peers, 2025.

Notes:

1. Internalization reduces trip generation by enabling people to meet daily needs within the same mixed-use development
2. All TDM+ strategies are based on the California Air Pollution Control Officers Association's (CAPCOA) 2021 report *Handbook for Analyzing Greenhouse Gas Emission Reductions, Assessing Climate Vulnerabilities, and Advancing Health and Equity.* This resource evaluates the literature behind several TDM program elements and provides methods for calculating a VMT reduction associated with each strategy.
3. Each TDM Strategy may encapsulate several TDM strategies described in Appendix A.