

MILITARY MULTIMODAL ACCESS STRATEGY



Active Transportation

There are a mix of Class II and III bike facilities along Barnett Avenue and Pacific Highway, the major roads that access MCRD. However, these bike facilities are inconsistent. The eastbound Class II bike lane along Barnett Avenue, which has a posted speed limit of 40mph, disappears at the Henderson Ave intersection that provides access to Gate 2, forcing bicyclists into mix-flow traffic for several blocks. The majority of bike facilities along the arterial roadways connecting to Pacific Highway are a mix of shared-use paths or routes classified by SANDAG's Bike Map (2018)¹ as unofficial bikeways not recommended for inexperienced riders. In addition, there is no safe or separated bike route for bike riders to access Gate 2 from Tripoli Ave.

Mobility Programs

SANDAG is collaborating with Waze Carpool, the United States Navy, and the U.S. Marine Corps to offer the Military Carpool Incentive Pilot. Through this pilot, Waze Carpool will offer free rides to new and existing carpoolers (riders only) at each identified military base for a one-month period. Waze Carpool works by connecting users through an app. Based on the user's route and destination, other users will be matched to their carpool route. The intent is to ease congestion to and from the military base and to provide mobility options for service members. SANDAG and Waze plan to outreach through social media, military websites, and presentations to educate service members and raise awareness.

There are currently no bikeshare program partnerships with MCRD, however bikeshare and scootershare programs (such as Lime and Bird) exist in the San Diego communities adjacent to the base.

A mobility report card identifying programs and complementing infrastructure projects that support access to MCRD has been developed ([Appendix C](#)). 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

According to MCRD's most recent zip code report, military personnel commute from a community within the county. Military personnel primarily commute from the City of San Diego ([Table 1](#)). In order to reduce parking demand, MCRD leadership utilize Transportation Demand Strategies to promote alternative commutes for personnel, especially during graduations, which is when MCRD sees the most amount of people coming to and leaving the facility.

Figure 2. Marine Corps Recruit Depot existing connectivity



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Gate Access

MCRD has three gates that provide access to the base. This report will focus on Gate 4, which is the access point with the most significant street network connections.

Gate 4

Gate 4 of MCRD is located on the northeastern side of MCRD, along Pacific Highway and Tripoli Avenue (Figure 3). The gate has two inbound and outbound lanes to provide access for vehicles, pedestrians, and people biking. MTS Route 10 stops near Gate 4.

Upon entering the gate, military personnel and visitors can directly access several parking lots, training facilities, and various types of land uses such as office, residential, and work. When exiting the gate, people enter into the City of San Diego where there are residential and existing / planned smart growth opportunity areas.

Gate 4 experiences minor traffic in the peak morning commute hours along Pacific Highway (see Appendix D). During afternoon peak commute hours, there is heavy traffic leaving the base backing up along Pacific Highway and Barnett Avenue.

Goods Movement

I-5 and Pacific Highway serve as major freight and goods movement corridors for MCRD and the region. Goods transported to and between MCRD and other bases use these corridors.

Due to the high volume of vehicles, I-5, Pacific Highway, and additional surrounding roads such as Harbor Drive continue to see high levels of traffic congestion. Several nearby intersections operate at a low level of service, especially during peak hours. This congestion not only causes poor access to MCRD, but also impedes trucks trying to access I-5.

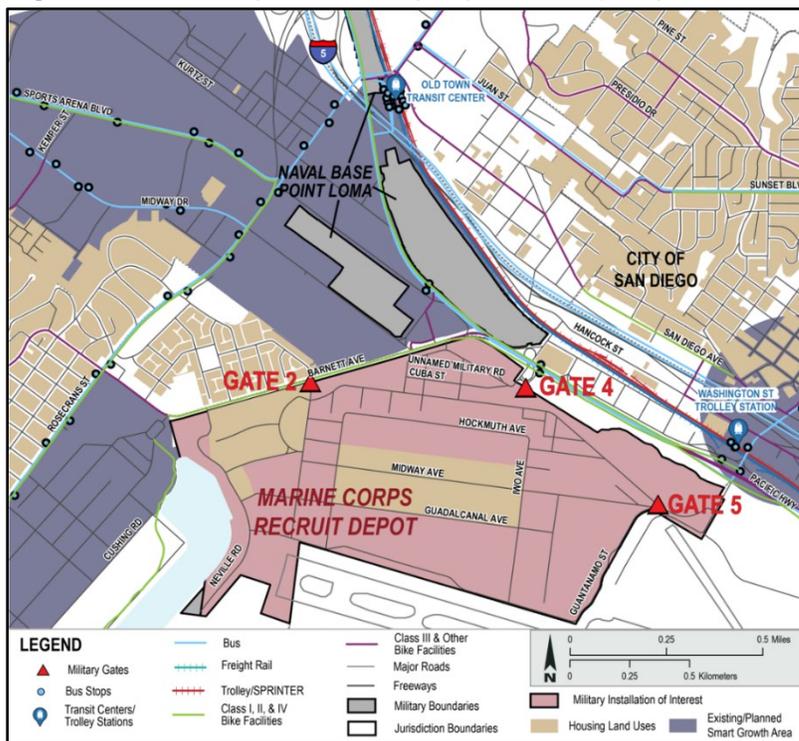
Table 1. Commute origin of Marine Corps Recruit Depot

Commute Origin	Percent of Commuters
City of San Diego	30%
North San Diego County	17%
Riverside County	11%
Other*	10%
South San Diego County	10%
East San Diego County	10%
Orange County	5%
Los Angeles County	3%
San Bernardino County	3%
Total Responses	142

Source: MCRD provided zip code report data, March 2018

Notes: *Other includes California Counties other than the ones listed, out of state, and international zip codes.

Figure 3. Marine Corps Recruit Depot gates vicinity map





Summary of Challenges for MCRD

Traffic and Regional Connectivity

- Community concerns about traffic resulting from proposed projects (additional rail line at-grade across Washington Street, the Airport Intermodal Transit Center, and the San Diego City Community Plan for the I-5/Pacific Highway)

Mobility

- Bicycle network gaps limit bicycle access to MCRD, particularly along Barnett Avenue

Other

- New infrastructure may require California Coastal Commission and/or City of San Diego support
- Congestion between the Washington Street Gate and I-5 causing delay for commuters.

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Relevant Programs and Projects

Existing Planned Projects & Programs Relevant to Marine Corps Recruit Depot					
Facility	Project Extents	Improvement Type	Subcategory	Project Improvement	Source
Nimitz Bridge	Along Nimitz Bridge	Active	Pedestrian	New ADA ramps, new light poles on the bridge, remove existing chain link gates, rehabilitate guardrails	City of San Diego Capital Improvement Program (CIP GIS Shapefile) (2017)
Harbor Drive	Harbor Dr (Downtown to Ocean Beach)	Active	Bicycle	Bicycle Facilities	SANDAG Regional Plan (2015)
Nimitz Blvd, Mission Bay Dr, Quivira Rd	Ocean Beach to Mission Bay	Active	Bicycle	Bicycle Facilities	SANDAG Regional Plan (2015)
Pacific Highway	Pac Hwy (Laurel St to Santa Fe Depot)	Active	Bicycle	Coastal Rail Trail San Diego	SANDAG Regional Plan (2015)
Pacific Highway	Pac Hwy (W Washington St to Laurel St)	Active	Bicycle	Coastal Rail Trail San Diego	SANDAG Regional Plan (2015)
I-5	I-15 to I-8	Freeway	Lanes	Add Operational Lanes to 8 Freeway Lanes	SANDAG Regional Plan (2015)
Route 510	Mira Mesa to Border	Transit	Trolley	Blue Line Rail Grade Separation	SANDAG Regional Plan (2015)
Route 530	Green Line	Transit	Trolley	Green Line Frequency Enhancements	SANDAG Regional Plan (2015)
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)
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)

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Existing Planned Projects & Programs Relevant to Marine Corps Recruit Depot					
Facility	Project Extents	Improvement Type	Subcategory	Project Improvement	Source
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 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 28	Point Loma to Kearny Mesa via Old Town, Linda Vista	Transit	<i>Rapid</i>	Connection from Point Loma to Kearny Mesa via Old Town, Linda Vista	SANDAG Regional Plan (2015)
Routes 640A/640B	San Ysidro to Palomar	Transit	<i>Rapid</i>	Route 640A: I-5 - San Ysidro to Old Town Transit Center via City College; 640B: I-5 Iris Trolley/Palomar to Kearny Mesa via Chula Vista, National City and City College	SANDAG Regional Plan (2015)
Route 510	Taylor St & Ash St	Transit	Trolley	Phase II - Blue Line rail grade separations at Taylor St and Ash St	SANDAG Regional Plan (2015)
Route 510	University City to Downtown San Diego	Transit	Trolley	Blue line extension to University City providing public transportation in coastal San Diego County. Increased frequencies and front door access to Naval Base San Diego at 32 nd St	SANDAG Regional Plan (2015)
Route 561	UTC to COASTER Connection	Transit	Trolley	UTC COASTER Connection (extension of Route 510)	SANDAG Regional Plan (2015)
Route 540	UTC to San Ysidro via downtown	Transit	Trolley	Blue Line Express – UTC to San Ysidro via downtown	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.icommutesd.com/Bike/BikeMap.aspx>

Appendices

Appendix A. iCommute Park & Ride Map

Appendix B. Old Town Center Mobility Hub Concept

Appendix C. Marine Corps Recruit Depot Mobility Report Card

Appendix D. Google Traffic Maps



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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)

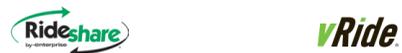
LOCATION	TRANSIT	PARKING SPACES
TEMECULA		
A United Methodist Church 42690 Margarita Rd		71
B Orchard Christian Fellowship 42101 Moraga Rd		105
C Rancho Community Church**** 31300 Rancho Community Way		100
D Winchester* 41327 Winchester Rd		87
E Promenade Mall** 40820 Winchester Rd	•	75
SAN JACINTO		
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



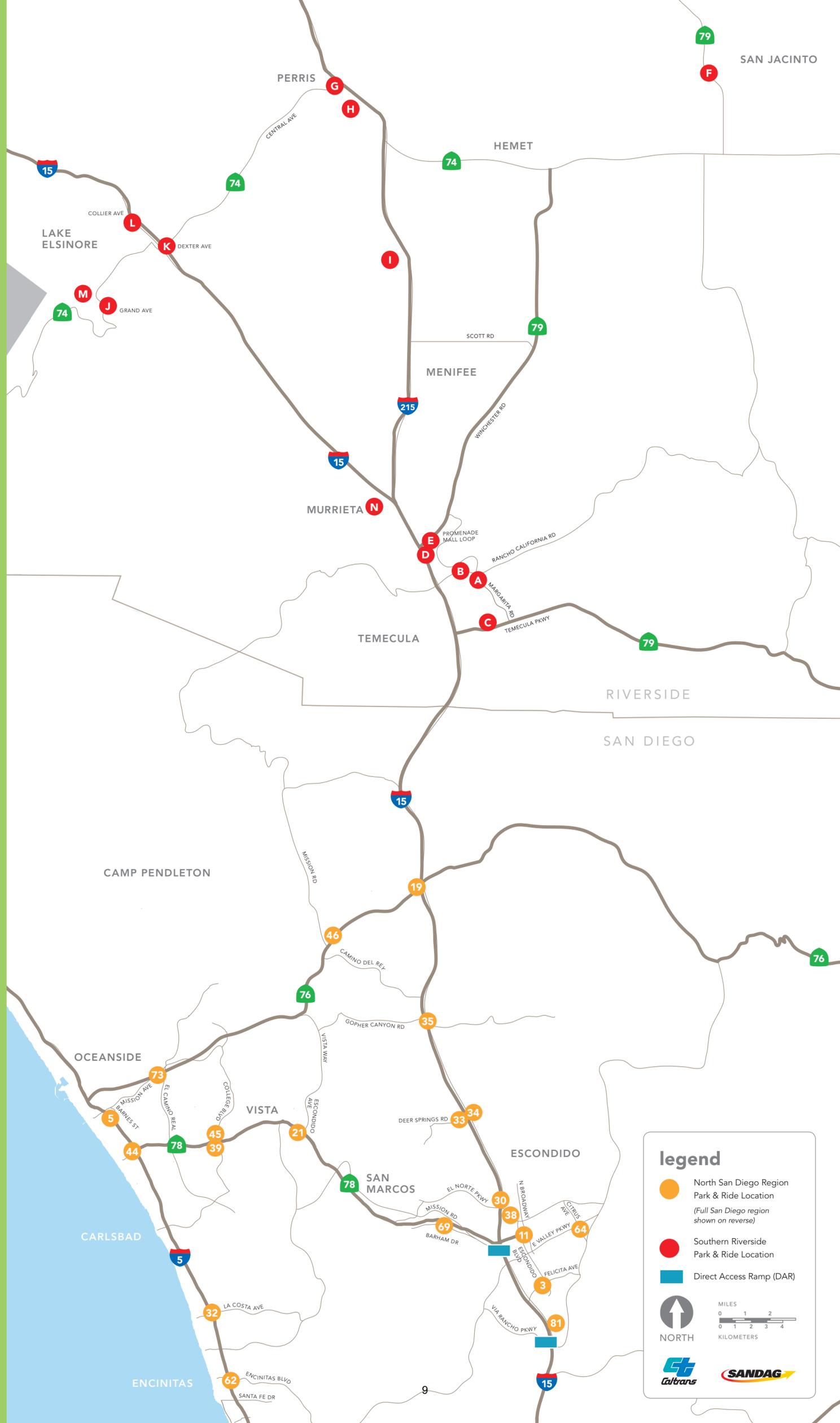
A vanpool brings five or more people together to share the costs of getting to work in a van or SUV. It's like a carpool, only bigger! Vanpool participants generally pay less than \$100 per month to get to work, and multiple vehicle options are available. Visit RedesignYourCommute.com to learn more.



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.



park and go

Park & Ride

Park & Ride lots are free, conveniently located throughout the region, and offer a great place to meet carpool or vanpool partners. This map provides a locator tool for approximately 90 Park & Ride lots in the San Diego region and in southern Riverside County. The map also has information about each lot's features, including the number of parking spaces, bike lockers, and transit connections. Leave your solo commute behind and find an alternative way to get to work and to many other destinations around San Diego County.

iCommute

More information about Park & Ride lots is available through the San Diego Association of Governments (SANDAG) iCommute program. iCommute assists commuters by providing carpool and ridematching services, a subsidized vanpool program, transit solutions, the Guaranteed Ride Home program, regional support for biking, and bike and pedestrian safety program support for schools. Visit 511sd.com/iCommute or call 511 and say "iCommute" for more information.

511

511 is a free phone and web service that consolidates the San Diego region's transportation information into a one-stop resource. 511 provides current information on: traffic conditions, incidents, and driving times; schedule, route, and fare information for San Diego public transportation services; commuter services; and biking information. The 511 service is available 24 hours a day, seven days a week at 511sd.com, by calling 511, or by downloading the 511 San Diego mobile app, available for iOS and Android.



Last modified: May 2016

3761



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)



san diego region park & ride lots

CALTRANS LOT #	TRANSIT BIKE PARKING PARKING SPACES
1	45
2	30
3	30
4	102
5	43
6	176
7	50
8	43
9	135
10	45
11	85
12	23
16	103
17	25
19	163
20	84
21	15
22	65
24	53
25	60
26	125
28	10
29	25
30	41
32	115
33	28
34	41
35	11
37	63
38	111
39	50
40	22
41	106
42	18
43	26
44	130
45	32
46	50
47	56
48	34
50	23
51	58
53	88
57	132
59	29
60	20
61	17
62	27
63	35
64	20
65	15
69	89
70	36
71	10
72	22
73	50
75	20
76	50
77	102
78	15
80	235
81	76



iCommute



park & ride map

Information on this map is accurate as of May 2016. HPark & Ride lot locations and amenities change periodically. Visit Caltrans at dot.ca.gov/dist11 to find the most up-to-date Park & Ride lot information.



transit



Taking public transportation helps you beat traffic, save money on gas, and ease the stress of your daily commute. Park at a transit station or Park & Ride lot and get on board the bus, Rapid, Trolley, COASTER, or SPRINTER. Your transit ride is even easier with Compass Card — the smart card for transit passes. Get your Compass Card at Albertsons and select Vons stores in San Diego County or visit 511sd.com/compass for more information.



secure bike parking



GO BY BIKE to close the gaps in your commute. Secure bike parking facilities are available throughout the region to make your trip a little easier. They keep your bike safe while you take transit or share a ride to work. To find out which Park & Ride lots have bike parking, check the list on this map. There is no fee to use bike parking facilities — just a small, refundable deposit. To sign up for bike parking or get more information on bike commuting, visit 511sd.com/iCommute.



TripPlanner



Find the best way to get where you need to go by comparing multiple transportation choices in one place. Just enter your starting point and destination in TripPlanner and click "Let's Go!" It's that easy. Trip Planner compares carpool, vanpool, transit, walk, and bike options, while calculating time, cost, calories burned, and emissions estimates.



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



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Appendix B. Old Town Center Mobility Hub Concept

Ridership Information at the Old Town Transit Center

Existing Ridership (2015)

Average daily boardings and arrivals within a half-mile of the Old Town Transit Center:

1,300 COASTER
11,100 Green Line Trolley
19,000 Bus

Source: SanGIS; SANDAG



Projected Trolley Station Ridership (2030)

940
A.M. Peak-Hour Boardings

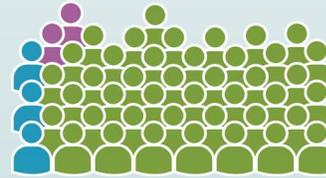


1,530
A.M. Peak-Hour Arrivals

11,080 Daily Boardings

Projected Trolley Station Mode of Access (2030)

A.M. Period

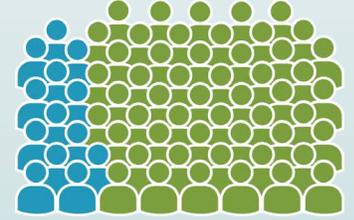


6% walk or bike (275 riders)

3% drive (150 riders)

91% transfer (4,200 riders)

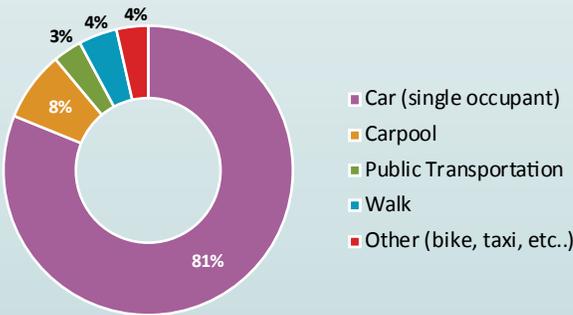
P.M. Period



20% walk or bike (1,310 riders)

80% transfer (5,150 riders)

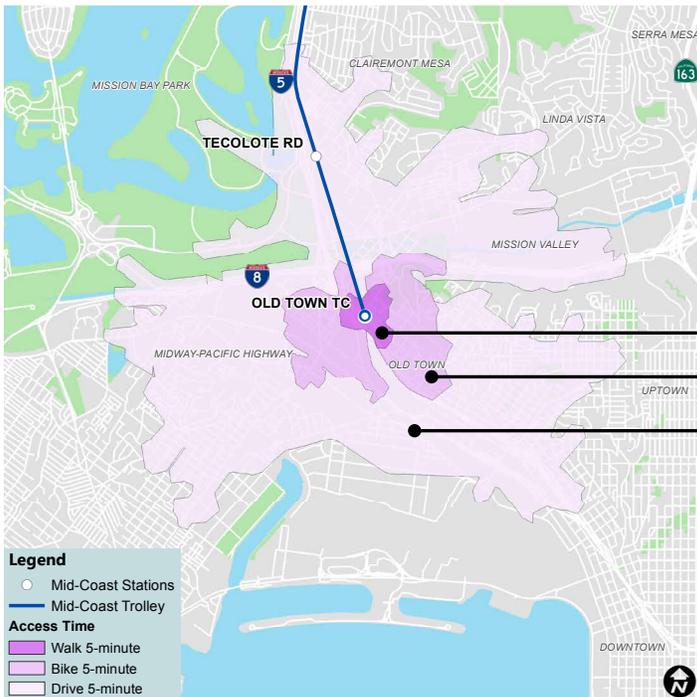
How Residents Get to Work



Note: Includes households located within a 5-minute drive of the station.
 Source: 2010-2014 American Community Survey

Note: Each icon represents approximately 100 riders. At least one icon is used for all modes with one or more riders.
 Source: Mid-Coast Corridor Transit Project Final Supplemental Environmental Impact Report (2014)

Population and Employment Information



Within five minutes of the station there are...

within walking distance { **220** residents }
 { **1,100** jobs }

within biking distance { **1,850** residents }
 { **7,200** jobs }

within driving distance { **29,000** residents }
 { **35,400** jobs }

Source: SanGIS; 2010-2014 American Community Survey; US Census Bureau

For More Information

Visit SDForward.com/MidCoastMobilityHubs or contact Marisa Mangan, Regional Planner, at (619) 595-5614 or marisa.mangan@sandag.org



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Appendix C. Marine Corps Recruit Depot Mobility Report Card

**Mobility Report Card
Marine Corps Recruit Depot**

Mobility Options		Supportive Programs/Infrastructure		Related Infrastructure Project Types	
		On Base	City of San Diego		
	Walking/Biking	<ul style="list-style-type: none"> Walkable 	<ul style="list-style-type: none"> Intermittent Class II bike lanes along Barnett Ave (40 mph), disappears at Gate 2 Class III bike route along Pacific Hwy 	 	Active Transportation Local Roads
	Public Transit	<ul style="list-style-type: none"> No public transportation on base 	<ul style="list-style-type: none"> MTS Route 10, 30, & 150 Green Line Trolley station (Washington Street) less than one mile from MCRD Multiple transit services at Old Town Transit Center 		Transit Infrastructure
	Microtransit	<ul style="list-style-type: none"> No current services 	<ul style="list-style-type: none"> No current services 		Local Roads
	Carpool & Vanpool	<ul style="list-style-type: none"> Vanpool subsidy with TIPS SANDAG iCommute Vanpool Program No designated parking spaces for carpool or vanpool 	<ul style="list-style-type: none"> No existing High Occupancy Vehicle lanes on I-5 and I-8 	 	Freeway Network Parking
	Carshare	<ul style="list-style-type: none"> No current programs 	<ul style="list-style-type: none"> Zipcar 		Parking
	On-Demand Rideshare	<ul style="list-style-type: none"> Waze Carpool 	<ul style="list-style-type: none"> Waze Carpool, Uber, Lyft 	 	Local Roads Curbside Designation
	Bikeshare	<ul style="list-style-type: none"> No current programs 	<ul style="list-style-type: none"> Lime, Discover Bike 	 	Active Transportation Local Roads
	Electric Bike & Scootershare	<ul style="list-style-type: none"> No current programs 	<ul style="list-style-type: none"> Electric bike: Lime, JUMP Electric scooter: Lime, Bird, Razor, Wheels, Wind 	 	Active Transportation Local Roads
	Neighborhood Electric Vehicle (NEV)	<ul style="list-style-type: none"> No current programs 	<ul style="list-style-type: none"> No current programs 	 	Active Transportation Local Roads
	Other	<ul style="list-style-type: none"> Limited parking on base 	<ul style="list-style-type: none"> Limited street parking close to base Smart Growth Opportunity Areas: Midway-Pacific Hwy and San Diego Peninsula in Point Loma 	 	Parking Transit Infrastructure

Data current as of December 2018



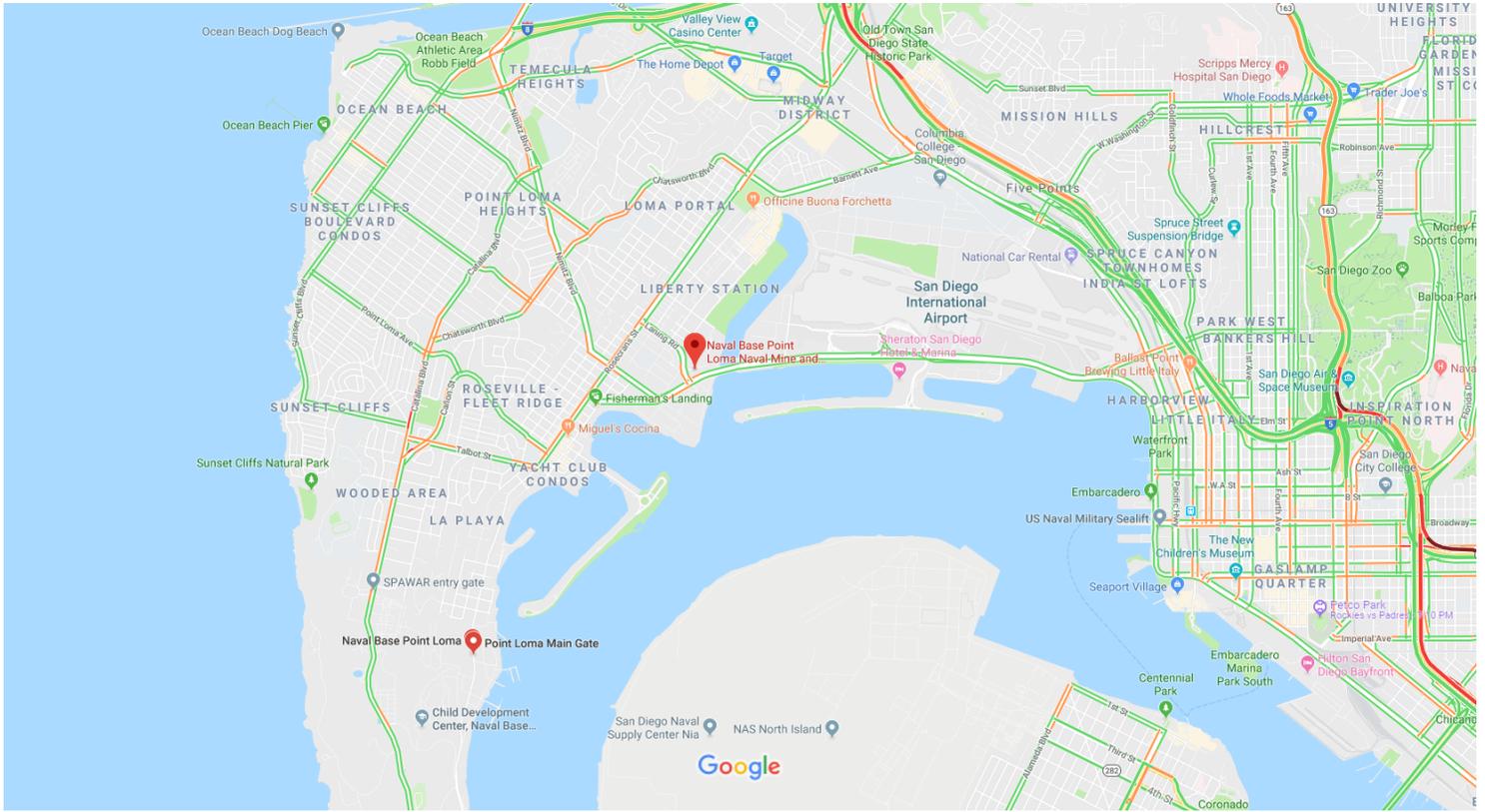
MILITARY MULTIMODAL ACCESS STRATEGY



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Appendix D. Google Traffic Maps



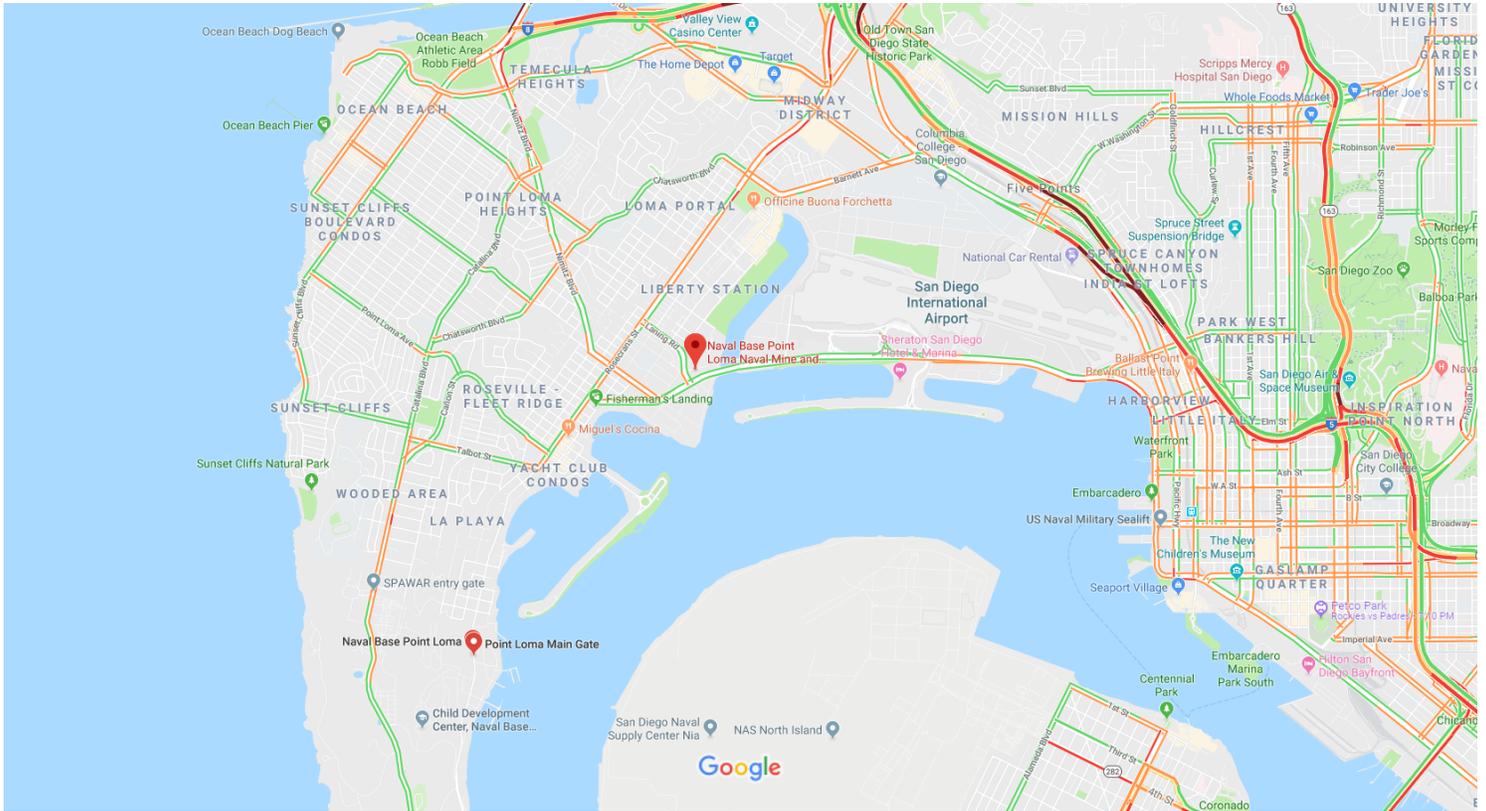
Typical traffic

Fast Slow

S M **T** W T F S

Tuesday, 7:35 AM

8 AM 12 PM 4 PM 8 PM



Typical traffic

Fast ■ ■ ■ ■ Slow

S M T **W** T F S

Wednesday, 4:10 PM

8 AM 12 PM 4 PM 8 PM