

Google 1600 Amphitheater Way,
Mountain View, CA

100&200 West Caribbean

TDM Plan

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Information | Pre-Decisional Draft – For Review Only

Draft 1 | April 21, 2018

This report takes into account the particular
instructions and requirements of our client.

It is not intended for and should not be relied
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is undertaken to any third party.

Job number 243343-29

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Appendix A

Sample Plan Summary

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City of Sunnyvale Comments

1 Introduction and Project Description

Transportation Demand Management (TDM) is the incorporation of a variety of incentives, services, and actions that influence the reduction of single-occupant automobile trips in order to provide additional relief from congestion, parking, and air quality impacts¹.

This TDM plan has been completed in accordance with comments from the City of Sunnyvale dated 02/14/2018 (see Appendix B), the City of Sunnyvale TDM Tool Kit, and the City of Sunnyvale Draft TDM Program Guidelines. This TDM Plan is also consistent with the Moffett Park Specific Plan Trip Reduction guidelines (see Figure 1).

1.1 Land Use Description

The proposed office building site is located south of West Caribbean Drive, between Mathilda Avenue and Borregas Avenue. Figure 2 presents a map of the site location and Figure 3 presents the proposed site plan.

The project includes two new 5-story office buildings totaling 1,041,890 square feet. The two buildings are situated on either side of the West Channel – 100 West Caribbean to the east of the West Channel and 200 West Caribbean to the west of the West Channel. Surface parking is provided on both sites and a parking structure is provided on the corner of Mathilda Avenue and West Caribbean Drive. The project site plan includes two shuttle drop-off areas and an appropriate number of trash enclosures and loading docks. A number of pedestrian and bicycle facilities are also provided in and around the site.

The site will have approximately 2,085 vehicle parking spaces, with 210 spaces for carpool and up to 210 spaces for electric vehicles. In total 585 bicycle parking spaces are provided: 303 spaces near 100 West Caribbean and 282 spaces near 200 West Caribbean. The bicycle parking includes short-term and long-term spaces including 121 short term bike racks, 232 long-term bicycle parking and 232 Google secure (Class I) bicycle parking.

1.2 Trip Reduction Goals

The trip reduction mitigation measures in the TDM plan are essential to achieve the trip reduction goals for the project.

¹ City of Sunnyvale Draft TDM Program Guidelines, November 2015.

Figure 1: Moffett Park Specific Plan TDM Trip Reductions (source: City of Sunnyvale Moffett Park Specific Plan, 2013 Amended)

Major Moffett Park Design Permit Completeness

- Complies with all zoning and development standards for the Moffett Park Specific Plan area, in addition to general procedures and requirements of the Sunnyvale Municipal Code.
- Appropriate environmental (CEQA) documentation
- TDM Plan with the following trip reduction. Peak hour reductions will also be required:

Development Intensity (including phases)	Total	Peak Hour
Up to 50% FAR	20%	30%
>50-60%	22.5%	30%
>60-70%	25%	30%

- Design Team includes a Certified Accredited LEED Professional
- Project information necessary to determine green building features for the applicable level of sustainable design.

Together, these factors aim for a 25 percent total vehicle trip reduction and a 30 percent reduction during peak hours relative to typical Institute of Transportation Engineers (ITE) trip generation rates, as identified in the Moffett Park Specific Plan, the TDM Tool Kit, and the Sunnyvale Draft TDM Guidelines.

1.3 Area Map

See Figure 2 for a map showing the location of 100 and 200 West Caribbean.

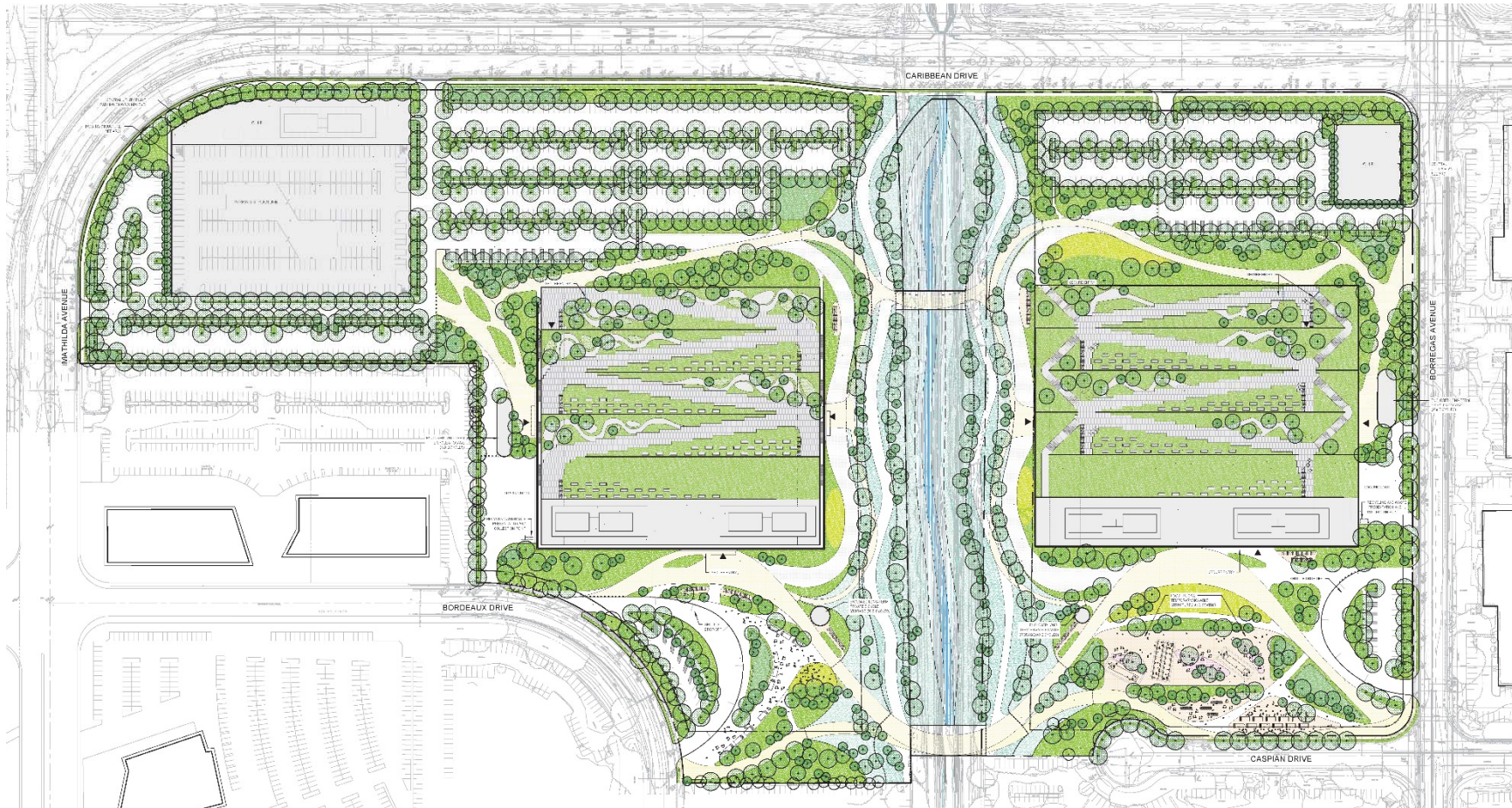
1.4 Site Plan

See Figure 3 for a site plan of 100 and 200 West Caribbean.

Figure 2: 100 and 200 West Caribbean Area Map



Figure 3: 100 and 200 West Caribbean Site Plan



2 Trip Reduction Program and Mitigation Measures

The following programs will be offered to the tenant's employees to achieve the trip reduction goals. The programs are organized into two categories: baseline measures, which the tenant will include in their TDM plan, and optional measures that may be included to help meet the trip reduction goals.

2.1 Baseline TDM Programs

The baseline TDM programs that the project will implement are described below.

2.1.1 On-Site TDM Coordinator

A transportation program as extensive as Google's requires an entire team. The role of "transportation coordinator" is currently shared by a team of dedicated on-site transportation professionals. The Google Transportation Team is supported by both Google employees and contractors to deliver transportation services. The team is well-positioned to proactively plan for changes in travel demand, adjust and implement new services, and monitor the impacts of changes, all while responding to a host of day-to-day operational challenges. The TDM Plan proposed for 100 and 200 West Caribbean will be administered and managed through the Google Transportation Team.

2.1.2 Membership in Transportation Management Association (TMA)

A Transportation Management Association (TMA) is an organized group (typically non-profit) that works to support TDM and related commuter transportation strategies for both private and public employers and their employees.

The Moffett Park Business Group operates as a Transportation Management Association. The TMA provides:

- Commuter resources
- Carpool and vanpool matching
- Transportation consulting
- Employee commute surveys
- Guaranteed Ride Home
- Enhanced bicycle facilities
- Car and vanpool incentives
- Transit advocacy
- Information on local issues
- Training
- Marketing programs
- Promotional assistance
- Newsletters



Carpool Parking

Photo © Arup

Google is a member of the Moffett Park Business Group TMA, and actively participates in the TMA programs and remains connected about alternative commute programs, incentives, and transportation projects affecting Moffett Park businesses.

2.1.3 Priority Parking for Carpools, Vanpools, and Clean-Fuel Vehicles

Reserved parking will be conveniently located for all carpoolers, vanpoolers, and clean-fuel vehicles. Parking for personal electric vehicles, carpools and expectant mothers will be provided close to main building entrances. For electric vehicle parking spaces, Google is required to provide at least 10% of the overall stall count – 210 spaces. A total of 42 accessible parking spaces will be provided for people with disabilities. The number and type of parking provided is summarized in Table 1.

Table 1: Parking Availability

Type of Parking	Parking Spaces Provided
Total Shared and Commercial Parking Spaces	2,085
Carpool (and Vanpool) Parking	10% of total spaces/210 spaces
Electric Vehicle Charging Spaces	10% of total spaces/210 spaces
ADA spaces	2% of total spaces/42 spaces including 8 ADA van spaces
Expectant mother	2% of total spaces/42 spaces

2.1.4 Bicycle Parking and Sharing, Shower and Changing Facilities

To facilitate bicycling as a major mode of transportation, secure and ample bicycle parking is required. This includes providing both short-term and long-term bike parking. As shown in Table 2, a total of 121 short-term (Class II) bicycle racks, 232 long-term bicycle parking, and 232 Google secure (Class I) bicycle parking will be provided.

As part of Google's bike sharing system, the site will also accommodate GBikes and Vbikes. The GBike program provides convenience and flexibility for on-campus transportation. GBikes are readily available in Moffett Park; users can pick one up and go. GBikes can be left at any building entrance but are most often used between Google buildings and to reach shuttle stops. Google also operates the Vbike program, assigning hybrid bikes to short-term employees for commute purposes.

Electric pedal-assist bicycles, or e-bikes, are a relatively new addition to Google's shared bicycle fleet. In 2015 Google rolled out a set of e-bikes to employees for longer-distance commuting to work. Employees in Moffett Park are eligible for this program.

Also, to complement a worksite's bicycle and active transportation facilities, showers and changing facilities are important for employees who walk or bike to work or for those who wish to change after commuting via alternative modes of transportation. At 100 and 200 West Caribbean, 25 and 22 showers with changing facilities will be provided respectively.

Table 2: Bicycle Parking Provision

Type of Parking	Parking Spaces Provided
Short-term (Class II) bicycle parking (racks lockable in two points on a bike)	100 West Caribbean: 63 200 West Caribbean: 58 Total: 121
Long-term bicycle parking (covered, lockable enclosure protected from rain)	100 West Caribbean: 120 200 West Caribbean: 112 Total: 232
Google secure (Class I) bicycle parking (secure, weather protected)	100 West Caribbean: 120 200 West Caribbean: 112 Total: 232
Total	585



Short-Term Bike Parking Photo © Alta Planning

2.1.5 Guaranteed Ride Home Program

Google's Emergency Ride Home (ERH) program (functionally equivalent to the Guaranteed Ride Home program described in the TDM Tool Kit) is available to

all employees who use alternate modes of transportation and who experience an emergency. The ERH program includes roadside assistance for cyclists, rides home in a vanpool, and/or taxi reimbursement. ERH is a supporting service that makes transit, shuttle services, carpooling, ridesharing, and bicycling viable transportation choices.

2.1.6 Rideshare Matching Services

Google provides an enhanced rideshare program available to all Google employees. Using Waze technology, potential carpoolers are able to dynamically match up with each other using an app, with drivers being reimbursed for their costs only. Waze carpoolers can use the designated carpool parking spaces.

2.1.7 Pre-tax Commuter Benefits

Pre-tax commuter benefits will be provided through payroll deductions and a third-party provider. Consistent with the provisions in the federal tax code, employees have the opportunity to pay for transit passes using pre-tax dollars.

2.1.8 Marketing and Information

Google will lead the marketing and promotion of the TDM programs, which is critical to the success of the TDM measures. In addition to providing information on transit and bike maps, Guaranteed Ride Home program, rideshare matching services, and pre-tax commuter benefits, Google will promote special events and recurring TDM programs to employees. This may include active transportation events such as Bike to Work Day, monthly or quarterly bike repair and commute workshops, fitness competitions, and other incentive programs.

Additional ways to promote the TDM programs include:

- Embedded materials within new hire packets and orientation
- Transportation fairs; combined with benefits/health fairs to increase attendance
- Regularly published electronic newsletters
- Informational email blasts
- Commuter information boards/kiosks located in prominent, central locations like the building lobby
- Employer/TMA website with information and links to local relevant agencies, forms, and services

2.2 Optional TDM Programs

This section provides additional TDM programs that Google has in place at some of its worksites and which may be implemented at 100 and 200 West Caribbean.

2.2.1 Employer Commuter Shuttle Services

Google has in place employer shuttle bus services to the Moffett Park Specific Plan area to serve Google employees already located in the area. Shuttle stops will be provided on 100 West Caribbean, off Borregas Avenue and on 200 West Caribbean, off Bordeaux Drive. Both home-based shuttles and connector shuttles will stop at 100 and 200 West Caribbean. The services will be split between the two bus stops based on the direction of the route.

Google's commuter shuttle program began in 2006 and has since grown to be one of the Bay Area's largest and most successful employer shuttle programs. According to a 2014 employee survey, Google's overall commuter shuttle mode share has reached 35%, while it is approximately 90% for specific markets such as San Francisco. The shuttle program has dozens of stops located throughout the Bay Area, with each shuttle route typically serving no more than three stops (to reduce travel time), and serving most stops with better than 30 minute headways. Free Wi-Fi is offered on board each shuttle.



Google Shuttle Buses

Photo © Arup

The shuttle program is operated on weekdays and is free to employees. Contractors may ride for a nominal fee in accordance with federal tax codes. The Google Transportation Team actively manages the shuttle program in collaboration with contractor suppliers who dispatch and provide drivers. Together, the team responds to day-to-day challenges such as traffic accidents, surges in demand, and bus breakdowns.

Commuter shuttles are especially effective in reducing drive alone mode share, since commute shuttles offer higher vehicle occupancy than carpools and vanpools. Google operates both single-and double-decker shuttles, with capacity ranging from 50 to 70 employees, respectively. All shuttles are equipped with internal and/or external bicycle storage.

One hallmark of the shuttle program is the ability to adjust service to meet growing demand. The Google Transportation Team continuously monitors population growth, preferences, and trends via regular employee surveys and employee feedback. As office locations are added, they also adjust services to those locations. Primary approaches to increase service have been to add stops,

add park and ride lots, create new routes, increase frequency, and use higher-capacity vehicles.

2.2.2 Flexible Work Schedule Program

Flexible work schedules provide versatility to employees and can reduce the numbers of commuters during typical peak work hours. Options can include:

- Occasional working from home (as agreed with supervisors)
- Schedule shifting
- Working from other offices or remote locations (if applicable)
- Gradual return to work (from long-term leaves)
- Formal part-time schedules
- Job sharing

Google will likely extend these options to employees at 100 and 200 West Caribbean.

2.2.3 Subsidized or Free Vanpools or Carpools

Google currently subsidizes vanpools by providing vans, fuel, toll expenses, and vehicle maintenance. Google is reviewing plans to expand this program to increase participation, with a particular focus on areas that are not well-served by the shuttle service.

2.2.4 Subsidized or Free Transit Passes

Google currently subsidizes VTA Eco Passes for its employees in Moffett Park buildings.

2.2.5 Bike Helmets and Locks

Bicycle helmets are currently provided in building lobbies for Google employee use, and will likely be included at this site. Bicycle locks are provided with each VBike. Secure bicycle parking is also provided for Google employees.

2.2.6 On-Site Bike Repair Facilities

Google employees in Moffett Park may make appointments for discounted tune-ups. These services are available approximately once per month from an onsite vendor. Self-repair stations in bike parking areas are also available in various locations within Moffett Park and may be provided at 100 and 200 West Caribbean.

**On-Site Repair Facility**

Photo © Alta Planning

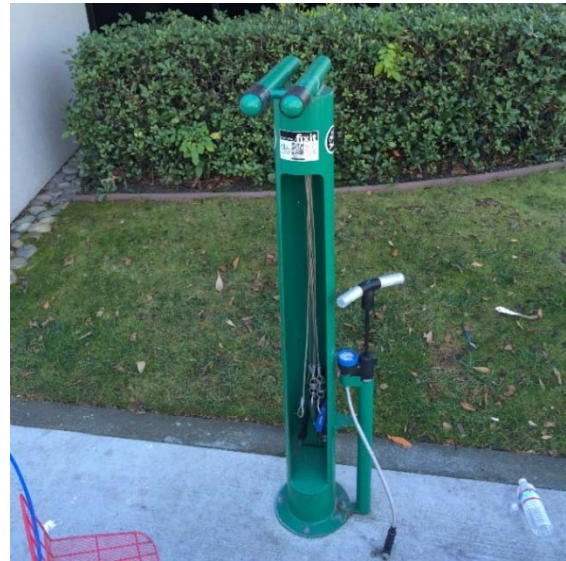
**Self-repair station**

Photo © Alta Planning

2.2.7 Car Sharing

Google employees currently have access to several car sharing options, including Google's fleet of shared vehicles (GFleet) and subsidized membership to external car sharing organizations. Access to shared cars for activities such as errands, doctors' appointments, and off-campus meetings reduces employees' anxiety of leaving their cars at home. Google maintains an all-electric fleet of over 60 car share vehicles that are available to all employees, free of charge, during work hours. GFleet vehicles are used for trips that begin and end at a Google campus.

2.2.8 Incentives and Rewards

Google employees are encouraged to log their non-single occupant car trips to an online website. Employees that track their trips online are eligible to win transportation-related rewards.

3 Planning and Design Measures

The project's location and physical context provides access to public transit and bicycle routes, which will complement the TDM program measures listed in Section 2.

3.1 Transit Service

A variety of transit services serve the project site. VTA Light Rail and several VTA bus routes stop within a quarter mile or less from the site. The Altamont

Corridor Express (ACE) Train provides a shuttle for commuters from the east (as far east as Stockton, passing through Lathrop, Tracy, Livermore, Pleasanton, and Fremont). Caltrain provides service to Sunnyvale, which connects to the VTA Light Rail stations around the site.

Table 3 shows a summary of the transit services available for employees at the office site. Maps of these routes are provided in Figure 4 through Figure 12.

Table 3: Transit Services Serving 100 and 200 W Caribbean Drive (source: VTA)

Service	Description	Nearby Stops	Service Hours
VTA Bus 26	Sunnyvale/Lockheed Martin Transit Center to Eastridge Transit Center	Java & Bordeaux (0.1 mi)	5:14AM-11:50PM (weekdays)
VTA Bus 54	De Anza College to Sunnyvale/Lockheed Martin Transit Center	Lockheed Martin Transit Center (0.6 mi)	6:03AM-9:29PM (weekdays)
VTA Bus 120	Fremont BART to Lockheed Martin Transit Center/Moffett Park	Java & Bordeaux (0.1 mi)	6:16AM-7:12PM (weekdays)
VTA Bus 121	Gilroy Transit Center to Lockheed Martin Transit Center/Moffett Park	Java & Bordeaux (0.1 mi)	4:30AM-7:36PM (weekdays)
VTA Bus 122	South San Jose to Lockheed Martin/Moffett Park	Java & Bordeaux (0.1 mi)	5:52AM-6:02PM (weekdays)
VTA Bus 321	Great Mall/Main Transit Center to Lockheed Martin/Moffett Park	Java & Bordeaux (0.1 mi)	8:11AM-6:38PM (weekdays)
VTA Bus 328	Almaden Expwy & Camden to Lockheed Martin/Moffett Park	Java & Bordeaux (0.1 mi)	5:57AM-7:14PM (weekdays)
VTA LRT 902	Mountain View to Winchester	Borregas Light Rail Station (0.2 mi)	4:42AM-12:45AM (weekdays)
826 (ACE Shuttle)	Great America ACE Station to Lockheed Martin Transit Center	Java & Bordeaux (0.1 mi)	6:16AM-6:39PM (weekdays)

Google 1600 Amphitheater Way, Mountain View, CA

Figure 4: VTA Bus Route 26 (source: VTA)

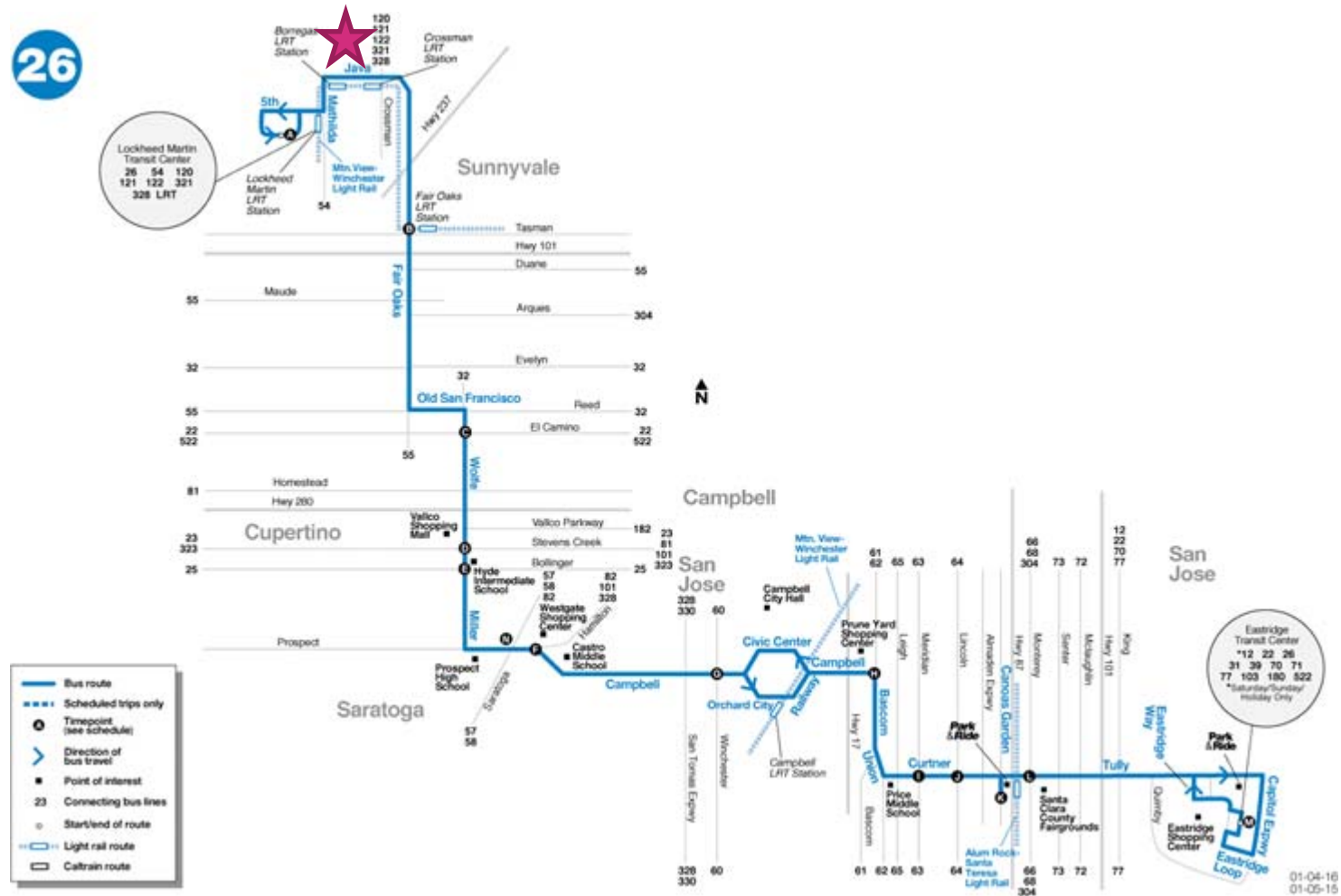
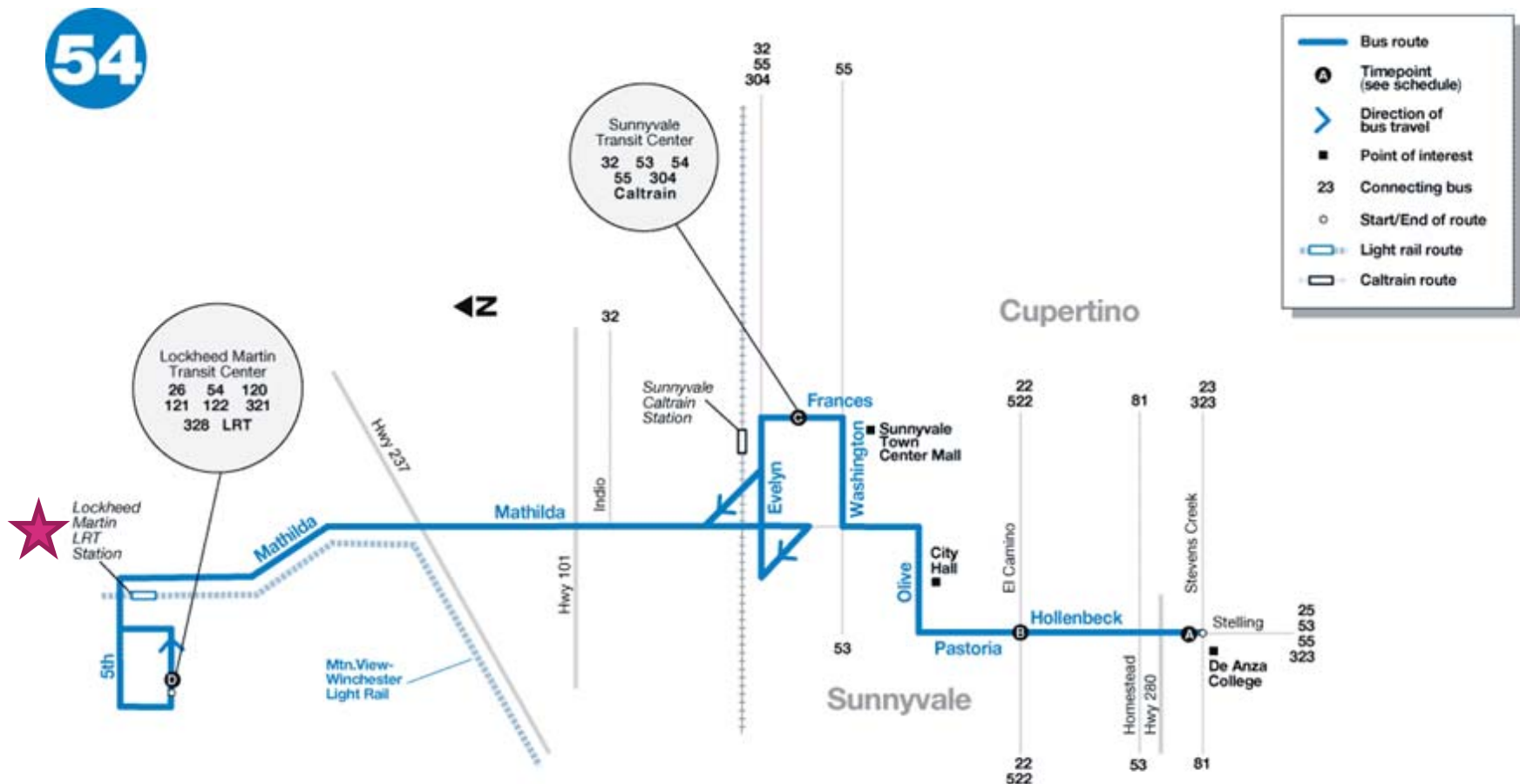


Figure 5: VTA Bus Route 54 (source: VTA)



01-04-16

Figure 6: VTA Bus Route 120 (source: VTA)

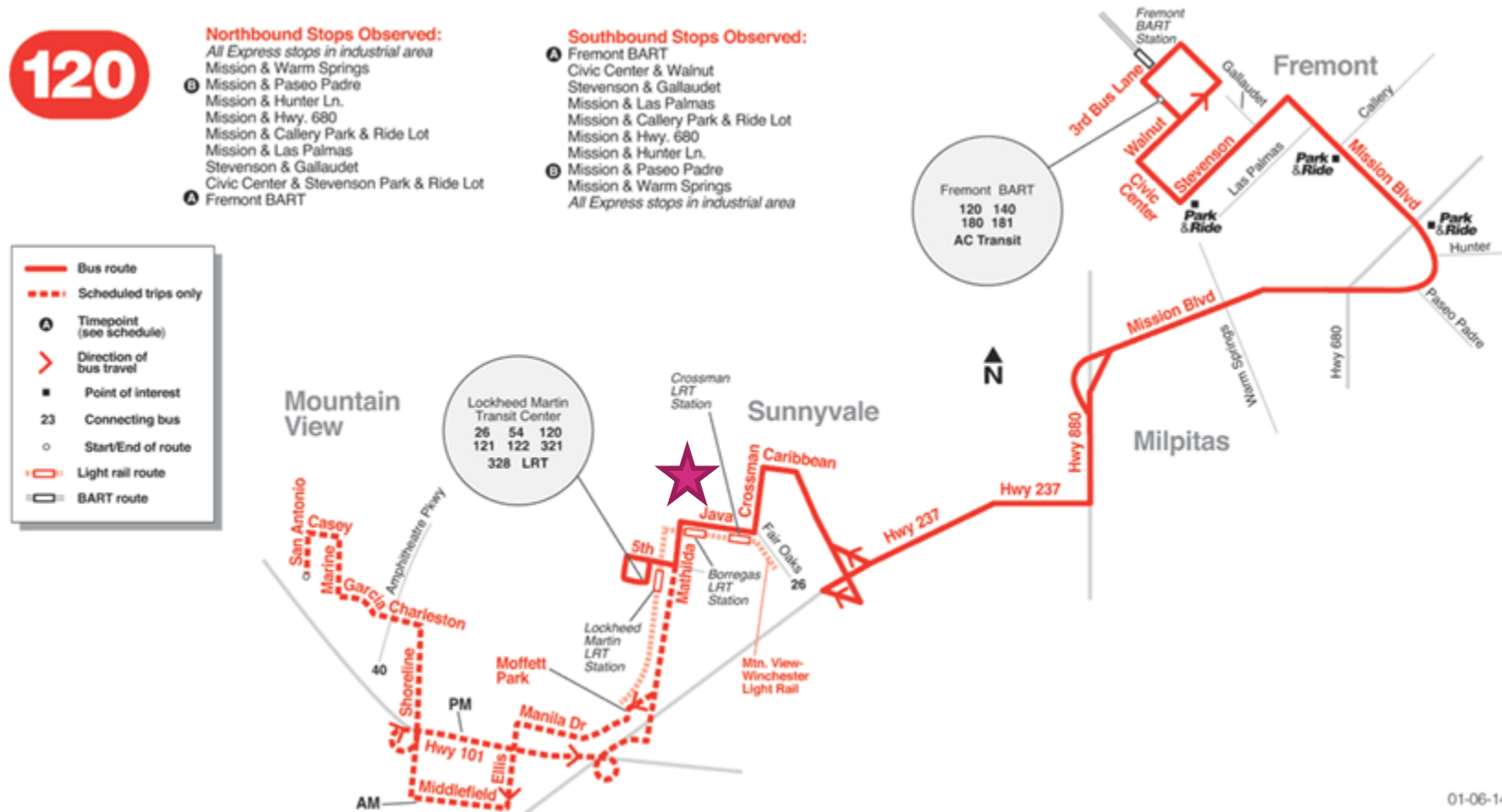


Figure 7: VTA Bus Route 121 (source: VTA)

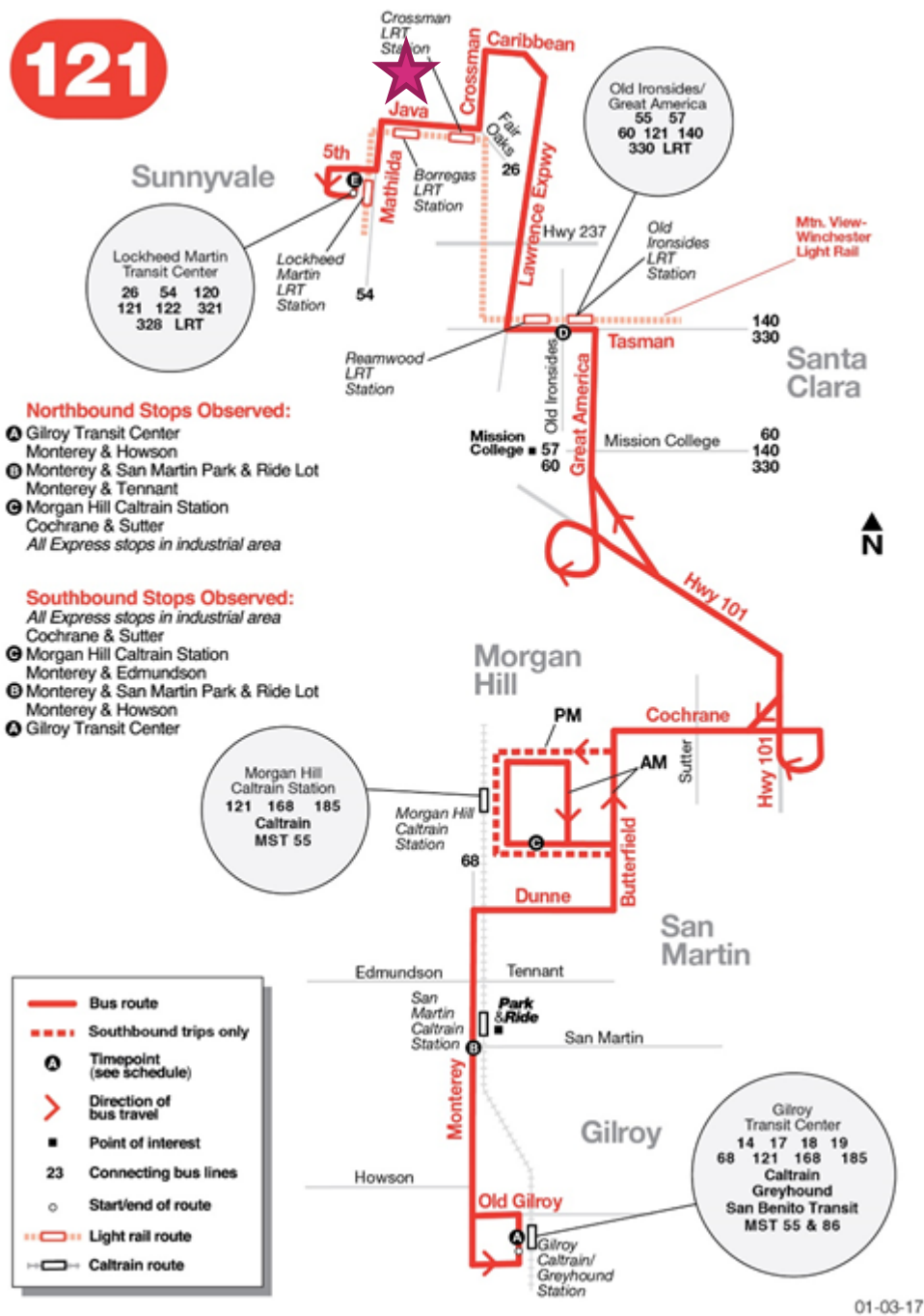
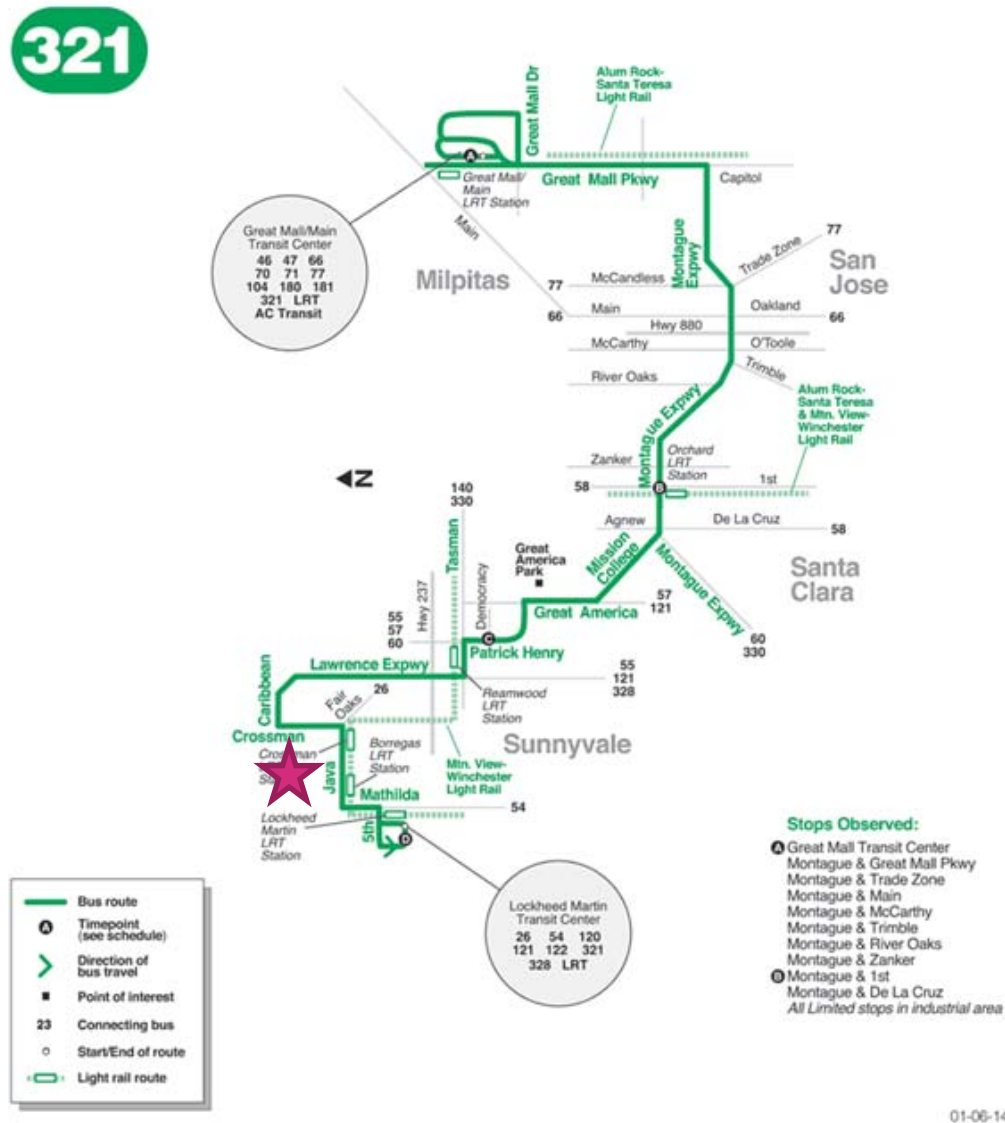


Figure 8: VTA Bus Route 122 (source: VTA)



01-05-14

Figure 9: VTA Bus Route 321 (source: VTA)



328

Northbound Stops Observed:

- A Almaden & Camden
- B Redmond & Almaden
- C Redmond & Meridian
- D Coleman & Redmond
- E Coleman & Camden
- F Camden & Blossom Hill
- G Camden & Koozer
- H Camden & Hwy. 85 Park & Ride Lot
- I Camden & Donna
- J Camden & Union
- K Camden & Bascom
- L San Tomas & Campbell
- M Hamilton & Darryl
- N Hamilton & Mendenhall
- O Hamilton & Sagemont
- P Campbell & Saratoga
- Q Prospect & Saratoga
- R Lawrence & Moorpark
- S Lawrence & Pruneridge
- T Lawrence & El Camino

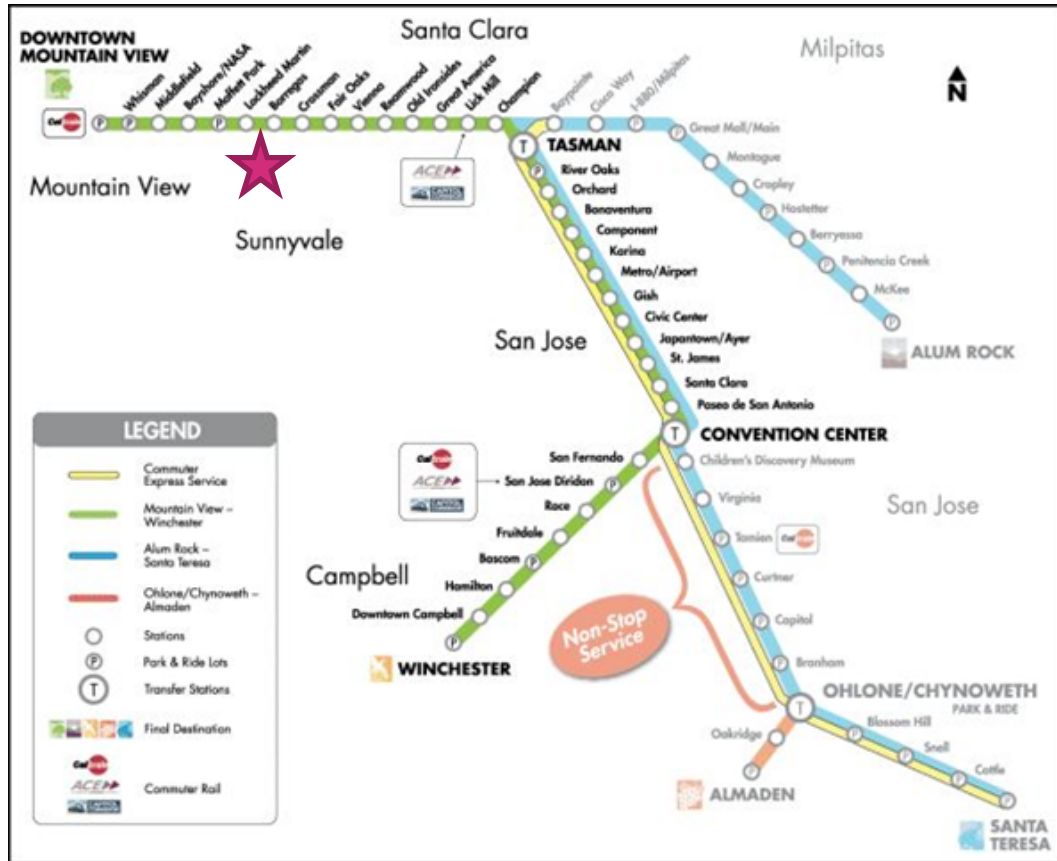
All Limited stops in industrial area

Southbound Stops Observed:

- A All Limited stops in industrial area
- B Lawrence & El Camino
- C Lawrence & Homestead
- D Lawrence & Pruneridge
- E Lawrence & Moorpark
- F Prospect & Saratoga
- G Hamilton & Sagemont
- H Hamilton & Mendenhall
- I Hamilton & Darryl
- J San Tomas & Hamilton
- K San Tomas & Campbell
- L Camden & Bascom
- M Camden & Union
- N Camden & Leigh
- O Camden & Hwy. 85 Park & Ride Lot
- P Camden & Koozer
- Q Camden & Blossom Hill
- R Coleman & Redmond
- S Redmond & Meridian
- T Almaden & Redmond
- A Almaden & Camden

The map shows the bus route 328 connecting Sunnyvale, Santa Clara, San Jose, and Saratoga. Key locations include Sunnyvale, Santa Clara, San Jose, and Saratoga. The route is shown as a green line with various stops marked by dots. A legend indicates symbols for bus route, timepoint, direction of travel, point of interest, connecting bus, start/end of route, and light rail route.

Figure 11: VTA Light Rail (source: VTA)



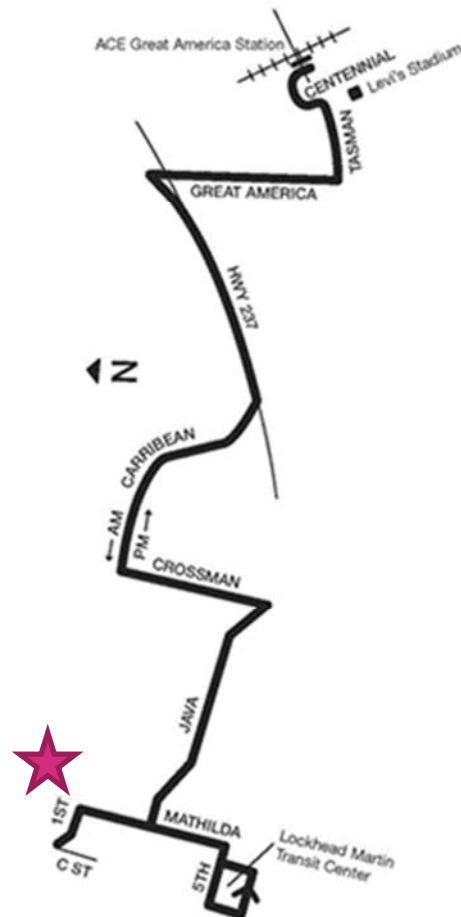
The Mountain View – Winchester line (green line) serves 100 and 200 West Caribbean.

Figure 12: ACE Red Line Shuttle 826 (source: VTA)

ACE Red Shuttle

JAN 30 2017

North Sunnyvale
826



VTA 4006

Caltrain

Caltrain provides a commuter rail service along the San Francisco Peninsula, through the South Bay to San Jose and Gilroy. The service operates seven days a week with various frequencies during the peak morning and evening hours. Google's employees can connect to the office site from Caltrain station in Mountain View via VTA Light Rail.

Bay Area Rapid Transit (BART)

BART is a heavy-rail system that connects riders in the East Bay and in the northern part of San Mateo County to San Francisco. The system operates seven days a week with various frequencies during the peak morning and evening hours. Commuters using BART can connect to VTA bus route 120 from the Fremont BART station.

3.2 Bicycle and Pedestrian Access

The site includes a network of pedestrian pathways. A shared bike and pedestrian trail is designed east-to-west through the center of the campus site, with intentions to connect to the future West Channel trail and larger network of existing and planned bike and pedestrian infrastructure in the area. Figure 13 shows the local existing and planned trails near the project.

Additionally, the site has access to extensive pedestrian and bicycle connections to the San Francisco Bay Area. Along with local area bikeways, the site has close access to the San Francisco Bay Trail. The San Francisco Bay Trail is a planned 500-mile walking and cycling path around the San Francisco Bay, running through all nine Bay Area Counties. The Bay Trail currently has 350 miles in place.

Santa Clara Valley BIKeways MAP

Legend:

- Bikeway (solid green line)
- Shared use path (dashed green line)
- Greenway (dotted green line)
- Other (thin solid green line)
- Highway (thick solid orange line)
- Major Road (thick solid orange line)
- Local Road (thin solid orange line)
- Transit Station (blue circle with 'B')
- School (yellow star)
- Park (green area)
- Waterway (blue area)
- Other (various symbols)

Key Locations and Features:

- NASA Ames Research Center
- Moffett Field
- Sunnyvale Station
- Levi's Stadium
- Great America
- Mission College
- Sunnyvale City Park
- Washington City Park
- Central Expressway
- Highway 205, 101, 237, 880

3.3.1 Parking Management Program

Preferential parking will be made available for alternative commuters, including carpools, vanpools, and electric vehicles.

The on-site amenities and services provided at Google reduce the number of trips that employees need to take during the day and increase the feasibility of using an alternative to a single-occupancy vehicle. The project has plans for many on-site amenities, which include:

- TDM Coordinator(s)
- On-site fitness centers
- Showers and changing facilities

- Bicycle storage
- Public plaza with greenery and seating
- Green Loop bicycle & pedestrian pathway across campus site
- Pedestrian and bike circulation throughout and around the property
- On-site amenities within the building may include:
 - On-site food services and break rooms
 - Massage and meditation areas
 - Game/recreation area
 - Walking work stations
 - Mail area



Kiosk desk for on-site services

Photo © Arup



Mobile haircut services

Photo © Arup

3.5 Exhibits Highlighting TDM Plan Elements on the Project Site Plan

Figure 14 through Figure 16 show support areas in the planned floor plans for 100 and 200 West Caribbean, including bicycle and shower facilities, lounges, game rooms, massage rooms, mail areas, nap areas, laundry services, libraries, and on-site food facilities.

Figure 14: 100 West Caribbean Level 1 Building Amenities (Source: CWa)

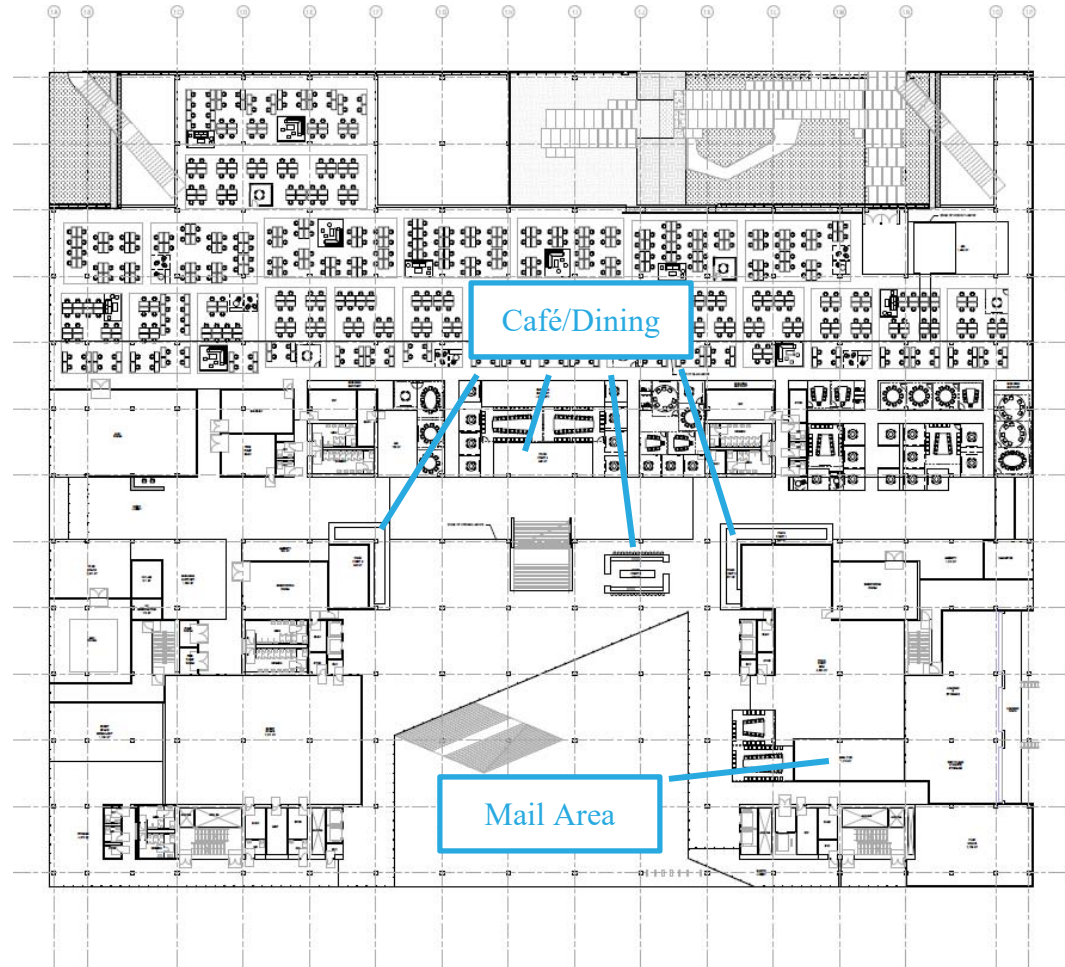


Figure 15: 200 West Caribbean Level 1 Building Amenities (Source: CWa)

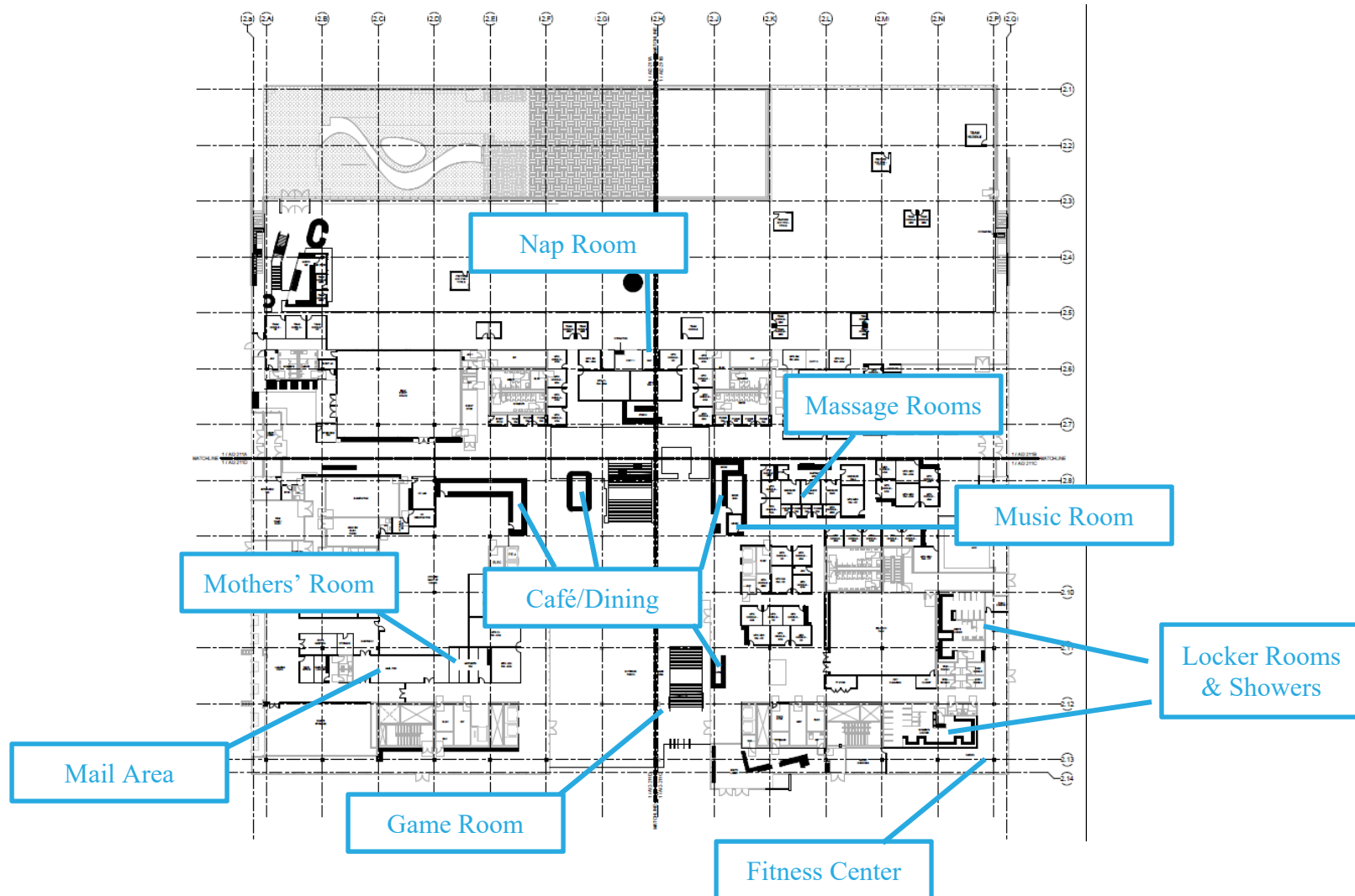
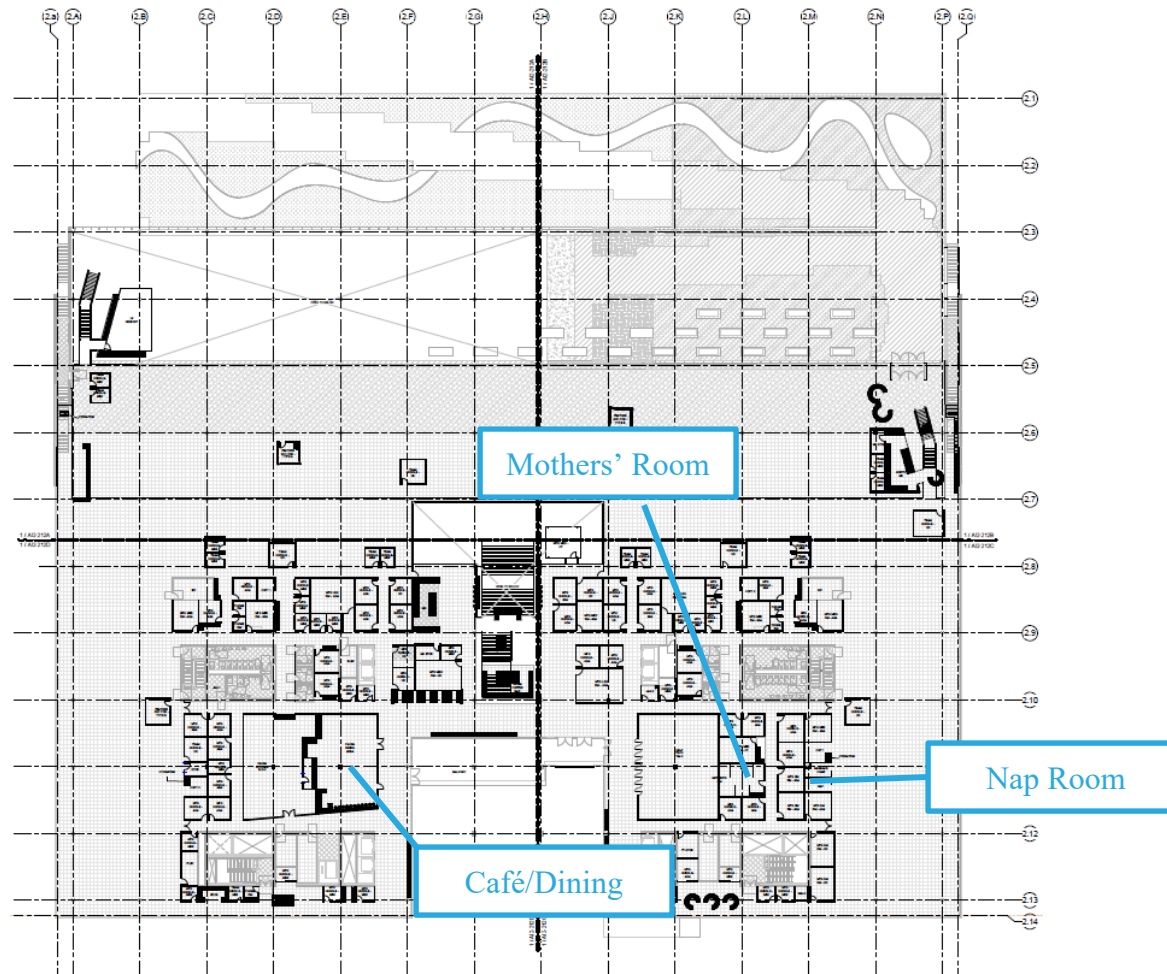


Figure 16: 200 West Caribbean Level 2 Building Amenities (Source: CWa)



4 Other TDM Programs and Measures

Refer to Section 2 for a comprehensive list of trip reduction measures and mitigations for the site.

5 Implementation Mechanism

Google will be responsible for implementing the TDM programs. TDM programs shall be complete, active, and in place upon 75% building occupancy.

Upon implementation of the program, as per requirements outlined in the TDM Program Guidelines, Google shall contact the City in writing to identify the designated TDM Coordinator, their contact information, occupancy date, and implementation date of the TDM plan. Such notification shall be sent to the City TDM Program.

6 Monitoring & Evaluation

The tenant will be responsible for annual monitoring and evaluating the TDM programs. The tenant's TDM Coordinator(s) shall produce annual reports to the City.

6.1 Preliminary Schedule

Construction of 100 and 200 West Caribbean is expected to be complete in the fourth quarter of 2021, and occupancy is anticipated in the first quarter of 2022.

6.2 Acknowledgment of Annual Driveway Trip Counts

Google acknowledges that the City will administer annual driveway trip counts beginning at 75% occupancy and agrees to pay all costs of these counts.

6.3 Acknowledgment of Non-Compliance Fees

Google acknowledges that non-compliance fees per the most recent City TDM program will apply and recognizes that fees are subject to change. The following process for determining fees, shown in Figure 17, is based on the City's TDM Program Guidelines.

Figure 17: TDM Non-compliance Penalties

Non-compliance Penalty

Non-compliance penalties will be determined by level of deficiency of the program. A \$3,000.00 per trip penalty will be used for the penalty calculation and may be assessed annually based on annual AM and PM peak hour trip counts. The fees and penalties will be adjusted annually based on Consumer Price Index (CPI) with the adoption of the city-wide fee schedule each fiscal year.

Calculation Detail:

- Compliance determination will be based on maximum allowable AM and PM peak hour trips as identified in the conditions of approval (trips will be determined by the project trip generation analysis)
- Both AM and PM peak hour trips will be surveyed; the penalty is based on the highest deficiency of the two
- Reduction factors
 - o Level 0: project is compliant, penalties are not applicable
 - o Level 1: Achieve a 0%-9.9% reduction - Pay full penalty (\$3,000 per trip in excess of maximum allowable trips)
 - o Level 2: Achieve a 10%-19.9% reduction - Pay 75 % penalty (\$2,250 per trip in excess of maximum allowable trips)
 - o Level 3: Achieve 20%-29.9% reduction - Pay 50% penalty (\$1,500 per trip in excess of maximum allowable trips)
 - o Level 4: Achieve 30% or more - Pay 25% of penalty (\$750 per trip in excess of maximum allowable trips)

Penalty Maximum:

The fees and penalties will be adjusted annually based on Consumer Price Index (CPI) with the adoption of the city-wide fee schedule each fiscal year.

Tier	Project Size	Maximum Annual Penalty
1	Less than 500,000 SF	\$300,000
2	500,000 SF to 1,000,000 SF	\$500,000
3	Greater than 1,000,000 SF	\$700,000

Example 1:

- o Project Size (P) = 425,000 SF
- o Expected AM Trips = 400
- o Expected PM Trips = 350
- o AM/PM Trip reduction goal = 30%
- o Maximum Allowable AM Trips = 280
- o Maximum Allowable PM Trips = 245
- o Actual AM Trips = 324
- o Actual PM Trips = 213
- o AM Reduction = 400-324=76 (19%)
- o PM Reduction = 350-213=137 (39%)
- o Highest Deficiency = AM Trips, 44 trips deficient of goal
- o Per trip penalty = \$2,250
- o Total penalty = \$99,000 for cycle year

Example 2:

- o Project Size (P) = 1,264,135 SF
- o Expected AM Trips = 2390
- o Expected PM Trips = 3219
- o AM/PM Trip reduction goal = 30%
- o Maximum Allowable AM Trips = 1673
- o Maximum Allowable PM Trips = 2253
- o Actual AM Trips = 2175
- o Actual PM Trips = 1931
- o AM Reduction = 2390-2175=215 (9%)
- o PM Reduction = 3219-1931 = 1288 (40%)
- o Highest Deficiency = AM Trips, 502 trips deficient of goal
- o Per trip penalty = \$3,000
- o Total penalty = \$700,000 (maximum penalty)

Penalties are subject to change at the City's discretion.

Table 4 shows the estimated weekday AM and PM peak hour vehicle trips for the project using Institute of Transportation Engineers (ITE) vehicle trip rates for the General Office Building (710)² land use code. The table also shows the trip generation allowance after applying the City's 25 percent reduction target for daily trips and the 30 percent peak hour reduction target for peak hour trips.

² ITE Trip Generation Manual 10th Edition (2018). The "Peak Hour of Generator" was used for this analysis as it represents the highest volume for the site.

Table 4: Trip Allowance Calculation for 100 & 200 West Caribbean

Land Use	ITE Code	Area (sf)	Daily		AM Peak Hour		PM Peak Hour	
			Rate	Trips	Rate	Trips	Rate	Trips
Single Tenant Office	710	1,041,890	9.74	10,148	1.47	1,532	1.42	1,479
Maximum Allowable Trips with 25%/30% Trip Reduction				7,611		1,072		1,036
Source: ITE Trip Generation Manual 10th Ed.; ITE Code 710, average rate per thousand square feet of Gross Floor Area, AM & PM peak hours.								

The maximum allowable daily trips after the 25 percent reduction are 7,611. The maximum allowable peak hour trips after the 30 percent reduction are 1,072 in the AM peak hour and 1,036 in the PM peak hour.

Program Monitoring Procedures

The City of Sunnyvale's TDM Program Guidelines specify that status reports should be filed on an annual basis. In advance of the monitoring cycle, the City will send out invoices to owners, via the designated TDM Coordinator(s). The invoices will include costs associated with driveway counts and associated staff time. Payment of the invoices will be due approximately thirty (30) days from the invoice date. Upon receipt of payment, the City will schedule the driveway counts and upon completion of the counts, the data will be provided to the owner to complete the report. The annual status report will be due to the City every year on December 31st, unless otherwise specified by the City's TDM Program Manager.

Developments that are compliant with the TDM trip reduction goals will continue with annual monitoring as scheduled. Developments that are not compliant with the goals will be re-invoiced for follow-up driveway counts. This will result in a six-month grace period and give developments the opportunity to satisfy TDM trip reduction goals before incurring penalties. This grace period is only applicable to the first annual report following occupancy. Following this grace period, all non-compliant driveway counts will incur penalties.

6.4 City TDM Program Contact Information

Mailing Address: City of Sunnyvale
Transportation Demand Program Manager
456 W. Olive Avenue
Sunnyvale, CA 94086
Phone Number: (408) 730-7415

7 TDM Coordinator Contact Information

The TDM Coordinator for 100 and 200 West Caribbean is as follows:

Name: Lucy Tice
Firm: Google LLC
Mailing Address: 1600 Amphitheater Parkway
Mountain View
Email: lucytice@google.com
Phone Number: +1 323 532 2995

Appendix A

Sample Plan Summary

Required Summary Sheet						
Site Address:						
Floor Area (square feet):						
Site Area (square feet):						
Land Use:						
TDM required as a mitigation measure (yes/no)?						
Owner(s) if known:						
List current TDM measures:						

Trip Generation Table						
	Code ¹	Land Use Description ¹	Units	Unit Type ²	AM Trips	PM Trips
Project use – 1						
Project use – 2 ³						
Project use – 3 ³						
Total						
Reduction Goal %						
Not to exceed trips						
Actual trips ⁴						
Trip deficiency(-)/exceeding goal(+)						
Notes: 1. All trip generation calculations shall be done per the latest version of the ITE Trip Generation Manual at the time of project approval. The edition applicable to this project is _____. 2. Unit type per ITE Trip Generation Manual (e.g. dwellings, occupied rooms, KSF) 3. Only applicable for multi-use projects. 4. Only applicable for annual reporting per driveway counts administered by the City.						

Rev. 11/16/15, CCO

Source: City of Sunnyvale Draft TDM Program Guidelines, November 2015.