Marine Corps Air Station Miramar

Base Overview

Marine Corps Air Station Miramar (Miramar) is located in northeast San Diego, roughly 13 miles north of downtown San Diego and 4 miles east of the Pacific Ocean (**Figure 1**). The 23,000-acre base accommodates 200 fighter and attack jets, helicopters, and cargo aircraft while serving many unique military purposes including Marine air training and coordination with other nearby military installations such as Marine Corps Base Camp Pendleton (Camp Pendleton). Miramar offers the diversity and flexibility to train Marine units for the challenges they may face in combat and help the Marine Corps prepare for its mission.

Miramar is the workplace for over 12,000 military personnel (**Table 1**)[1]. The facility has roughly 3,830 housing units for single military personnel (barracks) and 524 housing units for military families on-site. The barracks are managed by Miramar S-4 while on and off-base family housing is managed by Lincoln Military Housing.[2]
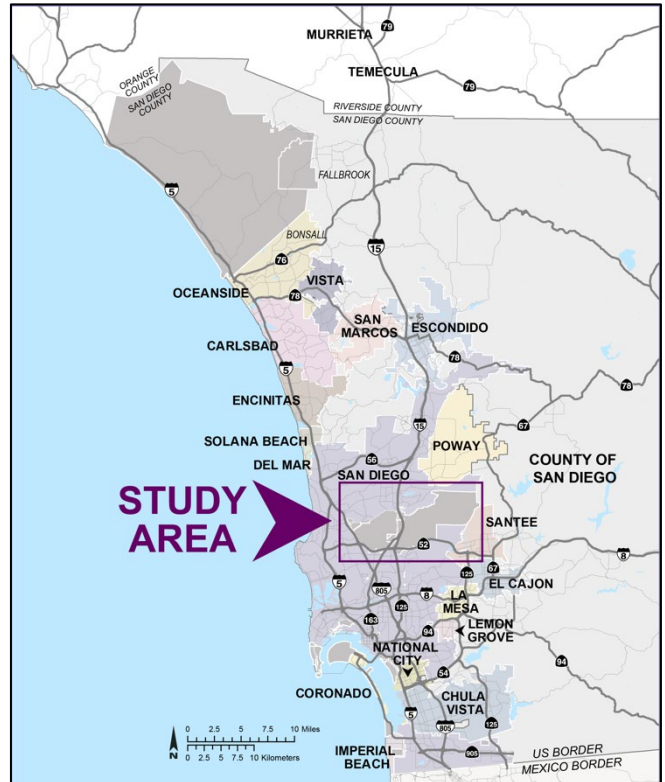
Figure 1. *MCAS Miramar location in the region*

Table 1. *MCAS Miramar population*

Military Personnel	Amount
Civilians	319
Active Duty	11,202
Reserve	918
Total Employees	**12,439**

Miramar is located within the City of San Diego and is surrounded by several communities and local jurisdictions (**Figure 2**). Mira Mesa, immediately north of the base, is one of the largest growing communities in the City of San Diego. This community is characterized by a mix of residential, industrial, and commercial land-uses. University City to the west and Kearny Mesa to the south are growing employment destinations with heavy industrial and commercial land-use. Scripps Ranch to the north, City of Santee to the east, and Tierrasanta to the south are predominantly growing residential areas.

Land Uses

Miramar is about 12 miles long from east to west and about 4 miles from north to south. The base is bordered by Interstate 805 (I-805) to the west and State Route 52 (SR 52) to the south. Interstate 15 (I-15), State Route 163 (SR 163), and Kearny Villa Road bisect the base and divide it into two areas – West and East Miramar (**Figure 2**). East Miramar is made up of coastal foothills and canyons with moderate to steep slopes. This area is primarily undeveloped and is used for military training, operational exercises, and warehousing.[3] This area supports encroachment and access control for the base's flight paths. The East Miramar Gate is the only gate that provides access to East Miramar.

West Miramar is relatively flat with deeply incised canyons. West Miramar area can be divided into two general geographic and functional sectors: Main Station and South/West Miramar. The Main Station is largely developed and includes military land-uses such as the airfield, aircraft operation areas and maintenance, supply, community support, recreation, and residential facilities. The Main Station is the main activity area of Miramar. South/West Miramar includes non-military and non-operational developments such as the Miramar landfill, a nursery, a bulk fuel storage facility, and reclaimed water program facilities.[4] Three military gates can be used to enter and exit West Miramar.

For military personnel to travel between West and East Miramar, they can either exit an access gate and enter another one using local jurisdiction roads or travel using the internal road network. There is no shuttle service that connects West and East Miramar; consequently, the majority of military personnel use personal vehicles, military-provided passenger vehicles, or operational vehicles for training.

Figure 2. *Marine Corps Air Station Miramar vicinity map*
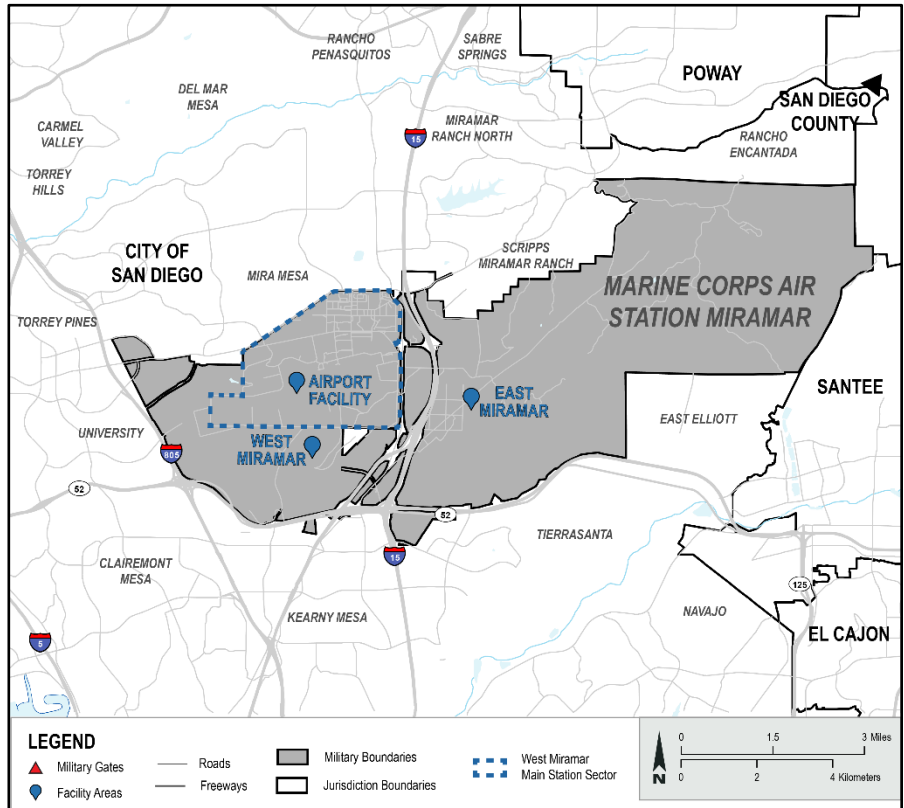
Existing Connectivity

Freeway/Road Network

There are several corridors and major arterials that provide access to Miramar. I-15, I-805, and SR 163 are three major north-south corridors, and SR 52 is a major west-east corridor (**Figure 3**). There are several Park & Ride lots along I-15 and I-805 where commuters can meet to carpool, vanpool, or access transit services (**Appendix A**). Black Mountain Road, Kearny Villa Road, Caminito Santa Fe, Carroll Road, and Miramar Road are important local roads for base access. I-15, Kearny Villa Road, and Miramar Road serve as the main corridors to and from the base.

Transit

Metropolitan Transit Systems (MTS) Route 31 is the only transit route that has stops adjacent to the base. This bus route stops along Miramar Road between I-805 and I-15 near the West and North Gates. MTS Route 31 connects the communities of University City and Mira Mesa to West Miramar. The route also stops at the UTC Transit Center and Miramar College Transit Station where riders can transfer to additional bus routes. There are no bus routes that provide direct service into and out of Miramar.

The Los Angeles – San Diego – San Luis Obispo (LOSSAN) Rail Corridor runs through the northwestern portion of the base, which is used by passenger rail services (Amtrak, Metrolink, and COASTER) and freight services (**Figure 3**). There are no stops for passenger rail service along the section of rail running through the base. The closest Amtrak or COASTER stop is at Sorrento Valley Station, which is over two miles north of Miramar.

Active Transportation

Bike facilities exist in most of the communities surrounding the base (**Figure 3**). There is a combination of Class II buffered bike lanes and Class III sharrows running east-west along Miramar Road, with a posted speed limit of 50 mph, and Pomerado Road, with a posted speed limit of 45 mph, and sidewalks along each side of the street. Miramar Road, a bidirectional six lane road, borders Miramar to the north and connects people to a variety of businesses, restaurants, and craft breweries along the corridor.

Figure 3. MCAS Miramar existing connectivity

Kearny Villa Road bisects the base and runs north-south with a posted speed limit of 65 mph and no sidewalks. There are existing buffered bike lanes with bike friendly intersections along the two-lane road running in each direction. Bike friendly intersections use green pavement markings to indicate the intended path for people riding bikes and provides clear boundaries for both people riding bikes and vehicles, which reduces potential conflict. These bike facilities help connect Miramar to destinations and bus routes in the surrounding areas.
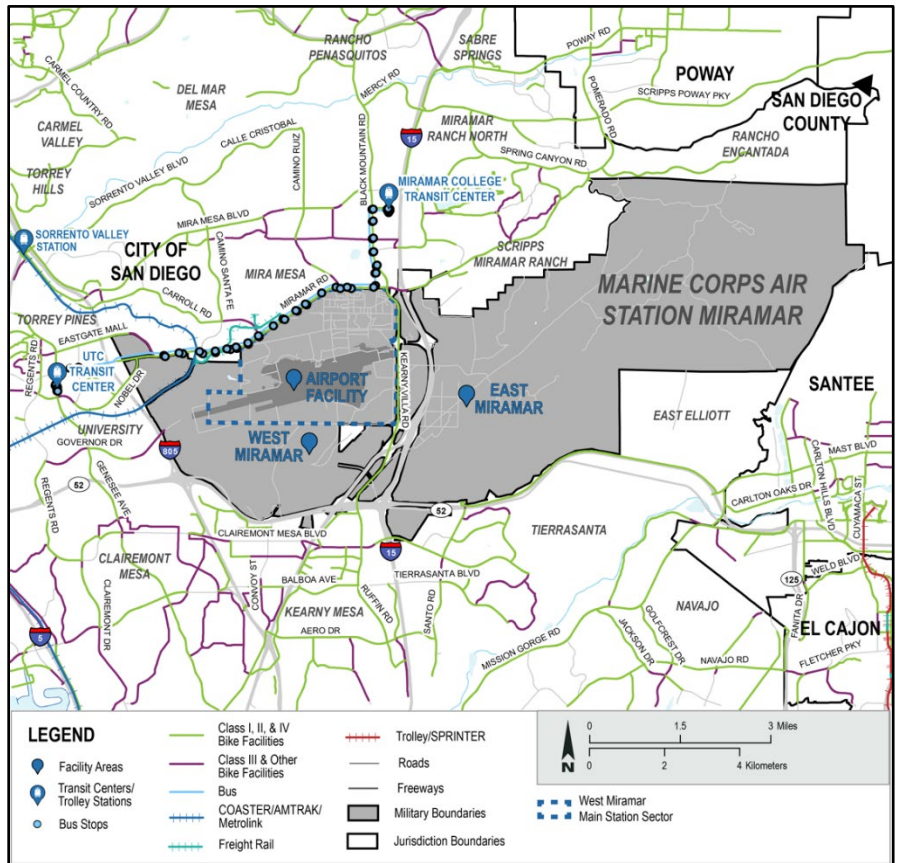
There is very little pedestrian activity on the surrounding local roads and within the base. Miramar Road and Kearny Villa Road have minimal pedestrian activity due to heavy vehicle use, lack of pedestrian amenities, and large blocks. Pedestrian activity is limited to the Main Station in West Miramar as it is the only developed area.

Mobility Programs

SANDAG iCommute works closely with Miramar to encourage alternative commute options and leverage the mobility programs available in the region.

In addition to the Waze pilot discussed in the Regional Framework, Miramar is participating in a 13-month bikeshare pilot program with Lime.[5] This pilot aims to provide a different and potentially more cost-effective transportation option for military personnel at Miramar. The Lime mobile app allows users to locate, rent, and drop bikes off at any location.

There are no pilot programs to streamline Transportation Network Companies (TNCs) to serve Miramar such as the one implemented at Camp Pendleton. Currently, TNC drivers can drop riders off within the base as long as the rider presents an acceptable security clearance at the gate. However, MCAS Miramar policy prohibits TNCs from obtaining pickup requests from within the base. Consequently, riders must request a TNC from the local streets outside the facility. There are is no designated or convenient pickup and drop-off curb space on the surrounding local streets, further hindering the ability of rideshare programs to facilitate connections from the base to the community.

There is substantial parking within the base in the Main Station Sector.

A mobility report card identifying programs and complementing infrastructure projects that support access to Miramar has been developed (**Appendix B**). Some programs have policy restrictions or contractual agreements to allow services in a military installation or City; those programs are outlined to the respective jurisdictions in the mobility report card.

Military Personnel Commuting Patterns

Miramar has more than 3,500 service members living in on-base housing and barracks. These on-base housing options are primarily located in the Main Station where nearly all activity for workspace, office buildings, and retail stores are located. The majority of people living on base use their personal vehicles to complete trips within the base.[6]

About 7,500 service members, civilian employees, and government contractors commute to the base daily. A majority of military personnel who live off-base commute to work by driving alone. There are only a few affordable housing and military housing developments for Marines near the base, so most seek housing in Riverside and southern San Diego County.

There are very limited transportation options on the base other than personally owned vehicles. There are roughly 110 passenger non-tactical vehicles (NTVs) on Miramar that military personnel can access. In addition, the base has extensive free parking options available on site. The limited transportation options and ample parking on base create an environment where personal vehicles are convenient for internal circulation.

Based on available iCommute data (January 2018), Miramar personnel are registered in 25 vanpools, which come primarily from areas of Riverside County and the City of Chula Vista. Miramar is the fourth highest military vanpool destination in the region.

With a significant number of military and civilian employees commuting by driving alone from locations across the region and in other counties, the base contributes to congestion on surrounding arterials and freeways. Specifically, Miramar Road and Black Mountain Road experience queuing during peak commuting hours; Miramar Road is congested with commuters heading toward I-15; and north of the base, the I-805/I-5 split is a bottleneck, choking traffic in both directions.
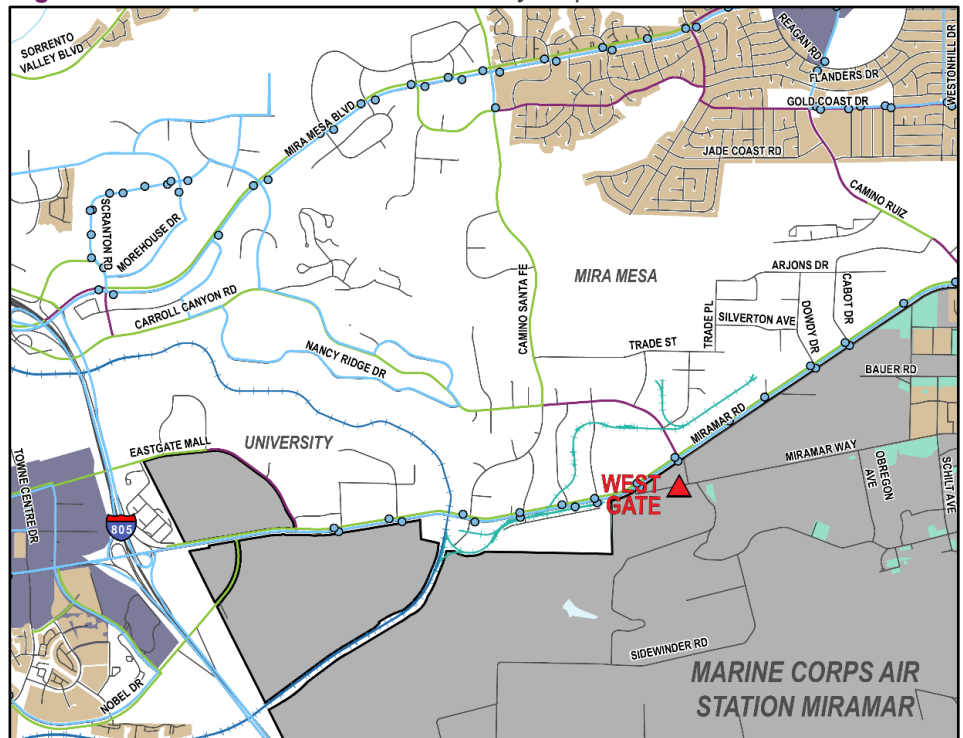
During morning peak commuting hours, queueing at the North Gate contributes to heavy congestion on Miramar Road in the westbound direction between I-15 and Camino Ruiz on the I-15 at the Miramar Road off-ramp. During the afternoon commuting hours, Miramar Road experiences heavier congestion on the eastbound direction between I-15 to Cabot Drive, and I-15 experiences moderate traffic northbound and heavy traffic on the Miramar on-ramp to enter I-15 north (**Appendix C**).
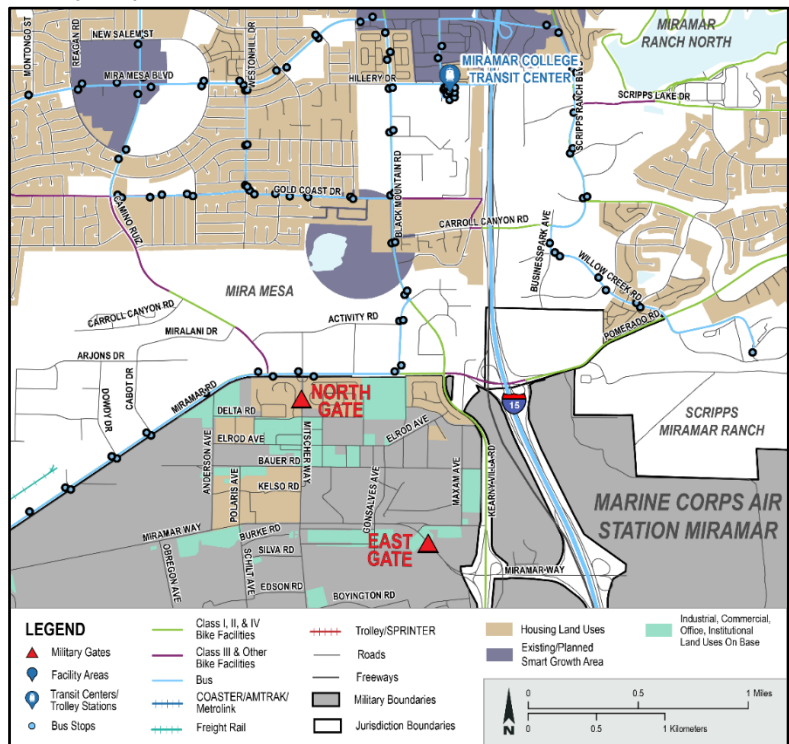
East/Main Gate

The East/Main gate is located to the west of Kearny Villa Road along Miramar Way (**Figure 5**). The gate provides direct access to Main Station and other locations on base via internal roads. The East/Main Gate is within a mile of Mira Mesa. The area of Mira Mesa closest to the gate is primarily industrial with pockets of commercial land uses.

The gate has two inbound and two outbound lanes that allow people driving and biking to enter. The gate does not have sidewalks in the westbound direction of Miramar Way, making it unsafe for pedestrians. Stops for MTS Bus Route 31 are about half-mile from the gate, near the intersection of Miramar Road and Black Mountain Road. The gate is open 24/7 daily.[9]

Upon exiting the gate, people can travel north on Kearny Villa Road to access Mira Mesa or south on Kearny Villa Road to access Clairemont, Kearny Mesa, and Tierrasanta. People can also travel east on Miramar Way to access the I-15, which can connect them to other areas of the San Diego region or Riverside County.

Figure 5. MCAS Miramar North Gate & East/Main Gate vicinity map

During morning peak hours, westbound Miramar Way experiences moderate and slightly heavy traffic as commuters exit I-15 and head towards the East/Main Gate. There is also a slight buildup of vehicles turning onto Miramar Way from Kearny Villa Road. During afternoon peak hours, eastbound Miramar Way experience buildup as people exit the gate and head towards I-15 (**Appendix C**)

Goods Movement

I-15, I-805, and Miramar Road serve as major freight and goods movement corridors for the base and the region. Goods transported to the facility and between the facility and other bases use these corridors. A BNSF Railway Company rail line runs partially east-west of the base and provides freight services only but does not stop at the facility. Due to the high volume of vehicles, Miramar Road and the on and off ramps of I-15 on Miramar Road see moderate levels of traffic congestion and vehicle queuing, especially during peak afternoon commuting hours. This congestion not only causes poor access to Miramar, but also impedes trucks trying to access I-15 and I-805 as Miramar Road is the main road to these freeways.

Summary of Challenges for MCAS Miramar

Traffic and Regional Connectivity

- Congestion on nearby roadways and interstates during peak hours delays commuters travelling to and from base.
- Most off-base housing is not within a reasonable (one-mile) walking distance.

Mobility

- Limited public transit connections to base.
- Travel is limited outside of roadway facilities on-base due to unexploded ordinance in certain areas.

Other

- Military personnel often transport heavy equipment which limits the types of vehicles that are usable.
- Staff work hours vary making schedule-based transportation difficult.
- Privacy policies restrict commuter data sharing with the SANDAG iCommute program.
- TNCs can drop-off riders on base but cannot pick-up new passengers on base. TNC apps do not recognize or accept requests from passengers within the base due to security clearance requirements.
- High traffic speeds deter bicyclists from using the bikeway that provides access to the base on Kearny Villa Road.
- Potential for Miramar to become a civilian airport due to base's ideal location.
- Alignment of proposed high-speed rail running through Miramar.

Relevant Projects & Programs

Existing Planned Projects & Programs Relevant to MCAS Miramar					
Facility	**Project Extents**	**Improvement Type**	**Subcategory**	**Project Improvement**	**Source**
I-15	I-15 Bikeway – Murphy Canyon Rd to Affinity Ct	Active	Bicycle	Bicycle Facilities	SANDAG Regional Plan (2015)
I-15	I-8 to SR 163	Freeway	Lanes	Add two managed lanes (8F to 8F + 2ML)	SANDAG Regional Plan (2015)
I-805	SR 163 to SR 52	Freeway	Lanes	Phase I: Add two managed lanes (8F to 8F + 2ML)	SANDAG Regional Plan (2015)
I-805	SR 52 to Carroll Canyon Rd	Freeway	Lanes	Phase I: Add two managed lanes (8F to 8F + 2ML)	SANDAG Regional Plan (2015)
SR 52	I-805 to I-15	Freeway	Lanes	Add two managed lanes (6F to 6F + 2ML)	SANDAG Regional Plan (2015)
SR 52	I-15 to SR 125	Freeway	Lanes	Add two, reversible managed lanes (4F/6F to 4F/6F + 2ML (R))	SANDAG Regional Plan (2015)
Miramar Road	I-805 Easterly Off Ramps to 300' east of Eastgate Mall	Roadway	Lanes	Widen Miramar Road to 8 lanes from I-805 easterly on and off-ramps to 300 feet east of Eastgate Mall. Includes dual left-turn lanes at Eastgate Mall.	City of San Diego Capital Improvement Program (CIP GIS Shapefile) (2017)
Route 398	Oceanside Transit Center to Downtown San Diego	Transit	COASTER	Double tracking (20-minute peak frequencies and 120-minute off-peak frequencies)	SANDAG Regional Plan (2015)

Existing Planned Projects & Programs Relevant to MCAS Miramar					
Facility	**Project Extents**	**Improvement Type**	**Subcategory**	**Project Improvement**	**Source**
Route 398	Oceanside Transit Center to Downtown San Diego	Transit	COASTER	Double tracking (20-minute off-peak frequencies, grade separations at Leucadia Blvd, stations/platforms at Convention Center/Gaslamp Quarter and Del Mar Fairgrounds, and extension to Camp Pendleton)	SANDAG Regional Plan (2015)
Route 398	Oceanside Transit Center to Downtown San Diego	Transit	COASTER	Double tracking (completes double tracking; includes Del Mar Tunnel) plus 2 grade separations)	SANDAG Regional Plan (2015)
Route 650	Chula Vista to Palomar Airport Rd Business Park	Transit	*Rapid*	Connection from Chula Vista to Palomar Airport Rd Business Park via I-805/I-5 (peak only)	SANDAG Regional Plan (2015)
Route 653	Mid-City to Palomar Airport Rd	Transit	*Rapid*	Connection from Mid-City to Palomar Airport Rd via Kearny Mesa/I-805/I-5	SANDAG Regional Plan (2015)
Route 870	El Cajon to UTC via Santee, SR 52, I-805	Transit	*Rapid*	Connection from El Cajon to UTC via Santee, SR 52, I-805	SANDAG Regional Plan (2015)
Route 890	El Cajon to Sorrento Mesa	Transit	*Rapid*	Connection from El Cajon to Sorrento Mesa via SR 52, Kearny Mesa	SANDAG Regional Plan (2015)
Routes 688/689/690	San Ysidro to Sorrento Mesa	Transit	*Rapid*	Route 688: San Ysidro to Sorrento Mesa via I-805/I-15/SR 52 Corridors (peak only); Route 689: Otay Mesa Port of Entry to UTC/Torrey Pines via Otay Ranch/Millennia, I-805 Corridor (peak only); Route 690: Mid-City to Sorrento Mesa via I-805 Corridor (peak only)	SANDAG Regional Plan (2015)

Facility	Project Extents	Improvement Type	Subcategory	Project Improvement	Source
Route 28	Point Loma to Kearny Mesa via Old Town, Linda Vista	Transit	*Rapid*	Connection from Point Loma to Kearny Mesa via Old Town, Linda Vista	SANDAG Regional Plan (2015)
Route 120	Kearny Mesa to Downtown San Diego	Transit	*Rapid*	Connection from Kearny Mesa to Downtown San Diego via Mission Valley	SANDAG Regional Plan (2015)
Route 235	Escondido to Downtown *Rapid* (formerly Route 610)	Transit	*Rapid*	Temecula (peak only) Extension of Escondido to Downtown *Rapid* (formerly Route 610)	SANDAG Regional Plan (2015)
Route 510	Palomar St to 12th & Imperial	Transit	Trolley	Phase I - Blue Line Frequency Enhancements and rail grade separations at 28th St, 32nd St, E St, H St, Palomar St, and Blue/Orange Track Connection at 12th & Imperial	SANDAG Regional Plan (2015)
Route 510	UTC to COASTER Connection	Transit	Trolley	UTC COASTER Connection (extension of Route 510)	SANDAG Regional Plan (2015)
Route 510		Transit	Trolley	Blue Line Rail Grade Separation	SANDAG Regional Plan (2015)
Route 562	Kearny Mesa to Carmel Valley	Transit	Trolley	Phase II - Connection from Kearny Mesa to Carmel Valley	SANDAG Regional Plan (2015)

C= Conventional Highway
F= Freeway
ML = Managed Lanes
T = Toll Road
R = Reversible Lanes
OPS = Operational Improvements

References

1 http://www.militaryinstallations.dod.mil/

2 Information from Major Brandon Newell (RFI Response, Nov 2018)

3 https://www.miramar-ems.marines.mil/Portals/60/Docs/MEMS/Nat_Res/INRMP%20Ch%202%20Land%20Use.pdf

4 https://www.miramar-ems.marines.mil/Portals/60/Docs/MEMS/Nat_Res/INRMP%20Ch%202%20Land%20Use.pdf

5 Interview with Major Brandon Newell (2018)

6 Interview with Major Brandon Newell (2018)

7 https://www.dodhousingnetwork.com/marines/mcas-miramar/gates

8 Interview with Major Brandon Newell (2018)

9 Interview with Major Brandon Newell (2018)

Appendices

Appendix A. Park & Ride Lots Map

Appendix B. Marine Corps Air Station Miramar Mobility Report Card

Appendix C. Google Traffic Maps

Appendix A.
iCommute Park & Ride Map

southern riverside

Riverside County Park & Ride lots are maintained by the Riverside County Transportation Commission (RCTC), unless otherwise noted. For more information visit IE511.org

(Full San Diego region Park & Ride map on reverse)

	LOCATION	TRANSIT	PARKING SPACES
	TEMECULA		
A	United Methodist Church *42690 Margarita Rd*		71
B	Orchard Christian Fellowship *42101 Moraga Rd*		105
C	Rancho Community Church**** *31300 Rancho Community Way*		100
D	Winchester* *41327 Winchester Rd*		87
E	Promenade Mall** *40820 Winchester Rd*	●	75
	SAN JACINTO		
F	Mt. San Jacinto College*** *1499 N State St*	●	27
	PERRIS		
G	Downtown Perris Station *C St and 4th St*	●	24
H	South Perris Station *1304 Case Road*		74
	MENIFEE		
I	The View Church *27755 Bradley Rd*	●	38
	LAKE ELSINORE		
J	Grand *15887 Grand Ave*		79
K	Dexter* *18600 Dexter Ave*		50
L	Outlet Center *17600 Collier Ave*	●	186
M	Shepherd of Life *30400 Grand Ave*		50
	MURRIETA		
N	Promise Lutheran Church *25664 Madison Ave*		46

* Not an RCTC lot.
** Not an RCTC lot; permit required. Call (951) 296-1121.
*** Permit required. Call (951) 787-7141.
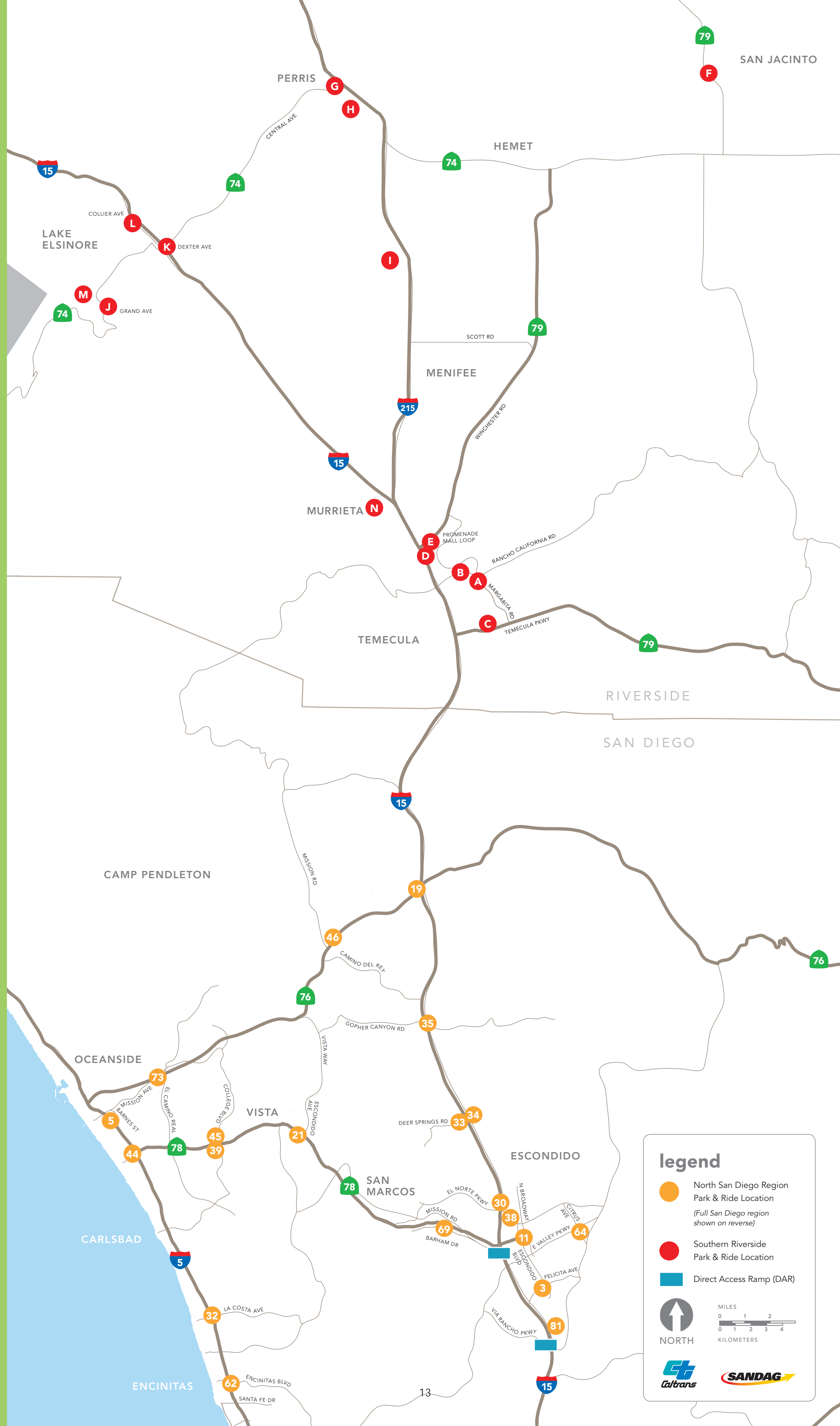**** Not an RCTC lot. No overnight parking.

vanpool

A vanpool brings five or more people together to share the costs of getting to work in a van or SUV. It's like a carpool, only bigger! Vanpool participants generally pay less than $100 per month to get to work, and multiple vehicle options are available. Visit RedesignYourCommute.com to learn more.

Rideshare   **vRide.**

guaranteed ride home
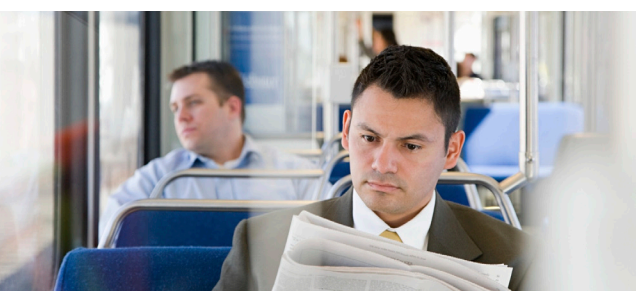
With Guaranteed Ride Home (GRH), commuters who carpool, vanpool, take transit, walk, or bike to work in San Diego County have a built-in safety net. In case of emergency or unscheduled overtime, the GRH program will get you home for free. To find out more, visit 511sd.com/iCommute.

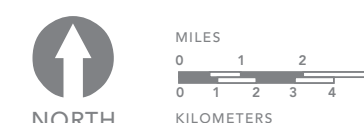**Guaranteed Ride Home**

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iCommute

my favorite morning meeting

san diego regional
park & ride map

legend

- 🟠 North San Diego Region Park & Ride Location
  (Full San Diego region shown on reverse)
- 🔴 Southern Riverside Park & Ride Location
- 🟦 Direct Access Ramp (DAR)

NORTH

MILES
0   1   2
0 1 2 3 4
KILOMETERS

Caltrans   **SANDAG**

511   **SANDAG**

san diego region park & ride lots

CALTRANS LOT #		TRANSIT	BIKE PARKING	PARKING SPACES
1	SR 94 at Sweetwater Springs Blvd	•		45
2	SR 67 at Riverford Rd & Woodside Ave	•		30
3	Felicita Ave at Escondido Blvd	•		30
4	Carmel Mountain Rd at Freeport Rd		•	102
5	Maxson St at Barnes St	•		43
6	I-15 at Mira Mesa Blvd	•		176
7	I-5 at Carmel Valley Rd & Sorrento Valley Rd		•	50
8	Lemon Grove Ave at High St			43
9	I-805 at Sweetwater Rd			135
10	SR 67 at Mapleview St	•		45
11	SR 78 at Broadway	•		85
12	Lemon Grove Ave at Lincoln St			23
16	Poway Rd at Sabre Springs Pkwy	•	•	103
17	I-8 at Taylor St			25
19	I-15 at SR 76	•		163
20	I-805 at Governor Dr			84
21	SR 78 at Sunset Dr & Seaview Pl			15
22	I-8 at Murray Dr			65
24	I-805 at Mira Mesa Blvd & Vista Sorrento Pkwy			53
25	SR 54 at Washington Ave	•		60
26	Carmel Mountain Rd at Rancho Carmel Dr			125
28	SR 94 at Potrero Post Office	•		10
29	I-8 at Japatul Valley Rd			25
30	I-15 at El Norte Pkwy	•		41
32	I-5 at La Costa Ave	•		115
33	I-15 at Deer Springs Rd			28
34	I-15 at Mountain Meadow Rd			41
35	I-15 at Gopher Canyon Rd			11
37	SR 94 at Avocado Blvd			63
38	7 Oakes Rd at El Norte Pkwy*			111
39	SR 78 at College Blvd (South)			50
40	SR 54 at Jamacha Blvd	•		22
41	I-8 at Los Coches Rd			106
42	I-8 at Lake Jennings Park Rd	•		18
43	I-5 at Gilman Dr			26
44	I-5 at SR 78 & Moreno St			130
45	SR 78 at College Blvd (North)			32
46	SR 76 at Sweetgrass Ln*			50
47	I-5 at Birmingham Dr			56
48	Twin Peaks Rd at Budwin Ln*			34
50	Telegraph Canyon Rd at Paseo Del Rey*			23
51	I-15 at Rancho Peñasquitos Blvd	•		58
53	Carmel Mountain Rd at Paseo Cardiel*	•		88
57	Carmel Mountain Rd at Stoney Creek Rd*	•		132
59	Bancroft Dr at Grossmont Blvd			29
60	Severin Dr at Bancroft Dr			20
61	Severin Dr at Murray Dr			17
62	Encinitas Blvd at Calle Magdalena*			27
63	SR 67 at Day St	•		35
64	East Valley Pkwy at Citrus Ave			20
65	I-15 at Rancho Bernardo Rd	•		15
69	SR 78 at Barham Dr*			89
70	Mission Gorge Rd at Big Rock Dr	•		36
71	Sweetwater Springs Blvd at Austin Dr	•		10
72	North Magnolia Ave at Alexander Way*	•		22
73	Mission Ave at Frontier Dr	•		50
75	SR 67 at Dye Rd*	•		20
76	I-15 at Scripps Poway Pkwy			50
77	SR 67 at Poway Rd			102
78	I-805 at Children's Way			15
80	Caliente Ave	•		235
81	Westfield North County Shopping Center**	•		76

legend

San Diego Park & Ride Location

Direct Access Ramp (DAR)

NORTH

MILES
0   1   2
0 1 2 3 4
KILOMETERS

*Park & Ride parking Monday-Friday, 5:30 a.m. - 6 p.m. only
**Park & Ride parking Monday-Friday only

14

Appendix B.

Marine Corps Air Station Miramar Mobility Report Card

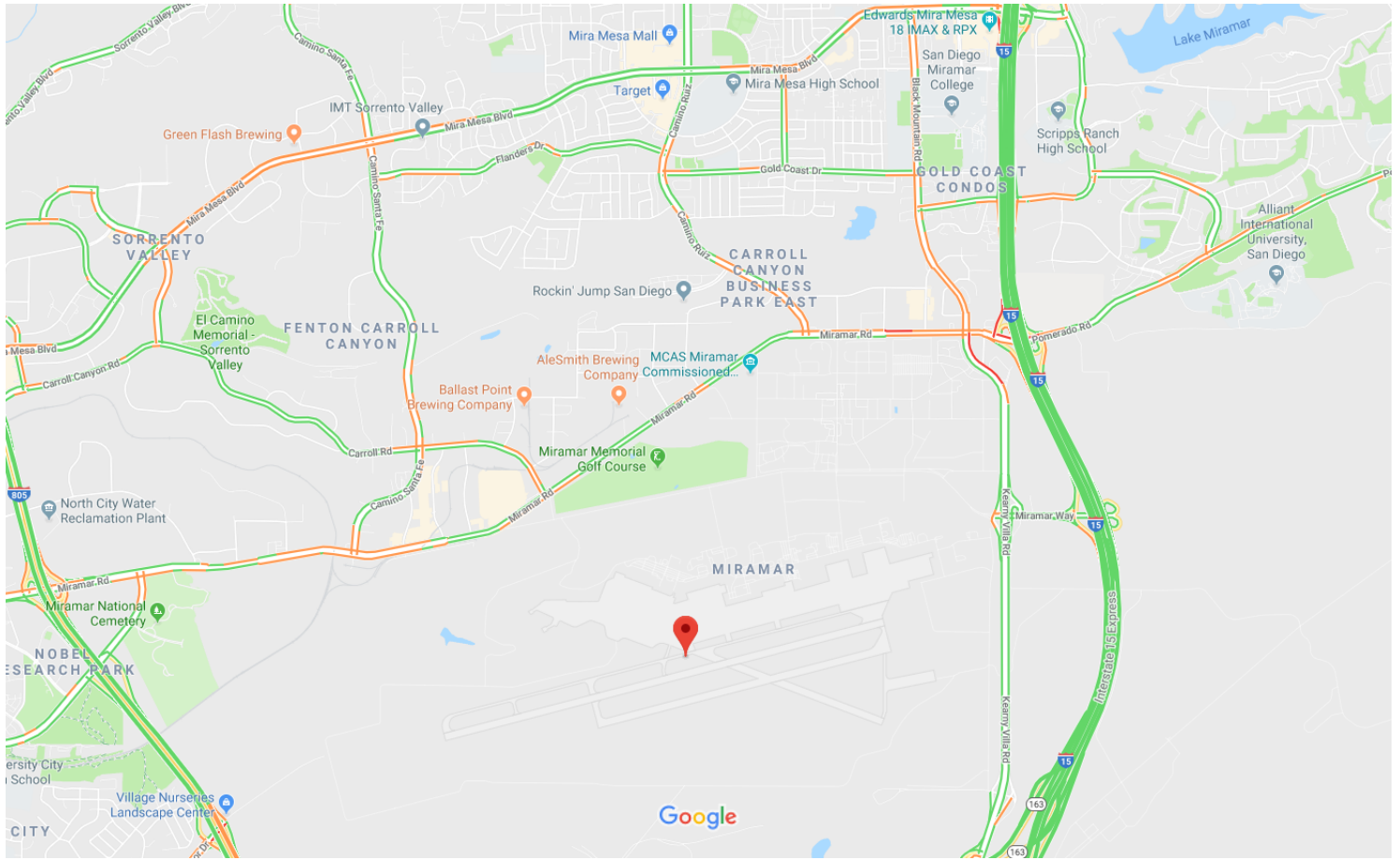| Mobility Report Card Marine Corps Air Station Miramar				
Mobility Options		**Supportive Programs/Infrastructure**		**Related Infrastructure Project Types**
		On Base	**City of San Diego**	
	Walking/Biking	• Walkable within Main Station Sector on West Miramar, not between sectors or between East and West Miramar • Moderate to steep terrain	• Mix of Class II bike lanes and Class III bike routes (sharrows) on Miramar Road (50mph), Pomerado Road (45mph), and Kearny Villa Road (65mph)	Active Transportation Local Roads
	Public Transit	• No transit services on base • No passenger rail access on base	• MTS Route 31 • Multiple MTS routes serve transit centers near the base (UTC and Miramar College)	Transit Infrastructure
	Microtransit	• No current services	• No current services	Local Roads
	Carpool & Vanpool	• Vanpool subsidy with TIPS • SANDAG iCommute Vanpool Program •Greencommuter Pilot	• High Occupancy Vehicle lanes on I-15	Freeway Network Parking
	Carshare	• Over 100 non-tactical government fleet vehicles • Greencommuter Pilot	• Zipcar	Parking
	On-Demand Rideshare	• Waze Carpool Pilot • Restricted Uber, Lyft access	• Waze Carpool • Uber, Lyft	Local Roads Curbside Designation
	Bikeshare	• Lime pilot	• Lime, Discover Bike	Active Transportation Local Roads
	Electric Bike & Scootershare	• No current programs	• Electric bike: Lime, JUMP • Electric scooter: Lime, Bird, Razor, Wheels, Wind	Active Transportation Local Roads
	Neighborhood Electric Vehicle (NEV)	• No current programs	• No current programs	Active Transportation Local Roads
	Other	• High supply of parking on base	• Limited street parking close to base • Smart Growth Opportunity Areas: University City and Mira Mesa	Parking Transit Infrastructure

Data current as of December 2019

Appendix C.
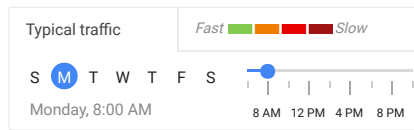## Google Maps Expected Traffic

Typical traffic

Fast ▮▮▮ *Slow*

S **M** T W T F S

Monday, 8:00 AM

8 AM   12 PM   4 PM   8 PM

Map data ©2018 Google   2000 ft

Google Maps   Miramar
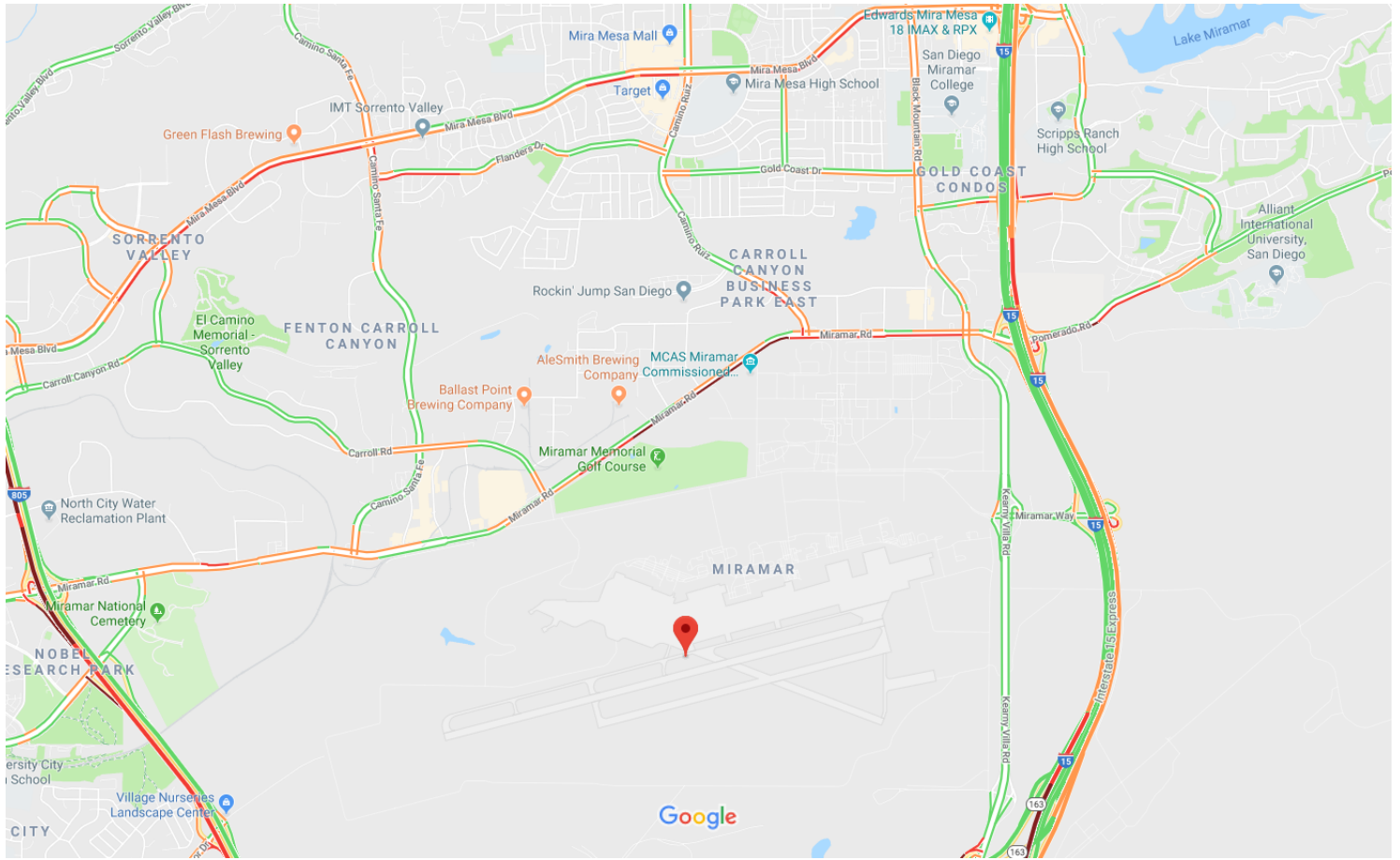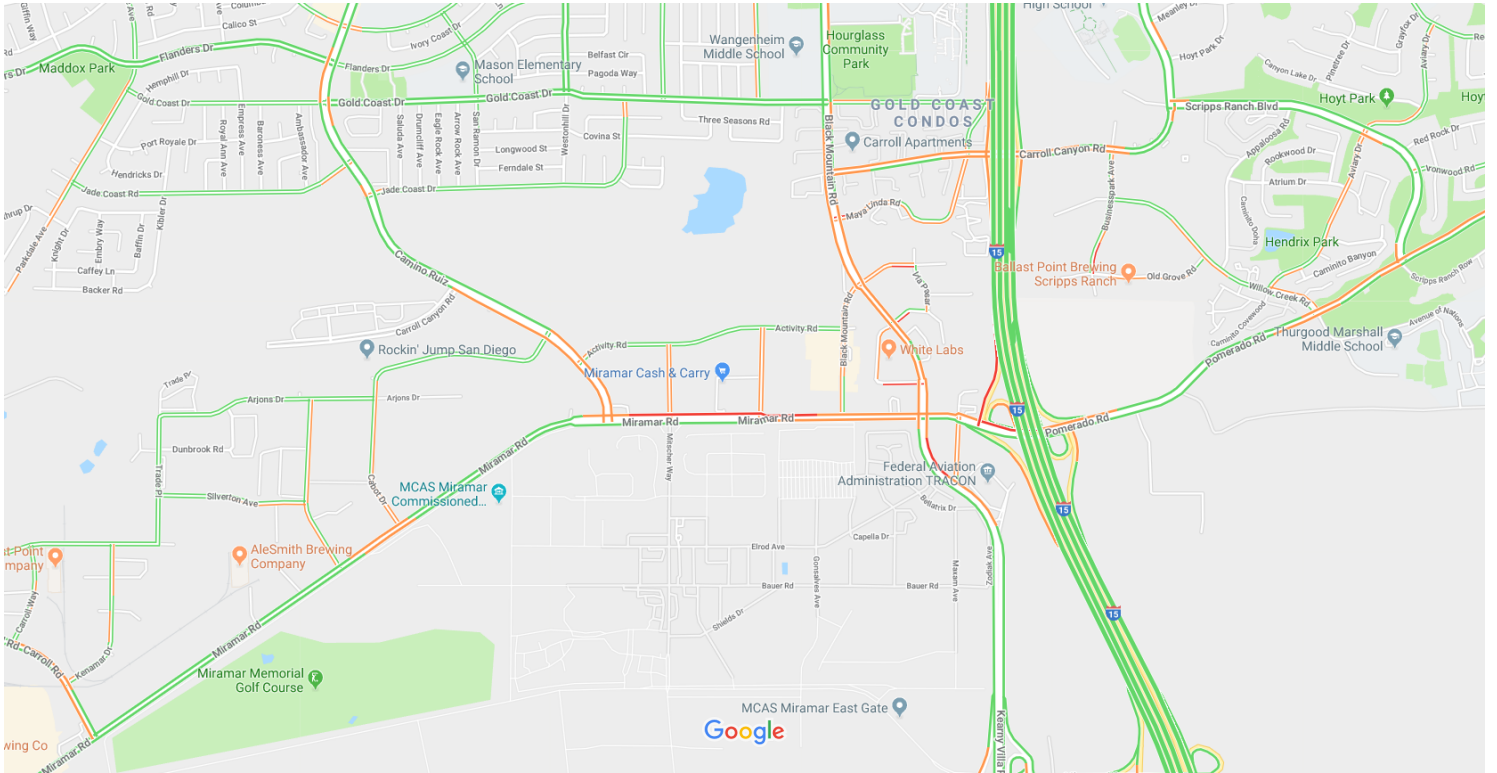

Typical traffic

| Fast | | | | Slow |

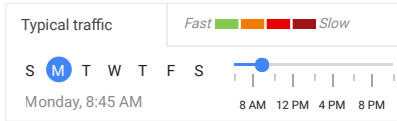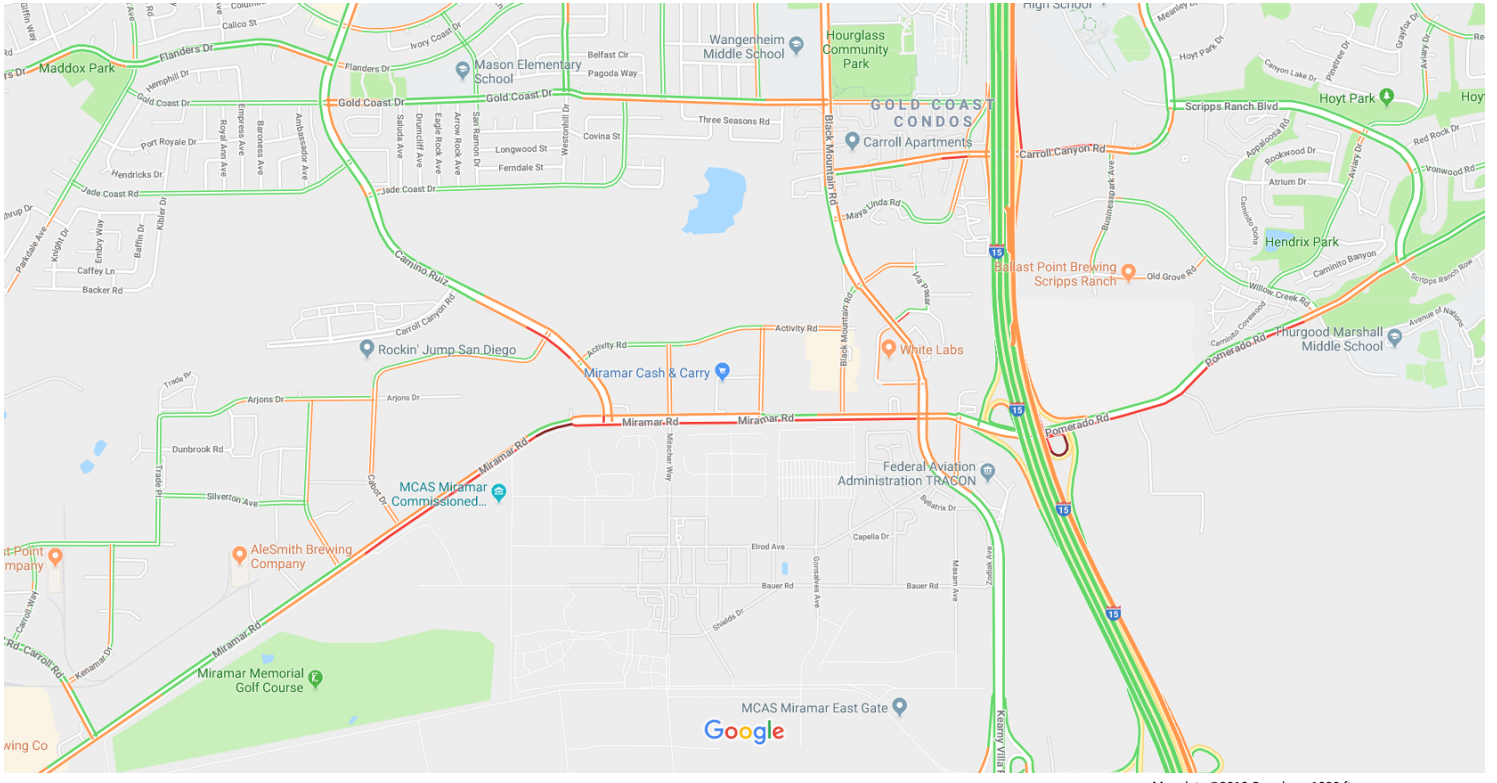S M T W T F S

Tuesday, 5:20 PM

8 AM 12 PM 4 PM 8 PM

Map data ©2018 Google   2000 ft

Google Maps

Typical traffic	Fast ▬▬▬▬ Slow
S **M** T W T F S	8 AM 12 PM 4 PM 8 PM
Monday, 8:45 AM	

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