



BRIEFING BOOK









# Naval Base San Diego

Naval Base San Diego (NBSD) is comprised of the following campuses: 32nd Street Facility Naval Base (known as NBSD), the Broadway Complex in Downtown San Diego, and the Naval Medical Center San Diego complex near Balboa Park (Figure 1). NBSD is the principle homeport for the United States Pacific Fleet and a part of San Diego's Working Waterfront, which has national and regional significance for employment, goods movement, and security. The Working Waterfront also includes the North American Steel and Shipbuilding Company (NASSCO) Shipyard, Port of San Diego, BAE Systems San Diego Ship Repair (BAE), and the Huntington Ingalls Industries (HII).

In addition to its three campuses, NBSD oversees 18 housing areas, including Murphy Canyon housing complex, and the Admiral Baker Golf Course and Recreation Center in Mission Valley. NBSD is the workplace for approximately 31,000 military personnel<sup>2</sup> and provides more than 4,900 homes for Navy families.3

# **NBSD – 32nd Street Facility**

#### **Base Overview**

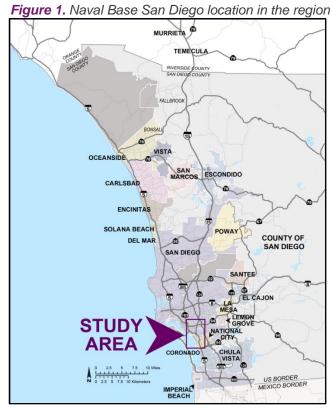
NBSD, the 32nd Street Facility, is located along the San Diego Bay south of Downtown San Diego and the Barrio Logan

community, and west of the City of National City (Figure 2). NBSD has 12 piers and is the homeport to over 50 Navy ships, which represents the largest concentration of Navy surface vessels on the West Coast. The facility also is home to seven ships of the Navy's Military Sealift Command<sup>4</sup>, two Coast Guard cutters, several research and auxiliary vessels, and over 200 individual commands<sup>5</sup>.

The base provides pier space and waterfront operational services. A major tenant command on base is Southwest Regional Maintenance Center (SWRMC), which makes NBSD the single point of contact for ship maintenance in the San Diego area. SWRMC oversees contracted maintenance and overhaul activities for all ships stationed in and visiting the region. This command is responsible for the simple shipboard repairs performed by the crew and "depot-level" repairs that are performed by naval shipyards and commercial shipyards. It is the Navy's largest intermediate maintenance center, employing 2,200 military and civilian personnel at 70 industrial work centers in 22 buildings, covering 22 acres.

SWRMC also consists of over 400 contractors who collaborate with military and civilian personnel to assist with ship building, maintenance, and repairs for the Navy to meet its mission. NASSCO, BAE, and HII are commercial shipyards located along the San Diego waterfront that contract with the Navy to support the construction and repair of ships.

The region headquarters of Navy Medicine West (NMW) is located on NBSD. NMW is the Navy Medicine's health care system in the Western Pacific, providing medical care to more than 750,000 beneficiaries. NMW region headquarters is responsible for management and oversight of all Navy medical facilities in the western part of the United States and the Pacific.





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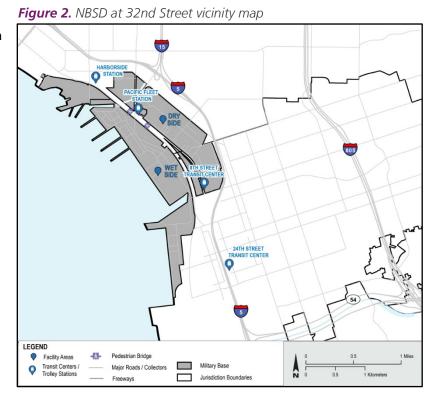






As the Navy rebalances to the Pacific, it plans to significantly increase the number of ships based in San Diego. Both the region and the waterfront will need to accommodate the resulting increase in military, civilian, and contract employees. This will have an impact on the greater transportation network and put further strain on local streets providing access to the waterfront.

Harbor Drive and the freight and Trolley lines split the base in two: the "west side" and the "dry side." The wet side is the area west of Harbor Drive and is comprised of the piers, maintenance support, and supply operations. Most of the buildings for SWRMC and a majority of the base's employment is located on the wet side. The dry side is the area east of Harbor Drive and includes base housing, professional education, training facilities, and fitness / recreational centers. The dry side also includes the region headquarters of NMW, the Navy Exchange Center, and the Navy Exchange Distribution Center where various goods are stored for the retail centers on base.



# **Existing Connectivity**

# Freeway / Roadway Network

I-5, I-805, and I-15 are three major north-south corridors used to access the base via driving, carpooling, and vanpooling. I-15 terminates at Harbor Drive and South 32nd Street immediately adjacent to the dry side. State Route 54 (SR 54) is a major east-west connector south of the base that also is used to access the base. Each of these four freeways have nearby Park & Ride lots where commuters can meet to carpool, vanpool, or access transit services (Appendix A) to access NBSD. There are no carpool lanes on SR 54 or the southern portion of I-5.

### **Transit**

The Blue Line Trolley is a north-south light rail service operated by MTS that runs from the U.S.-Mexico border at San Ysidro to Downtown San Diego. Adjacent to the base, the Blue Line Trolley runs parallel to Harbor Drive and has four stations within a mile of one or more of the base's access gates: Harborside Station, Pacific Fleet Station, 8th Street Transit Center, and 24th Street Transit Center (Figure 3). The closest east-west Trolley service, the Orange Line, stops approximately two miles north of NBSD at the 12th and Imperial Transit Center where people can then transfer to the Blue Line. The Blue Line operates from approximately 4 a.m. to 1 a.m. and runs every 7-8 minutes during the peak and every 15 minutes during off-peak. The Trolley crosses 28th Street and 32nd Street at-grade, causing additional queuing at the intersections of 28th Street and Harbor Drive, and 32nd Street and Harbor Drive when traffic volumes and congestion are at their peak.

MTS Bus Routes 929, 932, 955, 962, and 963 stop near NBSD. Routes 929, 932, and 955 are north-south bus routes that connect areas in the cities of San Diego, National City, and Chula Vista as well as the Otay Mesa community. Stops nearest the facility for Route 929 are along Main Street from South 26th Street and Division Street, and along National



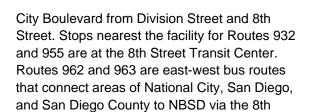
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Street Transit Center. None of the above routes

travel along Harbor Drive.

The 8th Street Transit Center has been identified as a mobility hub prototype site for the region (Appendix B). Mobility hubs are places of connectivity where different modes of travel walking, biking, transit, and shared mobility services - converge and where there is a concentration of employment, housing, shopping, and/or recreation. They provide an integrated suite of mobility services, amenities, and technologies to bridge the distance between high-frequency transit and an individual's origin or destination. The 8th Street Transit Center serves the Blue Line Trolley and 5 bus routes, and is within one mile of 5 access gates (Gate 7, 9, 38, 39, and 40) and less than



1.5 miles from another 5 gates (Gate 5A, 6, 6A, 29, and 32).

## Active Transportation

Nearby bike facilities provide connections between the base and Barrio Logan, Southeastern San Diego, and National City (Figure 3). The Bayshore Bikeway is a regional corridor that, once completed, will extend 24 miles around San Diego Bay<sup>6</sup>. Approximately 16 miles of Class I bike paths (separated from vehicle traffic) have been built and the remaining bikeway consists of on-street Class II bike lanes or Class III pavement markings (sharrows). Completed segments of the Bayshore Bikeway provide buffered bike lanes along Tidelands Avenue and a protected bikeway on Harbor Drive from Civic Center Drive to 32nd Street (Appendix C). The Barrio Logan Segment, once completed, will continue the Class I protected bikeway from 32nd Street to Park Boulevard. Once on base, people biking, including those using Lime bikes (discussed below), can use the internal roadway network, marked with sharrows, to get to their desired destinations. Helmets are required for people biking on base with personal or Lime bikes.

NBSD is very walkable due to its size and internal roads. For example, the wet side is approximately three miles from end to end. The internal roads are mostly two lanes, with one lane in either direction, and low speed limits. Pedestrian activity is concentrated within the base. High traffic volumes and lack of pedestrian amenities on adjacent local roads create an environment that discourages people from walking to the base.

Currently, there are two pedestrian bridges at the intersection of Harbor Drive and 32nd Street intersection – one on the north side of the intersection, spanning 32nd Street, and one on the west side, spanning Harbor Drive. These bridges (which can be accessed by staircases on the northeast, northwest, and southwest corners of the intersection) provide an above-ground, low-stress connection for military personnel and visitors travelling between the wet and dry side or travelling between the wet side and the Pacific Fleet Trolley Station. People using the bridges for travel between the wet





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and dry side must exit and re-enter the facility via access gates on either side. The pedestrian bridges do not meet the American with Disabilities Act of 1990 (ADA) standards, impede sight lines for people driving and biking along Harbor Drive, and hinder goods movement due to their low clearance. For these reasons and others, the pedestrian bridges will be removed as a part of the Bayshore Bikeway Barrio Logan Segment project and replaced with improved atgrade crossings.

Another pedestrian bridge spans Harbor Drive south of the intersection of Harbor Drive and 32nd Street. This bridge, unlike the other two, provides internal facility crossing between the wet and dry sides over Harbor Drive, meaning military personnel do not need to exit and re-enter security gates. This bridge has higher clearance and can accommodate trucks passing below the bridge on Harbor Drive. However, the bridge is not ideal for people biking since it can only be accessed via stairs and bikes must be walked across the bridge.

## **Mobility Programs**

NBSD launched a dockless bikeshare program with Lime to improve mobility for military personnel and employees. The launch marked the first dockless bikeshare program on a U.S. military base within the region and nationally. The initial deployment focused on high traffic areas inside the facility such as housing and retail areas such as the Navy Exchange. Lime also is allowed in the cities of San Diego and National City. Through the Lime bikeshare program, military personnel and employees have another option for getting to base either directly or combined with transit as a first and last mile solution. Lime bikes also provide internal circulation within the wet and dry sides. People using personal or Lime bikes on base are required to wear a helmet. Helmets are not provided with Lime bike rentals.

NBSD allows transportation network companies (TNCs) to drop off and pick-up military personnel on base. For specific drivers to have access onto base, the drivers must enroll and receive security clearance through the Department of Defense's Defense Biometric Identification System. Outside of the base, there are a few curb spaces where TNCs or taxis can drop-off or pick-up passengers. However, these spaces are not specifically marked or designated for passenger loading or use by taxis or TNCs. These are located on the eastside of 32nd street in between the Pacific Fleet Trolley Station and the entrance to Gate 43, and on the southside of Harbor Drive, west of 32nd street near the entrance of co-located Gates 5A and 6.

There are two shuttle routes that provide internal circulation within the wet side. These routes provide a total of 13 unique stops within the wet side. The wet side shuttle routes only operate on the weekdays from 7 a.m. to 5:30 p.m. There is no shuttle service on the dry side, due to lack of demand, or one that connects the wet and dry sides. The internal shuttle system has undergone process improvements over time to optimize routes and increase capacity at peaks.

There are several parking areas located on the facility. On the wet side, parking capacity is dynamic. Parking lots can be repurposed for staging areas for on-loading or off-loading ships at any time. There are parking spaces dedicated to vanpools and carpools near the piers.

To mitigate wet side parking demand, military personnel living on the dry side are required to walk or bike to the wet side. Additionally, contractors who need to access the shipyards do not have vehicle clearance to drive onto the wet side. Instead they are required to use company-provided shuttles to get to and from the piers.

Navy contractors, including NASSCO and BAE, have a combination of owned and leased parking lots within the working waterfront that they make available to their employees. Some of these parking lots are located between the freight and light rail lines along Harbor Drive opposite the shipyards. The light rail line has chain link fencing running parallel to the rail lines; however, the freight line has no barriers preventing pedestrians from crossing them. Additionally, there is either minimal or no pedestrian infrastructure, such as sidewalks and crosswalks, connecting these parking lots to the base. These parking lots also are subject to closure when maintenance is performed on the rail lines. Contractors have accommodated these closures by leasing remote parking facilities and busing employees into the shipyards.



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There also is a Navy Long-term Parking lot near the 8th Street Trolley Station and Navy Base Distribution Center which is meant for sailors to leave their cars while deployed for more than 30 days. The parking lot also is identified as a reserved military parking area for employees taking the Trolley to Broadway Complex in Downtown San Diego.

A mobility report card identifying programs and complementing infrastructure projects that support access to NBSD has been developed. 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 (Appendix D).

# **Military Personnel Commuting Patterns**

Government housing options for military and civilian employees include temporary lodging, family housing, unaccompanied ("bachelor") housing, and public-private venture housing on and off base. The Navy Lodge, located on the dry side, provides temporary lodging for military personnel who are either transitioning to the San Diego region or are on business or personal travel. There are over 4,600 bachelor housing units and 4,900 family housing units on base.

Sailors have the option to sleep on ships while docked on the wet side or lease on-base housing on the dry side or off base housing. Personnel who live on base on the dry side do not have the option to drive to the wet side, so there is a significant number of individuals who use the pedestrian bridge south of 32nd Street to access the wet side.

Table 1. Commute origin of NBSD

Commute Origin	Percent of Commuters
City of San Diego	46%
South San Diego County	26%
East San Diego County	14%
North San Diego County	6%
Riverside County	6%
Other*	2%
Total Responses	1,943

Source: iCommute Survey Results, August 2018 Notes: \*Other includes other California Counties with less than 1%, out of state, and international zip

Figure 4. Commute mode to NBSD

A large portion of military employees and their families living off base live in San Diego and Chula Vista (Table 1). After

City of San Diego and jurisdictions in South San Diego County such as Chula Vista, small percentages of military personnel live throughout the region and in Riverside County. Seventeen percent of military personnel living off base commute to the dry side, while 83% commute to the wet side8.

The primary mode for commuters is driving alone (*Figure 4*). Based on an iCommute survey, personnel drive out of convenience and lack of transit services near their home (**Table 1**)<sup>9</sup>. Additionally, personnel may require a vehicle to complete their mission. There are over 100 personnel that participate in the Department of Defense's TIP. Currently, 33 registered vanpools go to NBSD. However, vanpools only account as a commute mode for 4% of commuter trips. Very few commuters bike, walk, or take transit to work due to proximity of off base housing.

With a significant number of military and civilian employees commuting by driving alone, congestion around the base trickles onto adjacent local city streets and I-5. There is frequent congestion during peak hours along I-5 and Harbor Drive. Backups from the gates contribute to the

**Drive Alone** Bike/Walk 88% **7**% Carpool Motorcycle 9% 8% Work from Home Vanpool 3% 4% Rideshare **Transit** 2% 18%

Source: iCommute Survey Results,

August 2018

Notes: Total of 1,913 Survey Responses.

already congested and heavily used Harbor Drive corridor. In addition, the Trolley tracks nearby have created congestion by interrupting signal timing and through traffic at peak hours.





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#### **Gate Access**

NBSD has 15 gates that allow ingress and egress, although some are solely for emergency access purposes.

#### Wet Side Gates

Gates 2, 5A, 6, 6A, 7, 9, and 13 provide access to the wet side. With the exception of Gate 13, all wet side gates are accessed via Harbor Drive. Gates 5A and 6 may also be accessed via 32nd Street, and Gate 9 via 8th Street. Due to high volumes of military personnel and contractors accessing the wet side of NBSD, surrounding streets experience traffic congestion at peak hours. Harbor Drive, South 28th Street, South 32nd Street, and 8th Street experience heavy traffic as early as 5:30 a.m. during morning peak and 3 p.m. during the afternoon peak (Appendix E). During peak morning commute hours, southbound traffic along Harbor Drive can back up all the way to Cesar E Chavez Parkway while northbound traffic along Harbor Drive can back up to the Harbor Drive / Civic Center Drive exit on I-5 North. The heavy traffic experienced on

Figure 5. NBSD gates located north of the base vicinity map



Harbor Drive has spilled onto other local streets near wet side gates such as South 28th Street, South 32nd Street, and 8th Street. In addition, the traffic queue along Harbor Drive causes traffic congestion on I-5 South and I-15 in both directions, affecting circulation within the Barrio Logan community and National City and regionally via through traffic on freeways.

#### Gate 2

Gate 2 is located along Harbor Drive between South 28th Street and South 32nd Street adjacent to the NASSCO shipyard (Figure 5). The two-lane gate is open on the weekdays. The gate is "inbound only" in the morning (5 to 8 a.m.) with both lanes dedicated to inbound traffic. The gate is "outbound only" in the afternoon (3 to 5 p.m.) 10 with only one lane dedicated to outbound traffic. The gate is heavily used by contractors and military personnel accessing the wet side. The gate experiences an average daily volume of 2,700 vehicles.

Gate 2 provides access to the "Historic District" area of the facility and the piers. The Historic District is where base headquarters and the administrative offices of NBSD Port Operations, NBSD Security, and various tenant commands are located, as well as the movie theater and historic swimming pool. The gate is within a half-mile of the Harborside and Pacific Fleet Blue Line Trolley stations. Within the base, one of the wet side shuttle routes stops near Gate 2 and circulates the Historic District.





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#### Gate 5A and 6

Gate 5A (pedestrian-only) and Gate 6 are colocated along South 32nd Street (Figure 6) and are open 24 hours daily11. Gate 6 has six lanes. During the morning peak four lanes are dedicated to inbound traffic with each lane double-stacked with security personnel for increased efficiency. During the afternoon peak, three lanes are dedicated to outbound traffic and two lanes to inbound traffic. Gate 6A experiences an average daily volume of 7,175 vehicles.

Gates 5A and 6 is primarily surrounded by parking lots and industrial land uses on NBSD. The gates are heavily used by contractors and military personnel and provides access to several piers. The gates are near the Blue Line Trolley Pacific Fleet Station. Within the base, one of the wet side internal shuttle stops near the gates.

## Gate 6A (HOV/Freight)

Gate 6A is located on Harbor Drive south of Gate 6 and north of Gate 7 (Figure 6). It is primarily used

Figure 6. NBSD gates located north of the base vicinity map



for freight access as it is the only wet side gate that commercial vehicles are allowed to use. Gate 6A can only be accessed on the south side of Harbor Drive; there is no left turn lane providing access for northbound traffic. As a result, northbound freight trucks must make a U-turn at the intersection of Harbor Drive and 32nd Street to access Gate 6A.

The facility is planning to add a lane at this gate to accommodate increased High Occupancy Vehicle (HOV) traffic and facilitate throughput.

#### Gate 7

Gate 7 is located on Vesta Street and accesses Harbor Drive (Figure 6).

#### Gate 9

Gate 9 is located on 8th Street (Figure 7). The gate has three inbound lanes and three outbound lanes and sees an average daily volume of 1,548 vehicles. The gate is open weekdays from 5 to 8 a.m. and 2:30 to 5 p.m. 12

The gate is near the 8th Street Transit Center, which provides access to bus routes and the Blue Line Trolley. Within the base, one of the wet side internal shuttle stops is near Gate 9. The Navy Overflow Parking lot and Navy Exchange (NEX) distribution center are located on the north side of Harbor Drive across from Gate 9.

At peak hours, congestion related to the base spills onto 8th Street, backing up to the intersection of 8th Street and D Avenue. This congestion has made it difficult for MTS buses to access the 8th Street Transit Center.

#### Gate 13

Gate 13 is located on 19th Street and is accessed via Tidelands Avenue (Figure 7).





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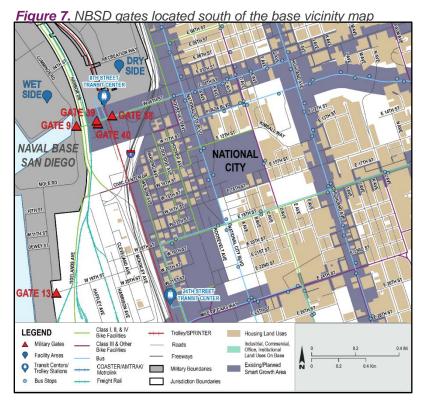
# Dry Side Gates

Gates 15, 23, 29, 32, and 43 provide access to the dry side of NBSD. The dry side of NBSD is separated by South 32nd Street. Gates 15 and 23 provide access to the dry side west of South 32nd Street and Gates 29, 32, and 43 provide access to the dry side east of South 32nd Street.

#### Gates 15 and 23 (Brooklyn Heights)

Gate 15 and Gate 23 provide access to the commissary, NEX, Navy Lodge, Navy Federal Credit Union, car wash, and Fleet and Family Services (Figure 5 and Figure 6). This area is colloquially known as Brooklyn Heights.

Gate 15 is located off South 28th Street between Main Street and Harbor Drive. It is directly adjacent to the Navy Lodge, which provides temporary housing to military personnel and their families. It has one inbound and one outbound lane and is open 24 hours daily. Gate 23 is located off 32nd Street between Main Street and Harbor Drive on the west side of 32nd Street. It has two inbound and two outbound lanes, and is open Monday



to Saturday from 6 a.m. to 10 p.m. and Sunday and holidays 6 a.m. to 9 p.m.

#### Gates 29, 32, and 43

Gates 29, 32, and 43 provide access to on-base housing, dining, training/education, medical and dental facilities, and fitness/recreational centers. Gate 29 is located on Vesta Street south of Main Street (Figure 6). It has two inbound lanes and one outbound lane and is open weekday mornings from 5 to 8 a.m.

Gate 32 is located on Yama Street / West Division Street south of Main Street (Figure 6). It has three inbound lanes and one outbound lane and is open weekdays from 5 a.m. to 7 p.m. Yama Street has both an I-5 South off-ramp and on-ramp. Queueing at Gate 32 backs up traffic on the Yama Street I-5 South off-ramp and impedes access to the I-5 South onramp.

Gate 43 is located off 32nd Street between Harbor Drive and Main Street and immediately north of the Pacific Fleet Trolley Station (Figure 6). It has two inbound lanes and one outbound lane and is open 24 hours daily. An I-5 South onramp and off-ramp is located immediately adjacent to Gate 43. Queueing at the gate backs up traffic on the on-ramp and off-ramp.

#### **Goods Movement**

A BNSF Railway Company (BNSF) rail line runs adjacent to Harbor Drive and continues north and south of NBSD (Figure 3). The freight rail crosses Harbor Drive just north of the intersection of Harbor Drive and 28th Street, switching from the west to the east side of Harbor Drive when traveling from north to south. BNSF trains cross 28th Street and 32nd Street at-grade, but not as frequently as the Blue Line Trolley. Approximately eight BNSF trains pass-through the corridor every day. A rail spur north of the Harbor Drive crossing provides direct access to the NASSCO shipyards for delivery of shipbuilding and ship repair materials.





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I-15, I-5, and Harbor Drive serve as major freight and goods movement corridors for NBSD and the region. Goods transported to NBSD and between NBSD and other bases use these corridors. Goods arriving and leaving the facility are directed to use Gate 6A located on the wet side, along Harbor Drive. In addition, goods arrive from ships docked at the piers. Trucks are used to move the material from the ships to their final destinations.

Harbor Drive has high traffic volumes and congestion. Several intersections operate at a level of service D or worse, especially during peak hours. Additionally, the intersection of 32nd Street and Harbor Drive is challenging for trucks to navigate as the pedestrian bridges are too low. Congestion not only causes poor access to NBSD, but also impedes trucks accessing I-15 and I-5 via Harbor Drive. Access to I-5 and I-15 is critical for the flow of goods to and from NBSD, within the region, and both nationally and internationally. This has caused truck traffic to channel into the local streets of Barrio Logan, creating concerns for pedestrian safety, air quality, and noise.

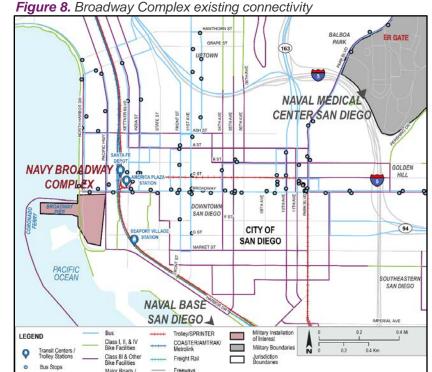
# **Navy Broadway Complex**

The Navy Broadway Complex (Broadway Complex) is a bayside military facility of NBSD located in Downtown San Diego. It houses the primary offices of the Navy Region Southwest and is closely tied to regional US Coast Guard operations. The Broadway Complex is bordered by the San Diego Bay and Harbor Drive to the west, Broadway to the north, Pacific Highway to the east, and W Harbor Drive to the south (Figure 8).

# **Existing Connectivity**

# Freeway / Roadway Network

I-5, I-15, and SR 163 are three major north-south freeways and SR 94 is a major east-west freeway for driving, carpooling, and vanpooling to the base (Figure 8). There are no carpool lanes on SR 163 and SR 94. There are several Park & Ride lots along these major corridors where commuters can meet to carpool, vanpool, or access transit services (Appendix A).







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### **Transit**

Military personnel can access the Broadway Complex via various transit services serving Downtown San Diego. Santa Fe Depot, located a half-mile from the facility, is served by Amtrak, which connects metropolitan areas along the California

coastline; and NCTD's COASTER, a regional commuter rail line that connects coastal communities from Oceanside to Downtown San Diego.

Military personnel also can use the Blue Line Trolley, which stops at America Plaza; the Green Line Trolley, which stops at the Seaport Village Station and Santa Fe Depot; and the Orange Line Trolley, which stops at the Courthouses. The Blue Line allows for travel between the Broadway Complex and NBSD and connects Downtown San Diego with the cities of National City, Chula Vista, Imperial Beach, and San Ysidro. The Green Line connects Downtown San Diego with Mission Valley and the cities of El Cajon and Santee. The Orange Line connects Downtown San Diego with the cities of Lemon Grove, La Mesa, and El Cajon.

There are several MTS bus routes that serve Downtown San Diego (Figure 8) and connect Broadway Complex to various destinations across the region (Table 2). MTS Routes 923 and 992 and Rapid Express Routes 280 and 290 provide a direct connection to the facility with stops north of the facility along Broadway between Harbor Drive and Santa Fe Depot.

The Coronado Ferry stops at the Broadway Pier adjacent to Broadway Complex. The ferry connects Downtown San Diego to Coronado and is featured as part of the Bayshore Bikeway. Commuters receive free ferry rides between 5:40 and 8:50 a.m. Morning commuters receive a return ticket to be used same-day between 2 and 6:45 p.m.

# **Active Transportation**

A mixture of Class I, II, and III bike facilities exist along

Harbor Drive, Broadway, and Pacific Highway. The majority of the east-west downtown streets, such as Broadway which has a posted speed limit of 25mph, are mix-flow bike routes (Class III with sharrows) that experience significant vehicle use. Broadway has sidewalks in both directions which are frequently used by people biking and scootering in addition to walking, despite City of San Diego municipal code that requires motorized scooters to operate on the local street<sup>13</sup>. The Bayshore Bikeway is a major north-south, low-stress bike corridor along Harbor Drive that serves the Broadway Complex and connects it to NBSD and areas surrounding the San Diego Bay.

Table 2. MTS Bus Routes serving Downtown San Diego

Route	Destinations				
2	Golden Hill, South Park, North Park				
7	Balboa Park, North Park, City Heights				
11	Bankers Hill, Hillcrest, University Heights, Normal Heights, College Area, San Diego State University				
30	Old Town, Pacific Beach, La Jolla, VA Medical Center, University Town Center (UTC)				
50	Bay Park, Clairemont, UTC				
83	Bankers Hill, Hillcrest, Mission Hills, Old Town				
110	Mira Mesa				
150	Sports Arena, Old Town, La Jolla, UTC				
923	Point Loma, Ocean Beach				
992	San Diego International Airport				
Rapid 215	Balboa Park, North Park, University Heights, Normal Heights, College Area, San Diego State University				
Rapid 225	Chula Vista				
Rapid 235	City Heights, Normal Heights, Kearny Mesa, Mira Mesa, Sabre Springs, Rancho Bernardo, Escondido				
Rapid Express 280	Escondido				
Rapid Express 290	Sabre Springs, Rancho Bernardo				





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# Mobility Programs

Personnel may use Lime bikes to access and travel within the Broadway Complex. They can also access Circuit, formerly known as FRED, which was discussed in the Regional Framework<sup>14</sup>. Naval Broadway Complex falls within the Circuit service area.

Available parking for those accessing the Broadway Complex include a permitted government-only parking area on the facility, downtown metered street parking, and privately managed parking lots. The on-facility parking area is planned for development as a part of the Manchester Pacific Gateway project, which will build an administration complex that includes hotels, offices, and shops<sup>15</sup>. During construction, military personnel are being re-directed to use the parking lot west of the 8th Street Transit Center near NBSD and either take the Blue Line Trolley or a new shuttle service to the Broadway Complex. Parking at the lot west of the 8th Street Transit Center has a limited amount of reserved spaces for those accessing the Broadway Complex. The Manchester Pacific Gateway project plans include the construction of approximately 460 underground parking spaces.

There is currently no shuttle that provides transportation services within the Broadway Complex. A new shuttle service will

be implemented to bring people between the parking lot west of 8th Street Transit Center and the facility once the current on-facility parking lot is developed through the planned Manchester Pacific Gateway project.

A mobility report card identifying programs and complementing infrastructure projects that support access to Broadway Complex has been developed. 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. (Appendix D)

**Military Personnel Commuting Patterns** 

There are no housing options provided on Broadway Complex. Military personnel working at Broadway Complex either live on another base, in off-base government housing or in housing within jurisdictions in the region or other counties. The employees of Broadway Complex primarily live in the cities of San Diego and Chula Vista (Table 3). There is a small distribution of the employees who live in the region, Riverside County, and Orange County.

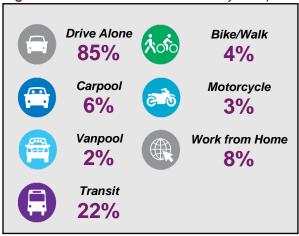
The primary commute mode for employees is driving alone (85%) due to the flexibility and convenience of having a personal vehicle to do errands or go home in case of an emergency. 16 There are only seven registered vanpools that go to Broadway Complex and very few travel by this option. Many commuters bike, walk, take the train, or take transit to work.

Table 3. Commute origin of Broadway Complex

Commute Origin	Percent of Commuters
City of San Diego	53%
South San Diego County	18%
East San Diego County	16%
North San Diego County	9%
Riverside County	2%
Total Responses	130

Source: iCommute Survey Results, June 2016

Figure 9. Commute mode to Broadway Complex



Source: iCommute Survey Results, June 2016 Notes: Total of 130 Survey Responses.





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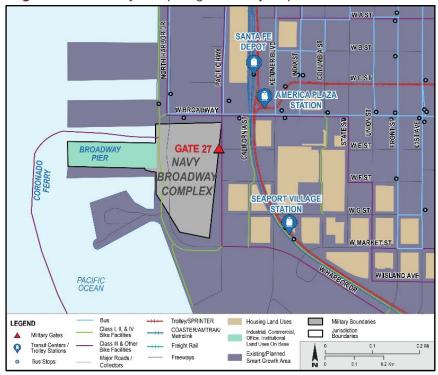


With the impending loss of on-facility parking areas due to the Manchester Pacific Gateway project, the facility is encouraging alternative commute options for its employees. A majority of commuters are choosing commute options other than driving alone with a monetary subsidy to take other commute modes, guaranteed ride home in the event of an emergency or unscheduled overtime, or assistance finding people with whom to carpool/vanpool<sup>17</sup>.

#### **Gate Access**

The Broadway Complex currently has one pedestrian access gate (Post 26) (Figure 10). All other access gates are closed due to construction related to the Manchester Pacific Gateway project. Post 26 is open weekdays from 6 a.m. to 6 p.m. and is located at the facility's Quarterdeck.

Figure 10. Broadway Complex gate vicinity map







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# Naval Medical Center San Diego

The Naval Medical Center San Diego (NMCSD) is a technologically advanced Navy medical treatment facility and serves as the largest teaching hospital in the Navy. NMCSD has five medical mobilization teams including the hospital ship whose personnel are drawn from the hospital staff. These teams deploy to the Western Pacific at various times during the year. NMCSD also is a major training facility and is affiliated with other medical facilities in the region such as Scripps Clinic and University of California, San Diego. NMCSD employs more than 6,000 active duty, civilians, contractors, and volunteers. In 2014, the facility admitted more than 19,000 patients and received more than one million outpatient visits<sup>18</sup>. It is an important medical facility for not only the military, but also the region.

NMCSD is located within the grounds of Balboa Park in San Diego (Figure 11). It is north of Downtown San Diego, east of the Uptown neighborhood, and west of North Park, South Park, and Golden Hill. The facility is bordered by

Figure 11. Naval Medical Center existing connectivity NAVAL MEDICAL CENTER SAN DIEGO UPTOWN GOLDEN CITY OF SAN DIEGO DOWNTOW 94 SOUTHEASTERN Trolley/SPRINTER Balboa Park LEGEND Military Boundaries Freight Rail

Zoo Place to the north, Florida Drive to the east, I-5 to the south, and Park Boulevard to the west.

# **Existing Connectivity**

# Freeway / Roadway Network

I-5 and SR 163 are two major north-south freeways and SR 94 is a major east-west freeway for driving, carpooling, and vanpooling to the facility. There are no carpool lanes on SR 163 and SR 94. There are several Park & Ride lots along these major corridors where commuters can meet to carpool, vanpool, or access transit services (Appendix A).

#### **Transit**

Military personnel and visitors can access NMCSD via various transit services. The City College Station, located approximately three miles south of NMCSD, is served by the Blue Line and Orange Line Trolleys and several MTS bus routes. (Figure 11).

MTS Bus Route 7 and Rapid Route 215 stop along Park Boulevard adjacent to NBSD. The closest stop to the facility for both routes is near the intersection of Park Boulevard and Wieber Avenue. These routes connect the facility to Downtown San Diego, North Park, City Heights, and College Area; and stop at several transit centers and Trolley stations including the City College Station and SDSU Transit Center.

#### **Active Transportation**

Currently, there are Class III bike facilities along Park Boulevard and Class II bike lanes on Florida Drive, and Pershing Drive, which are local roads adjacent to NMSCD. These facilities provide connections between NMSCD and Downtown San Diego, Uptown, and North Park. The Pershing Bikeway and Park Boulevard Bikeway are planned bike projects that





**BRIEFING BOOK** 









will improve access to NMSCD. Once completed, the Pershing Bikeway will provide a separated bikeway, buffered bike lanes, and a walking path along the 2.6-mile segment of Utah Avenue and Pershing Drive from the intersection of Utah and Landis to B and C Streets in Downtown San Diego. The Park Boulevard Bikeway may include buffered or separated bikeways, intersection improvements, and traffic calming features from the intersection of Park Boulevard and Robinson Avenue to the intersection of Park Boulevard and Upas Street.

## **Mobility Programs**

NMCSD is surrounded by communities that allow multiple bikeshare programs (dockless and docked) and scooter share programs, giving NMCSD employees and military personnel more mobility options. These programs have the potential to provide first and last mile connections from the facility to transit services that may not be within walking distance to NMSCD. There are limitations to the use of TNCs to access NMSCD due to the constrained footprint of the campus. However, TNCs can pick up and drop off military personnel on local streets surrounding the facility.

There are four parking lots located within NMCSD with approximately 3,800 parking spaces combined<sup>19</sup>. Staff parking is limited and many staff park in adjacent city-owned parking lots within Balboa Park and walk to campus.

A mobility report card identifying programs and complementing infrastructure projects that support access to Naval Medical Center has been developed. 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. (Appendix D)

# **Military Personnel Commuting Patterns**

There are no housing options provided on NMCSD. Employees of NMCSD live on another base, in off-base government housing, or housing within jurisdictions in the region and in other counties. The employees of NMCSD primarily live in the city of San Diego (**Table 4**). There is a small distribution of the employees who live elsewhere in the region and in Riverside County.

The primary commute mode for employees is driving alone (87%) due to the flexibility and convenience of having a personal vehicle to do errands, accommodate irregular work hours, or go home in case of an emergency. There are twelve registered vanpools that go to the facility; very few travel by this option. Very few commuters bike, walk, take the train, or take transit to work.<sup>20</sup>

Table 4. Commute origin of Broadway Complex

Commute Origin	Percent of Commuters
City of San Diego	37%
East San Diego County	20%
South San Diego County	17%
North San Diego County	17%
Riverside County	10%
Total Responses	30

Source: iCommute Survey Results, June 2016





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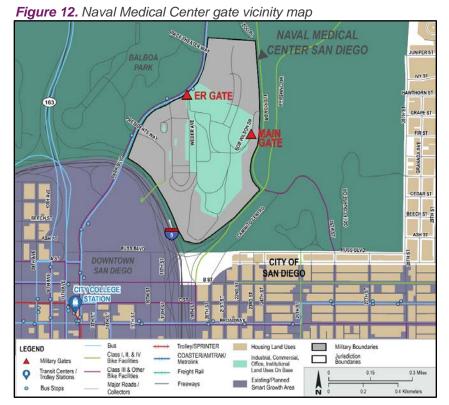




#### **Gate Access**

There are two gate entrances for NMCSD (Figure 12). The ER Gate is located on the east side of NMCSD off Park Boulevard. It provides access to pedestrians and emergency vehicles only. MTS Bus Route 7 and Rapid Route 215 stop immediately outside the ER Gate.

The Main Gate is located on the east side of NMCSD along Bob Wilson Drive near the intersection of Bob Wilson Drive and Florida Drive. The gate has four inbound and two outbound lanes and is open 24 hours daily<sup>21</sup>. It provides access to people driving, walking, or biking and is the gate used for supply deliveries. The Main Gate is the only entrance gate for NMCSD that non-emergency vehicles can use to enter and exit NMCSD. During the peak morning commute, the gate experiences a queue of vehicles that can spill onto Florida Drive as staff, military personnel, patients, and visitors try to enter the facility (Appendix E).







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# **Summary of Challenges for NBSD**

# Traffic and Regional Connectivity

- Ingress and egress delays at NBSD dry side gates, especially during peak travel periods
- Yama Street Gate not designed to accommodate the current volume of vehicles which is resulting in queueing onto freeway ramps
- Congestion along Harbor Drive and freeway ramps affects access to NBSD
- At-grade rail crossings at 28th Street and 32nd Street interrupt signal timing and coordination which contributes to congestion at adjacent intersections
- Multiple intersections along routes to NBSD with low levels of service during peak hours such as 32nd Street/ Wabash Boulevard and 32nd Street/Harbor Drive
- Poor pavement conditions on Harbor Drive impacts vehicular movements
- Traffic queue at NMCSD Main Gate, the only access point for non-emergency vehicles, impacts Florida Drive at peak hours

# Mobility

- Limited connections between NBSD wet and dry sides
- Limited knowledge of available alternative commuting options
- Cost savings are not a strong incentive to change current commuting behavior
- Mobility of residents in Barrio Logan community impacted by the amount of truck traffic on local roads
- Helmet is required for biking on base while helmets are not currently provided by the bikeshare companies upon bike rental
- Irregular work hours prevent some military personnel from using schedule-based transportation services like transit and vanpool
- Low transit ridership on former routes serving NBSD resulted in the elimination of those services
- Lack of transit service within NBSD to connect work locations and ship yards
- Traffic queue at NBSD Gate 9 extends onto 8th Street, impacting bus access to 8th Street Transit Center
- High parking demand within NBSD, around Gate 13, and along Main Street
- High weekday parking demand at transit centers decreases reliability of available spaces for commuters

#### Other

- Congestion on Harbor Drive, especially at the intersection of 32nd Street and Harbor Drive, impedes goods movements and causes freight traffic to divert onto local roads
- Low clearance of pedestrian bridges at the intersection of Harbor Drive and 32nd Street limits certain freight trucks from using the corridor for goods movement
- Truck traffic on residential streets causes concerns for pedestrian safety, air quality, pavement condition, and noise in surrounding communities such as Barrio Logan
- Intersection of 32nd Street and Harbor Drive is difficult for trucks to make desired movements
- Concerns with how to accommodate for the increase growth of staff and personnel on NBSD
- Broadway Complex redevelopment removes current parking spaces
- Military family housing is located throughout the county
- Limited government-owned land to accommodate new housing for future military growth





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# **Relevant Programs and Projects**

**Existing Planned Projects & Programs Relevant to Naval Base San Diego (at 32nd Street)** 

	Existing Planned Projects & Programs Relevant to Naval Base San Diego (at 32nd Street)						
Facility	Project Extents	Improvement Type	Subcategory	Project Improvement	Source		
Harbor Drive	National City Marina to 32nd St	Active	Bicycle	Bayshore Bikeway	SANDAG Regional Plan (2015)		
8th Street	Harbor Drive to Roosevelt Avenue	Active	Bicycle	Cycle Track on 8th Street between Harbor Drive and Roosevelt Avenue, connection with Bayshore Bikeway and NBSD	National City Downtown Specific Plan (2017)		
32nd Street	Norman Scott Rd	Active	Pedestrian	Upgrade curb ramps, install ped countdown timers	City of San Diego Capital Improvement Program (CIP GIS Shapefile) (2017)		
8th Street	Harbor Drive to D Avenue	Active	Pedestrian	Urban trail	National City Downtown Specific Plan (2017)		
National City	National City	Active	Pedestrian	Traffic calming measures such as corner bulb-outs, pedestrian actuated flashing crossing signs and high intensity striping, new lighting and pedestrian curb ramps for ADA compliance to enhance safety and access at 14 existing crosswalk	National City Capital Improvement Program (CIP) (2017)		
I-5	San Ysidro to Downtown San Diego	Active	Pedestrian	Add Pedestrian Over Crossing (POC) Americans with Disabilities Act (ADA) upgrades	Caltrans District System Management Plan (DSMP) (2016)		
Chollas Creek	Dorothy Petway Park to Harbor Dr	Active	Pedestrian/ Bicycle	The project will construct a multi-use path, traversing portions of two City of San Diego communities, Southeastern San Diego and Barrio Logan. The project runs from the Dorothy Petway Neighborhood Park at its eastern terminus to Harbor Drive	City of San Diego Capital Improvement Program (CIP GIS Shapefile) (2017)		



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	Existing Planned Projects & Programs Relevant to Naval Base San Diego (at 32nd Street)						
Facility	cility Project Improvement Extents Type		Subcategory	Project Improvement	t Source		
Harbor Drive	City Center Drive to Northern City Limits	Active	Pedestrian/ Bicycle	Class I multi-use path on west side of Harbor Drive from Civic Center Drive to Northern City Limits and Class II bicycle lane on east side of Harbor Drive from Civic Center Drive to Northern City Limits	National City Downtown Specific Plan (2017)		
Harbor Drive	at 8th Street	Active	Pedestrian/ Bicycle	Pedestrian and bicycle connections to NBSD gate	National City Downtown Specific Plan (2017)		
McKinley Ave	Civic Center Drive to 19th Street	Active	Pedestrian/ Bicycle	Road diet to allow for widening of sidewalks and Class II bike lanes.	National City SMART Foundations (2014)		
National City	National City	Active	Roadway/ Pedestrian/ Bicycle	Wayfinding Sign Plan for Citywide active transportation programs and a designated truck route	National City Capital Improvement Program (CIP) (2017)		
National City	Throughout National City	Active	Roadway/ Pedestrian/ Bicycle	National City Wayfinding Signage Project	Port Capital Improvement Program (CIP) (2014)		
I-5	SR-54 to SR-15	Freeway	Lanes	Add 2 freeway lanes and 2 managed lanes (8F to10F + 2ML)	SANDAG Regional Plan (2015)		
Harbor Drive	Harbor Drive	Maritime	Roadway/ Pedestrian/ Bicycle	Harbor Drive Multimodal Corridor Improvements, including but not limited to: improvements at 32nd Street and Vesta Street; pedestrian crossings and bridges; various truck improvements; bikeway accommodations; street scape, safety, and parking improvements	SANDAG Regional Plan (2015)		
I-15	I-15 to Kinder Morgan MV Terminal	Rail Intermodal	Other	I-15 Access to Kinder Morgan MV Terminal	SANDAG Regional Plan (2015)		
Vesta Street	Over Harbor Drive	Roadway	Bridge	Install access enhancement bridge	Caltrans District System Management Plan (DSMP) (2016)		











	Existing Planned Projects & Programs Relevant to Naval Base San Diego (at 32nd Street)						
Facility	Project Improvement Extents Type		Subcategory	Project Improvement	Source		
Civic Center Drive	Harbor Drive and I-5	Roadway	Connector	Create a direct connection with Harbor Drive and Tidelands Avenue, Signalized Wilson Avenue at Civic Center Drive, add northbound lane on Wilson Avenue, widen Northbound 1-5 ramp	Port CIP Caltrans Trade Corridors Improvement Fund		
8th Street	at I-5 SB off- ramp	Roadway	Intersection	Signalize intersection and eliminate free right-turn	National City Downtown Specific Plan (2017)		
8th Street	Hoover Avenue	Roadway	Intersection	Signalize intersection	National City Downtown Specific Plan (2017)		
National City	National City	Roadway	Intersection	Upgrades such as new traffic signals, push buttons, curb ramps, and modifications to signal poles, pedestrian "countdown" signal heads	National City Capital Improvement Program (CIP) (2017)		
Main St	Vesta St	Roadway	Intersection	Traffic signal improvements	City of San Diego Capital Improvement Program (CIP GIS Shapefile) (2017)		
32nd Street	Harbor Drive to I-5	Roadway	Other	Grade Separated Improvements: a partially raised tee intersection for turning movement from Harbor Drive to I-5	Port CIP Caltrans Trade Corridors Improvement Fund		
32nd Street	Norman Scott Rd	Roadway	Traffic	Install signal poles with longer mast arms; remove signal poles off medians; upgrade vehicle heads to 12" LED; install Polara APS	City of San Diego Capital Improvement Program (CIP GIS Shapefile) (2017)		
Plaza Boulevard	Highland Avenue to Euclid Avenue	Roadway	Other	Widen Plaza Boulevard to construct a 6-lane regional arterial roadway.	National City Capital Improvement Program (CIP) (2017)		
Route 637	North Park to 32nd St Trolley Station	Transit	Rapid	Connection from North Park to 32nd St Trolley Station via Golden Hill	SANDAG Regional Plan (2015)		



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ı	Existing Planned Projects & Programs Relevant to Naval Base San Diego (at 32nd Street)						
Facility	Project Extents			Project Improvement	Source		
Routes 640A/640 B	San Ysidro to Palomar	Transit	Rapid	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)		
8th Street and Yama Street	Connections to NBSD	Transit	Shuttle	Electric shuttle system	National City Downtown Specific Plan (2017)		
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	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 32nd 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 510	Mira Mesa to Border	Transit	Trolley	Blue Line Rail Grade Separation	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)		
Route 562	San Ysidro to Kearny Mesa	Transit	Trolley	Phase I - Connection from San Ysidro to Kearny Mesa via Chula Vista via Highland Ave/4th Ave, National City Southeast San Diego, Mid- City, and Mission Valley	SANDAG Regional Plan (2015)		

C= Conventional Highway

F= Freeway

ML = Managed Lanes

T = Toll Road

R = Reversible Lanes OPS = Operational Improvements





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# **Existing Planned Projects & Programs Relevant to Broadway Complex**

	Existing Planned Projects & Programs Relevant to Broadway Complex						
Facility	Project Extents	Improvement Type	Subcategory	Project Improvement	Source		
Harbor Drive	W Broadway to Park Blvd	Active	Bicycle	Bayshore Bikeway	SANDAG Regional Plan (2015)		
Pacific Hwy	Pac Hwy (Laurel St to Santa Fe Depot)	Active	Bicycle	Coastal Rail Trail San Diego	SANDAG Regional Plan (2015)		
Harbor Drive	Harbor Dr (Downtown to Ocean Beach)	Active	Bicycle	Bicycle Facilities	SANDAG Regional Plan (2015)		
North Embarcadero	West Broadway, from railroad to Harbor Drive, and Harbor Drive, from West Broadway to B Street	Active	Pedestrian	North Embarcadero Vision Plan	Port Capital Improvement Program (CIP) (2014)		
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)		
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 910	Coronado to Downtown San Diego	Transit	Rapid	Connection from Coronado to Downtown San Diego	SANDAG Regional Plan (2015)		
Route 235	Escondido to Downtown <i>Rapid</i> (formerly Route 610)	Transit	Rapid	Temecula (peak only) Extension of Escondido to Downtown Rapid (formerly Route 610)	SANDAG Regional Plan (2015)		
Route 2	North Park to Downtown	Transit	Rapid	Connection from North Park to Downtown San Diego via 30th St, Golden Hill	SANDAG Regional Plan (2015)		



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Existing Planned Projects & Programs Relevant to Broadway Complex						
Facility	Project Extents	Improvement Type	Subcategory	Project Improvement	Source	
Route 225	Otay Mesa to Downtown and Otay Mesa ITC (formerly Route 628)	Transit	Rapid	South Bay Rapid (Otay Mesa to Downtown) and Otay Mesa ITC (formerly Route 628) connection to employment and activity centers in Downtown San Diego and provide travelers with frequent, reliable transit encouraging commuting by transit	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 520	East San Diego County to Downtown San Diego	Transit	Trolley	Orange Line Frequency Enhancements and four rail grade separations at Euclid Ave, Broadway/Lemmon Grove Ave, Allision Ave/ University Ave, Severin Dr	SANDAG Regional Plan (2015)	
Route 520	East San Diego County to Downtown San Diego	Transit	Trolley	Orange Line Frequency Enhancements	SANDAG Regional Plan (2015)	
Route 530	Green Line	Transit	Trolley	Green Line Frequency Enhancements	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 32nd 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 510	Mira Mesa to Border	Transit	Trolley	Blue Line Rail Grade Separation	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

**SANDAG** | MMAS Briefing Book

**NBSD** Profile





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# **Existing Planned Projects & Programs Relevant to Naval Medical Center**

Existing Planned Projects & Programs Relevant to Naval Medical Center							
Facility	Project Extents	Improvement Type	Subcategory	Project Improvement	Source		
Park Blvd	Uptown - Hillcrest to Balboa Park	Active	Bicycle	Bicycle Facilities	SANDAG Regional Plan (2015)		
Pershing Ave	Pershing and El Prado - North Park to Downtown San Diego	Active	Bicycle	Bicycle Facilities	SANDAG Regional Plan (2015)		
Laurel St/ El Prado	Pershing and El Prado - Cross- Park	Active	Bicycle	Bicycle Facilities	SANDAG Regional Plan (2015)		
Imperial Blvd, Island Ave, Park Blvd	Downtown San Diego to Golden Hill	Active	Bicycle	Downtown to Southeast connections	SANDAG Regional Plan (2015)		
I-5	San Ysidro to Downtown San Diego	Active	Pedestrian	Add Pedestrian Over Crossing (POC) Americans with Disabilities Act (ADA) upgrades	Caltrans District System Management Plan (DSMP) (2016)		
I-5/SR-94	North to East	Freeway	Connector	Freeway connector	Caltrans California Freight Mobility Plan (2014)		
I-5	I-15 to I-8	Freeway	Lanes	Add Operational Lanes to 8 Freeway Lanes	SANDAG Regional Plan (2015)		
I-5	I-5 to SR-54 West to South and North to East	Freeway	Lanes	Add High Occupancy Vehicle Connectors	Caltrans District System Management Plan (DSMP) (2016)		
SR 94	I-5 to I-805	Freeway	Lanes	Add two managed lanes (8F to 8F + 2ML)	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 2	North Park to Downtown	Transit	Rapid	Connection from North Park to Downtown San Diego via 30th St, Golden Hill	SANDAG Regional Plan (2015)		





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Existing Planned Projects & Programs Relevant to Naval Medical Center					
Facility	Project Extents	Improvement Type	Subcategory	Project Improvement	Source
Route 225	Otay Mesa to Downtown and Otay Mesa ITC (formerly Route 628)	Transit	Rapid	South Bay Rapid (Otay Mesa to Downtown) and Otay Mesa ITC (formerly Route 628) connection to employment and activity centers in Downtown San Diego and provide travelers with frequent, reliable transit encouraging commuting by transit	SANDAG Regional Plan (2015)
Routes 640A/640B	San Ysidro to Palomar	Transit	Rapid	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 554	Hillcrest, Balboa Park, Downtown San Diego	Transit	Streetcar	Loop between Hilcrest, Balboa Park, and Downtown San Diego	SANDAG Regional Plan (2015)
Route 555	30th St to Downtown San Diego	Transit	Streetcar	Connection from 30th St to Downtown San Diego via North Park/Golden Hill	SANDAG Regional Plan (2015)

C= Conventional Highway

F= Freeway

ML = Managed Lanes T = Toll Road

R = Reversible Lanes OPS = Operational Improvements





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# References

- 1 http://www.cpf.navy.mil/about
- 2 San Diego Military Advisory Council (SDMAC). 2017, "9th Annual Military Economic Impact Study" Available at: https://www.sdmac.org/MEIS2017
- 3 https://www.cnic.navy.mil/regions/cnrsw/installations/navbase san diego.
- 4 United States Navy's Military Sealift Command (MSC) is an organization that controls the replenishment and military transport ships of the Navy. Military Sealift Command has the responsibility for providing sealift and ocean transportation for all US military services as well as for other government agencies.
- 5 SDMAC 2017
- 6 https://www.keepsandiegomoving.com/RegionalBikeProjects/bayshore bikeway intro.aspx
- 7 https://www.cnic.navy.mil/regions/cnrsw/installations/navbase\_san\_diego/om/NBSDBusSchedule.html
- 8 SANDAG iCommute Commuter Survey June 2016
- 9 SANDAG iCommute Commuter Survey June 2016
- 10 https://www.cnic.navy.mil/regions/cnrsw/installations/navbase\_san\_diego/about/gate\_hours.html
- 11 https://www.cnic.navy.mil/regions/cnrsw/installations/navbase\_san\_diego/about/gate\_hours.html
- 12 https://www.med.navy.mil/sites/nmcsd/pages/visitors/why.aspx
- 13 https://www.sandiego.gov/bicycling/bicycle-and-scooter-sharing/rules
- 14 http://thefreeride.com/san-diego.php
- 15 http://www.manchesterpacificgateway.com/site\_plan.html
- 16 SANDAG iCommute Commuter Survey June 2016
- 17 SANDAG iCommute Commuter Survey June 2016
- 18 https://www.med.navy.mil/sites/nmcsd/pages/visitors/why.aspx
- 19 https://www.med.navy.mil/sites/nmcsd/pages/visitors/parking-information.aspx
- 20 SANDAG iCommute Commuter Survey June 2016
- 21 https://www.cnic.navy.mil/regions/cnrsw/installations/navbase\_san\_diego/about/gate\_hours.html

# **Appendices**

Appendix A. iCommute Park & Ride Map

Appendix B. 8th Street Transit Center Mobility Hub Profile

Appendix C. Bayshore Bikeway Fact Sheet

Appendix D. Mobility Report Cards for Naval Base San Diego, Broadway Complex, and Naval Medical Center

Appendix E. Google Traffic Maps





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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)

(i uii J	an Diego region rank & Nide ma	ap on revers	C)
	LOCATION	TRANSIT	PARKIN SPACES
	TEMECULA		
A	United Methodist Church 42690 Margarita Rd		71
В	Orchard Christian Fellowship 42101 Moraga Rd		105
G	Rancho Community Church**** 31300 Rancho Community Way		100
D	Winchester* 41327 Winchester Rd		87
<b>(3</b> )	Promenade Mall** 40820 Winchester Rd	•	75
	SAN JACINTO		
<b>F</b>	Mt. San Jacinto College*** 1499 N State St	•	27
	PERRIS		
G	Downtown Perris Station C St and 4 <sup>th</sup> St	•	24
H	South Perris Station 1304 Case Road		74
	MENIFEE		
0	The View Church 27755 Bradley Rd	•	38
	LAKE ELSINORE		
•	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 & 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





san diego regional

park & ride map





# san diego region park & ride lots

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

SR 54 at Washington Ave Carmel Mountain Rd at Rancho Carmel Dr SR 94 at Potrero Post Office 29 I-8 at Japatul Valley Rd I-15 at El Norte Pkwy 32 I-5 at La Costa Ave 33 I-15 at Deer Springs Rd I-15 at Mountain Meadow Rd I-15 at Gopher Canyon Rd SR 94 at Avocado Blvd 7 Oakes Rd at El Norte Pkwy\* SR 78 at College Blvd (South) SR 54 at Jamacha Blvd I-8 at Los Coches Rd

125

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115

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106

130

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20

43 I-5 at Gilman Dr 44 I-5 at SR 78 & Moreno St 45 SR 78 at College Blvd (North) 46 SR 76 at Sweetgrass Ln\* I-5 at Birmingham Dr Twin Peaks Rd at Budwin Ln\* 50 Telegraph Canyon Rd at Paseo Del Rey\* 51 I-15 at Rancho Peñasquitos Blvd 53 Carmel Mountain Rd at Paseo Cardiel\*

42 I-8 at Lake Jennings Park Rd

Carmel Mountain Rd at Stoney Creek Rd\* Bancroft Dr at Grossmont Blvd Severin Dr at Bancroft Dr 61) Severin Dr at Murray Dr 62 Encinitas Blvd at Calle Magdelena\* 63 SR 67 at Day St 64 East Valley Pkwy at Citrus Ave

65 I-15 at Rancho Bernardo Rd 15 69 SR 78 at Barham Dr\* 89 Mission Gorge Rd at Big Rock Dr 71 Sweetwater Springs Blvd at Austin Dr North Magnolia Ave at Alexander Way\* 22

73 Mission Ave at Frontier Dr 75 SR 67 at Dye Rd\* 20 76 I-15 at Scripps Poway Pkwy 50 SR 67 at Poway Rd 102 I-805 at Children's Way

Caliente Ave 235

81 Westfield North County Shopping Center\*\* \*Park & Ride parking Monday-Friday, 5:30 a.m. - 6 p.m. only \*\*Park & Ride parking Monday-Friday only







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,  $\it Rapid$ , 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



 $\ensuremath{\mathsf{GO}}$  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 man. There is no fee to use hike 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.







**BRIEFING BOOK** 









**Appendix B.**8<sup>th</sup> Street Transit Center Mobility Hub Profile









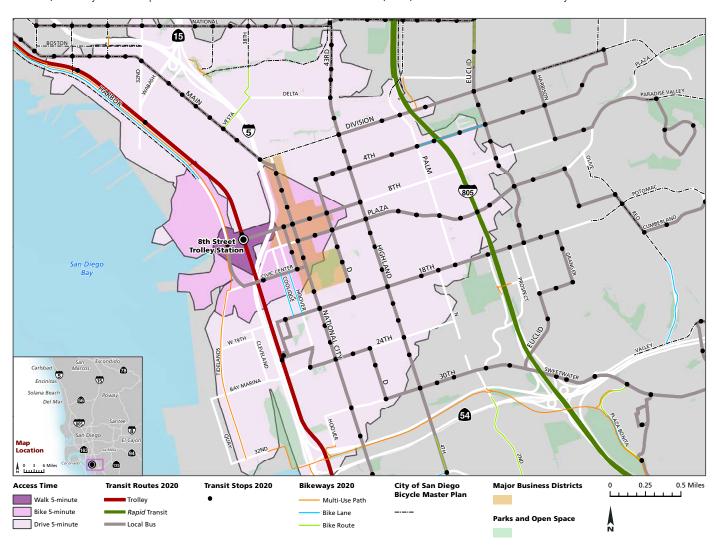
# 8th Street Trolley Station

Mobility hubs are transportation centers located in smart growth areas served by high frequency transit service. They provide an integrated suite of mobility services, amenities, and technologies that bridge the distance between transit and an individual's origin or destination. They are places of connectivity where different modes of travel—walking, biking, transit, and shared mobility options—converge and where there is a concentration of employment, housing, shopping, and/or recreation. This profile sheet summarizes mobility conditions and demographic characteristics around the 8th Street Trolley Station to help inform the suite of mobility hub features that may be most suitable.

The 8th Street Trolley Station is directly west of Interstate 5 in the northwest corner of National City, a South Bay community. The station provides access to the UC San Diego Blue Line and a few local bus routes, and is within close proximity to the region's industrial working waterfront including Naval Base San Diego. A mix of single and multi-family housing units are located east of the station on the other side of Interstate 5, and the downtown village area features a thriving community college and other retail destinations. The map below depicts the transit services and bikeways anticipated to serve the community in 2020.

#### **2020 MOBILITY SERVICES MAP**

In 2020, a variety of travel options will be available within a five minute walk, bike, or drive to the 8th Street Trolley Station.















### **DEMOGRAPHIC AND TRANSPORTATION HIGHLIGHTS**

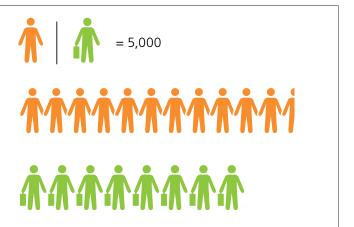
# 2020 Population and Employment

#### **POPULATION** = 57,741

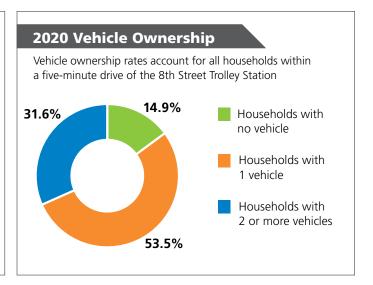
By 2020, over 57,000 people will live within a five-minute drive of the 8th Street Trolley Station.

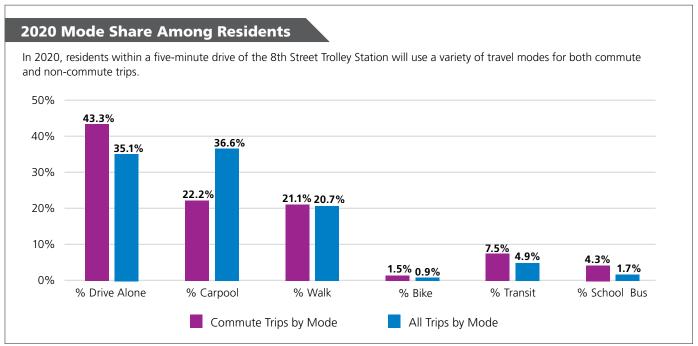
# **EMPLOYMENT** = 41,093

In 2020, over 40,000 jobs will be accessible within a five-minute drive of the 8th Street Trolley Station.



# 2020 Transit Services BUS local bus LIGHT RAIL Trolley HEAVY RAIL HEAVY RAIL





Source: Series 13: 2050 Regional Growth Forecast/San Diego Forward: The Regional Plan in ABM 13.2.2













Photos courtesy of SANDAG and the City of National City

#### **MOBILITY HUB OPPORTUNITIES**

The 8th Street Trolley Station is located a short distance from major waterfront employers, including Naval Base San Diego. The station provides a convenient Park & Ride option for the Blue Line Trolley that connects downtown to the U.S./Mexico border. As part of the San Diego Trolley Renewal Project, the Blue Line was renovated to provide a more comfortable transit experience for riders. The renovation included signal optimization for improved service, new shelters, raised platforms, and next arrival signage. Implementation of the mobility hub concept can expand upon these transit station investments to enhance the waiting area with technology amenities like WiFi and USB charging ports. Existing passenger loading zones, where feasible, can also be expanded to accommodate designated curb space with clear wayfinding signage for seamless passenger loading and unloading.

A surface lot with over 120 parking spaces may provide an opportunity to support operation of some shared mobility services and related amenities. These services expand the reach of transit by filling gaps in the local bus network. Motorized shared services help fulfil connections beyond the first or last mile. Given the Trolley station location west of Interstate 5, trips destined for locations beyond the National City civic center may be difficult via walking or biking. Electrified and other motorized shared services could be explored along with amenities that support their operation – EV charging infrastructure and dedicated parking or loading areas. Subsides for qualifying residents and employees could also be considered.

Additionally, the Trolley station's somewhat isolated location limits access to retail stores and eateries so the opportunity to allow mobile retail services and food vendors to operate during periods of heavy station use could be explored. Transit lot occupancy is routinely higher than two-thirds pointing to an opportunity to enhance parking management efforts using real-time availability and reservation technology while facilitating more flexible use of parking areas based on changing demands.

Beyond the immediate station area, the City of National City is making several multimodal improvements to enhance the walking and biking experience - pedestrian pathways, curb bulbouts, traffic circles, improved lighting, bike boxes, reverse angled parking, and effective wayfinding signage. The city's proximity to the 24-mile Bayshore Bikeway invites the opportunity for residents and visitors to use the facility to make inter-city connections while pursuing a healthy, active lifestyle.



#### RECOMMENDED MOBILITY HUB FEATURES

Mobility hubs depend on a complementary suite of transportation services, amenities, and technologies to deliver a seamless and reliable travel experience. Providing context-sensitive mobility hub features leverages existing transportation investments while anticipating the future of mobility in the San Diego region. Pedestrian, bike, and motorized solutions all play a role to enhance connections to transit while extending its reach into communities. The incorporation of electrified mobility options coupled with real-time technologies will reduce our region's carbon footprint while providing a fully integrated trip planning experience. As on-demand and autonomous services become more ubiquitous, transit stations and their surrounding communities will need to adapt to ensure these services effectively meet the needs of users while positively contributing to the transportation landscape.



# ENHANCED TRANSIT WAITING AREAS

The Trolley station could offer enhanced station amenities like WiFi, USB charging ports, and an interactive transportation kiosk that displays real-time information about regional travel options.



#### PASSENGER LOADING ZONES

Designated passenger loading zones could be used by on-demand ridehailing and microtransit services dropping off passengers and responding to real-time ride requests.



#### **BIKESHARE**

Bikeshare complements existing bike and pedestrian facilities—traffic circles, bike boxes, reverse angled parking, effective wayfinding. The Bayshore Bikeway provides a great opportunity to encourage biking for both commute and recreational trips. Integration of electric bikes can assist riders with longer trips, and membership subsidies could reduce financial barriers.



#### ON-DEMAND RIDESHARE

Increased use of pooled, ondemand rideshare services can enhance mobility for both residents and employees. Subsidies could be provided to ensure equitable access. Employers could partner with service providers to offer convenient transit connection options for employees while minimizing parking demand at employment sites.



## **MICROTRANSIT**

On-demand, shared autonomous shuttles could align with Trolley arrival times then transport riders to port, civic, and commercial destinations. Major waterfront employers could partner to subsidize this service.



# ELECTRIC VEHICLE CHARGING

Electric shared mobility services like bikeshare, microtransit, and on-demand vehicles require fast EV charging points to support operations. Siting charging stations and/or wireless charging technology near the Trolley station and passenger loading zones will ensure a connected network of conveniently located charging opportunities.



# MOBILE RETAIL SERVICES

The availability of retail services like grocery, dry cleaning, and package delivery stations during peak travel times can help commuters complete daily errands while en route to or from the Trolley station.



#### UNIVERSAL TRANSPORTATION ACCOUNT

An integrated system that offers National City residents and employees a seamless way to find, access, and pay for a wide range of mobility services and amenities is a key component of a mobility hub.







BRIEFING BOOK











Appendix C.
Bayshore Bikeway Fact Sheet

# **BAYSHORE BIKEWAY**

# **FACT SHEET**







#### Overview

The Bayshore Bikeway is envisioned as a separate bike path that will extend for 24 miles around San Diego Bay. Planning for the bikeway began in the 1970s. In 2006, SANDAG updated the Bayshore Bikeway Plan and identified an alignment that uses railroad, utility, and other public rights-of-way. About 16 miles of the bikeway have been built to date.

Construction of the bikeway is paid for by federal, state, and local funds, including the regional *TransNet* half-cent sales tax for transportation, administered by SANDAG.

The Bayshore Bikeway is a regional asset that also is part of the California Coastal Trail, an initiative of the State Coastal Conservancy to create a 1,200-mile network of public trails from Oregon to Mexico. The bikeway takes riders through some of the most scenic areas in San Diego County, as well as to employment centers around San Diego Bay.

#### **Recent Accomplishments**

Construction of segments 4 and 5 — between Harbor Drive at 32nd Street and the National City Marina — was completed in phases. The first phase, along Harbor Drive between 32nd and Vesta streets, was completed in April 2015. Construction between Vesta Street and Civic Center Drive was completed in February 2018. Segments 4 and 5 were funded by a \$2.5 million grant from the State Coastal Conservancy, federal Transportation Enhancement funds, and *TransNet*.

#### **Future Construction**

A total of \$3,023,000 from federal and state government, *TransNet* sales tax, and the County of San Diego is programmed to

plan, design, and construct an extension of the bike path that currently ends at Palomar Street in Chula Vista; this segment is expected to begin construction in December 2019. The remaining gap that continues to Main Street will be completed pending the outcome of a proposed private development in the area. The rest of the planned bikeway in Chula Vista will be finished in conjunction with future redevelopment of the city's bayfront. As a condition of the redevelopment, the Bayshore Bikeway will be extended from J Street to the Chula Vista Marina and north to the existing bike path at E Street.

The planned Barrio Logan segment of the bikeway extends from 32nd Street north to the Convention Center. When finished, it will complete a major portion of the loop along the east side of San Diego Bay. This project is fully funded with a combination of funds from *TransNet* and the state Active Transportation Program. Final design is underway and construction is scheduled to be completed in May 2020.

#### **Bikeway Milestones**

The first leg of the bikeway was built in 1976 when National City received \$50,000 from SANDAG to widen the Chollas Creek Bridge on Harbor Drive. The following year, the Bay Route Bikeway Steering Committee was formed by the County of San Diego and the cities of Coronado, Imperial Beach, Chula Vista, National City, and San Diego. As a result of their efforts, the state Legislature passed Senate Bill 283, which provided about \$1 million for bikeway construction. By 1983, nearly \$1.5 million had been spent to build the bikeway on unused railroad right-of-way along the Silver Strand in Coronado and on Harbor Drive in the City of San Diego.

# SANDAG

401 B Street, Suite 800 San Diego, CA 92101 (619) 699-1900 Fax (619) 699-1905 sandag.org



SANDAGregion



SANDAG



SANDAGregion



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(Continued on reverse)









Development of the bikeway gained further momentum when the Bayshore Bikeway Working Group was formed in 1989. The group consists of an elected official from the County of San Diego and each of the five cities around the bay, as well as representatives from the San Diego Unified Port District and the biking community. The group's leadership has helped to complete the following projects, totaling more than \$13 million in improvements:

- » In 1993, the San Diego Unified Port District extended the Tidelands Park section of the path to the ferry landing in Coronado.
- In 1997, the City of Imperial Beach created the section of the bike path along the bayfront, from 7th Street to 13th Street. This 1.2-mile project was constructed primarily within the old Coronado Branch Line of the San Diego & Arizona Eastern Railway right-of-way.
- In 1998, Caltrans built a half-mile connection between Marina Way in National City and the Sweetwater River Bikeway. This path passes under Interstate 5 and the San Diego Trolley line at State Route 54, and provides a connection for people to ride east to Plaza Bonita.
- In 2004, a 1-mile bridge and bike path opened at the SR 54/I-5 interchange, which enables bike riders to cross the Sweetwater River and connect to National City and Chula Vista. The bridge was named in honor of longtime Bayshore Bikeway advocate and senior cycling champion Gordy Shields. Before the project was completed by Caltrans, riders had to travel east from the bayfront to cross the river on National City Boulevard. Now, they can reduce their travel distance by more than 2 miles and ride along the bay within a right-of-way reserved for people walking and biking.

- » In 2009, a 1.1-mile extension of the bikeway through the San Diego Bay National Wildlife Refuge opened. Built by the City of San Diego, this segment provides a more direct route between Imperial Beach and Chula Vista and replaced the old route along Palm Avenue. The project extended the Imperial Beach section of the path at 13th Street to Main Street in Chula Vista, using a combination of former railroad right-of-way and berms along the Otay River. Two new bridges were built to span the Otay River channel and preserve existing historic railroad bridges.
- » In March 2012, SANDAG completed a 1.8-mile segment of the bikeway between Palomar Street and H Street in Chula Vista.

#### **Regional Collaboration**

Construction of the Bayshore Bikeway requires collaboration between local, regional, state, and federal agencies, as well as public and private property owners. The bikeway crosses through land or easements owned by the U.S. Navy, Port District, Metropolitan Transit System, and others.

#### For More Information

Visit *KeepSanDiegoMoving.com/ BayshoreBikeway* or contact Senior
Public Outreach Officer, Brandy Sweitzer at brandy.sweitzer@sandag.org or
(619) 595-5610.





BRIEFING BOOK









# Appendix D.

Naval Base San Diego, Broadway Complex, & Naval Medical Center **Mobility Report Cards** 

	Mobility Report Card Naval Base San Diego (at 32nd Street)						
Me	obility Options		Supportive Programs/Infrastructure		Related	Infrastructure Project Types	
		On Base	City of San Diego	National City			
(À of o	Walking/Biking	Wetside walkable     Pedestrian bridges (external and internal) helps people cross Harbor Drive     Sharrows	Bayshore Bikeway along Harbor Drive     Sidewalks on adjacent local roads     Removing pedestrian bridges	Bayshore Bikeway along Harbor Drive     Sidewalks on adjacent local roads	i de la companya de l	Active Transportation  Local Roads	
	Public Transit	No public transportation exists on base	Pacific Fleet Station - Trolley Only Harborside Station - Trolley Only MTS Route 929 direct access to base border MTS Route 932, 955, 962, 963 travels through city and stops at 8th Street Transit Center	24th Street Transit Center - Trolley & local bus routes     8th Street Transit Center - Trolley & local bus routes		Transit Infrastructure	
	Microtransit	AV Shuttle Pilot     Internal Shuttle on wet side	No current programs	No current programs		Local Roads	
	Carpool & Vanpool	5% carpool, 8% vanpool     Designated carpool and vanpool reserved parking spaces on-base	Limited parking at Trolley Stations/Transit Centers     No HOV lanes on freeways leading to base	Limited parking at Trolley Stations/Transit Centers     No HOV lanes on freeways leading to base		Freeway Network Parking	
	Carshare	Limited government fleet     No current carshare partnerships	• Zipcar	No current programs	(I)	Parking	
<b>(</b>	On-Demand Rideshare	Waze Carpool     Uber and Lyft with Security Clearance	Waze Carpool, Uber, Lyft	Waze Carpool, Uber, Lyft		Local Roads  Curbside Designation	
m	Bikeshare	• Lime Pilot	• Lime, Discover Bike, JUMP	• Lime		Active Transportation  Local Roads	
<b>(2)</b>	Electric Bike & Scootershare	• Lime Pilot	Bird, Razor, Lime, Wheels, Wind	• Lime		Active Transportation  Local Roads	
	Neighborhood Electric Vehicle (NEV)	No current partnerships	Circuit, formerly known as FRED	No current programs	**************************************	Active Transportation  Local Roads	
?	Other	Removing parking on wet side for pier security clearance Parking lots on wet side repurposes to shipping workspace areas No parking for contractors on base	Limited street parking close to base Limited parking at trolley stations Smart Growth Opportunity Area: Barrio Logan Freight Signal Priority Pilot	Limited street parking close to base Limited parking at trolley stations Smart Growth Opportunity Areas: Downtown National City, Plaza Boulevard and 8th Street		Parking Transit Infrastructure	

Data current as of December 2018

Mobility Report Card Naval Base San Diego Broadway Complex						
Mo	obility Options	Supportive Programs/Infrastructure		Related	Related Infrastructure Project Types	
		On Base	City of San Diego			
(بغره الم	Walking/Biking	Base small and walkable	Sidewalks on adjacent local roads     Bike facilities along Harbor Drive, Broadway, and Pacific Highway     Bayshore Bikeway adjacent to base	<b>1.66</b>	Active Transportation  Local Roads	
	Public Transit	Multiple transit routes adjacent to the facility	MTS Route 932, 992, 280, and 290     Seaport Village Trolley Station     America Plaza Trolley Station     Santa Fe Depot     Ferry Terminal located adjacent to base, connect Downtown San Diego to Coronado		Transit Infrastructure	
	Microtransit	No shuttle service within base	Circuit, formerly known as FRED		Local Roads	
	Carpool & Vanpool	6% carpool / 2% vanpool     No designated carpool / vanpool spaces	No current programs	P	Freeway Network Parking	
	Carshare	Limited Government Fleet     No Current Private Carshare Programs	• Zipcar	P	Parking	
<b>(1</b> )	On-Demand Rideshare	Waze Carpool     Uber and Lyft with Security Clearance	Waze Carpool, Uber, UberPool, Lyft, LyftLine Express		Local Roads  Curbside Designation	
m	Bikeshare	• Lime Pilot	Lime, Discover Bike, JUMP	Asia Elle	Active Transportation  Local Roads	
(Fig.)	Electric Bike & Scootershare	• Lime Pilot	Bird, Razor, Lime, Wheels, Wind	Asia H	Active Transportation  Local Roads	
	Neighborhood Electric Vehicle (NEV)	No Current Partnerships	Circuit, formerly known as FRED	<b>*</b> ****	Active Transportation  Local Roads	
?	Other	<ul> <li>Removing parking on base, relocating parking to lot east of the 8th Transit Center</li> </ul>	Limited street parking close to base Privately owned parking lots in Downtown Smart Growth Opportunity Area: Centre City / Downtown	P	Parking Transit Infrastructure	

	Mobility Report Card Naval Medical Center						
Mo	obility Options	Supportive Prog			Infrastructure Project Types		
	, , , , , , , , , , , , , , , , , , ,	On Base	City of San Diego		, ,,		
(Àoro)	Walking/Biking	Base walkable	Sidewalks on adjacent local roads	\$ofo	Active Transportation		
					Local Roads		
	Public Transit	Internal tram on base to connect buildings to parking lots	MTS Route 7 and 215		Transit Infrastructure		
	Microtransit	No current programs	Circuit, formerly known as FRED, limited to Downtown, service area bordered off by I-5		Local Roads		
	Carpool & Vanpool	• 10% carpool / 3% vanpool	HOV lanes on I-15 but not on SR 163 or SR 94.		Freeway Network Parking		
	Carshare	Limited Government Fleet No Current Private Carshare Programs	• Zipcar	P	Parking		
<b>(</b>	On-Demand Rideshare	Waze Carpool     Uber and Lyft with Security Clearance	Waze Carpool, Uber, Lyft		Local Roads  Curbside Designation		
	Bikeshare	No current programs	Lime, Discover Bike, JUMP		Active Transportation  Local Roads		
<b>(3)</b>	Electric Bike & Scootershare	No current programs	Bird, Razor, Lime, Wheels, Wind	į, ofo	Active Transportation		
	Neighborhood Electric Vehicle (NEV)	No current programs	Base does not fall within Circuit service area		Local Roads  Active Transportation  Local Roads		
?	Other	Limited Parking Available, only one access gate for vehicles	Limited street parking close to base, pedestrian accessible at ER gate Smart Growth Opportunity Area: Centre City / Downtown		Parking Transit Infrastructure		





BRIEFING BOOK

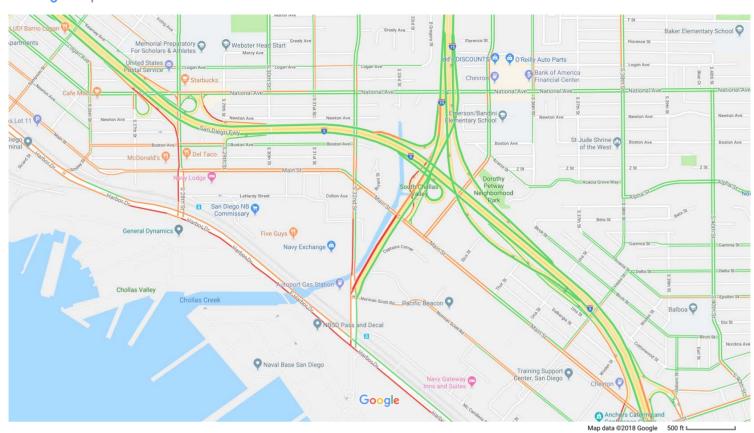




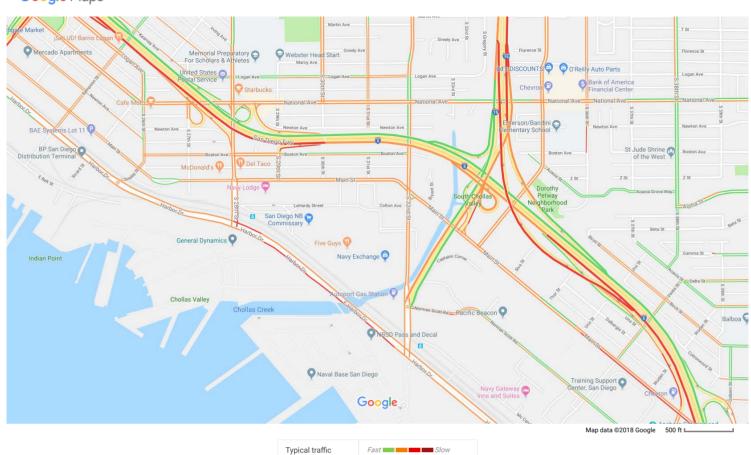


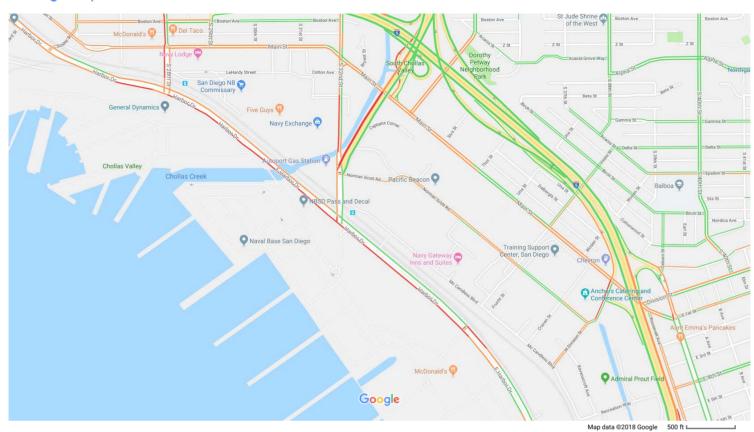


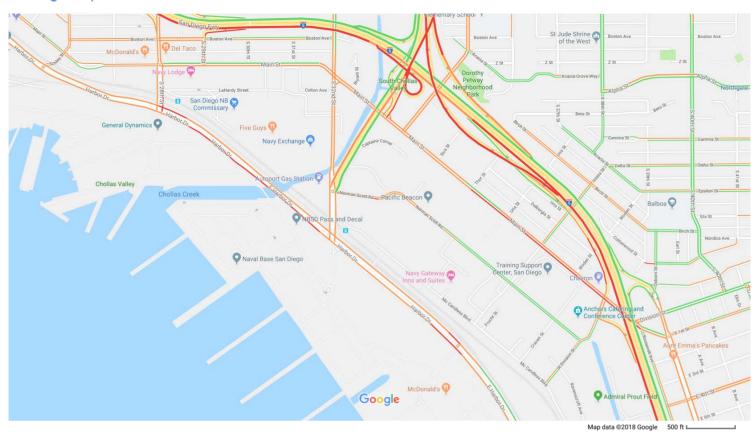
**Appendix E.**Google Maps Expected Traffic









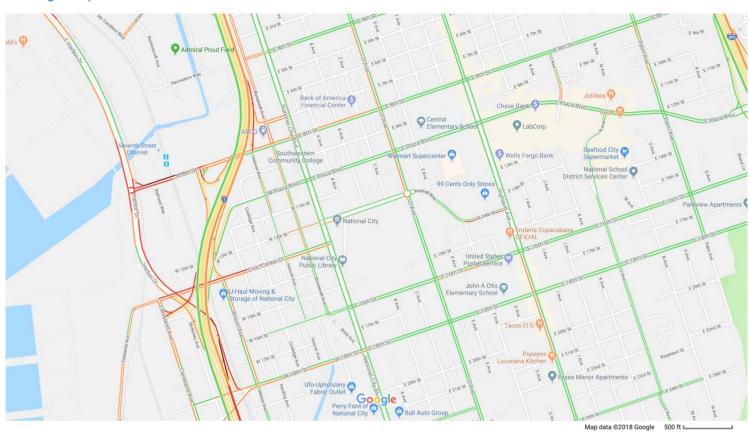


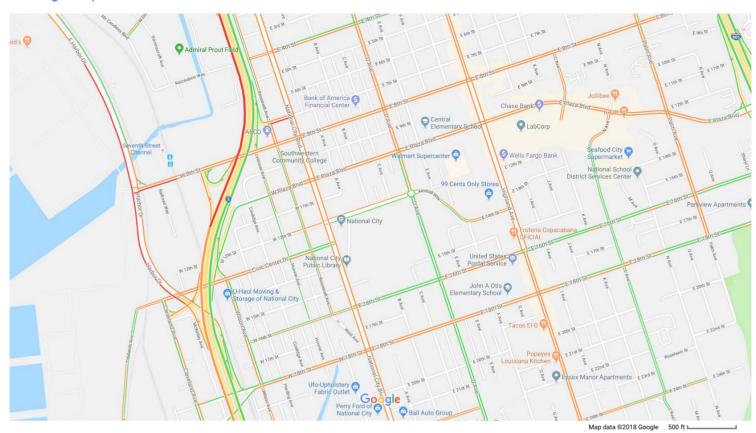


Google Maps

#### Google Maps

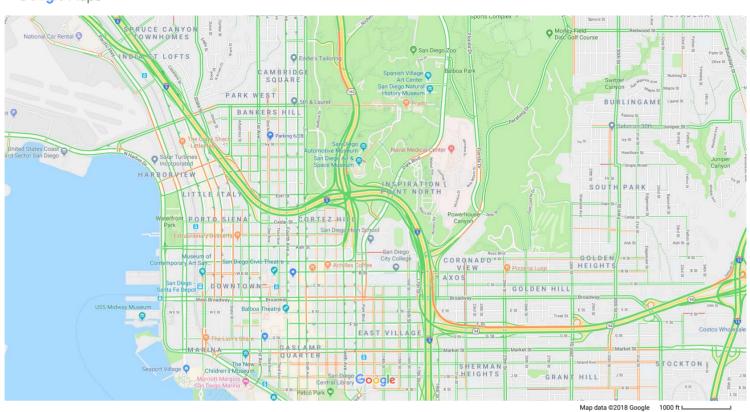
8/17/2018







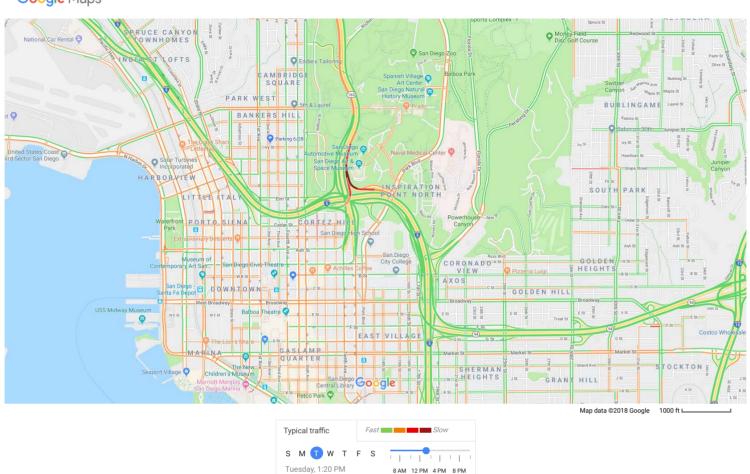
8/22/2018 Google Maps



Google Maps

#### Google Maps

8/22/2018



8 AM 12 PM 4 PM 8 PM





BRIEFING BOOK











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)

(i uii J	an Diego region rank & Nide ma	ap on revers	C)
	LOCATION	TRANSIT	PARKIN SPACES
	TEMECULA		
A	United Methodist Church 42690 Margarita Rd		71
В	Orchard Christian Fellowship 42101 Moraga Rd		105
G	Rancho Community Church**** 31300 Rancho Community Way		100
D	Winchester* 41327 Winchester Rd		87
<b>(3</b> )	Promenade Mall** 40820 Winchester Rd	•	75
	SAN JACINTO		
<b>F</b>	Mt. San Jacinto College*** 1499 N State St	•	27
	PERRIS		
G	Downtown Perris Station C St and 4 <sup>th</sup> St	•	24
H	South Perris Station 1304 Case Road		74
	MENIFEE		
0	The View Church 27755 Bradley Rd	•	38
	LAKE ELSINORE		
•	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 & 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





san diego regional

park & ride map





# san diego region park & ride lots

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

SR 54 at Washington Ave Carmel Mountain Rd at Rancho Carmel Dr SR 94 at Potrero Post Office 29 I-8 at Japatul Valley Rd I-15 at El Norte Pkwy 32 I-5 at La Costa Ave 33 I-15 at Deer Springs Rd I-15 at Mountain Meadow Rd I-15 at Gopher Canyon Rd SR 94 at Avocado Blvd 7 Oakes Rd at El Norte Pkwy\* SR 78 at College Blvd (South) SR 54 at Jamacha Blvd I-8 at Los Coches Rd

125

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106

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20

43 I-5 at Gilman Dr 44 I-5 at SR 78 & Moreno St 45 SR 78 at College Blvd (North) 46 SR 76 at Sweetgrass Ln\* I-5 at Birmingham Dr Twin Peaks Rd at Budwin Ln\* 50 Telegraph Canyon Rd at Paseo Del Rey\* 51 I-15 at Rancho Peñasquitos Blvd 53 Carmel Mountain Rd at Paseo Cardiel\*

42 I-8 at Lake Jennings Park Rd

Carmel Mountain Rd at Stoney Creek Rd\* Bancroft Dr at Grossmont Blvd Severin Dr at Bancroft Dr 61) Severin Dr at Murray Dr 62 Encinitas Blvd at Calle Magdelena\* 63 SR 67 at Day St 64 East Valley Pkwy at Citrus Ave

65 I-15 at Rancho Bernardo Rd 15 69 SR 78 at Barham Dr\* 89 Mission Gorge Rd at Big Rock Dr 71 Sweetwater Springs Blvd at Austin Dr North Magnolia Ave at Alexander Way\* 22

73 Mission Ave at Frontier Dr 75 SR 67 at Dye Rd\* 20 76 I-15 at Scripps Poway Pkwy 50 SR 67 at Poway Rd 102 I-805 at Children's Way

Caliente Ave 235

81 Westfield North County Shopping Center\*\* \*Park & Ride parking Monday-Friday, 5:30 a.m. - 6 p.m. only \*\*Park & Ride parking Monday-Friday only







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,  $\it Rapid$ , 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



 $\ensuremath{\mathsf{GO}}$  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 man. There is no fee to use hike 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.







**BRIEFING BOOK** 









**Appendix B.**8<sup>th</sup> Street Transit Center Mobility Hub Profile









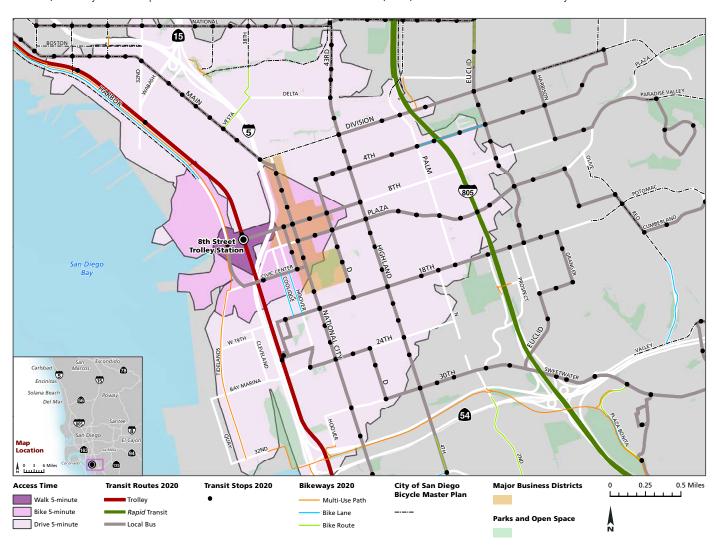
# 8th Street Trolley Station

Mobility hubs are transportation centers located in smart growth areas served by high frequency transit service. They provide an integrated suite of mobility services, amenities, and technologies that bridge the distance between transit and an individual's origin or destination. They are places of connectivity where different modes of travel—walking, biking, transit, and shared mobility options—converge and where there is a concentration of employment, housing, shopping, and/or recreation. This profile sheet summarizes mobility conditions and demographic characteristics around the 8th Street Trolley Station to help inform the suite of mobility hub features that may be most suitable.

The 8th Street Trolley Station is directly west of Interstate 5 in the northwest corner of National City, a South Bay community. The station provides access to the UC San Diego Blue Line and a few local bus routes, and is within close proximity to the region's industrial working waterfront including Naval Base San Diego. A mix of single and multi-family housing units are located east of the station on the other side of Interstate 5, and the downtown village area features a thriving community college and other retail destinations. The map below depicts the transit services and bikeways anticipated to serve the community in 2020.

#### **2020 MOBILITY SERVICES MAP**

In 2020, a variety of travel options will be available within a five minute walk, bike, or drive to the 8th Street Trolley Station.















#### **DEMOGRAPHIC AND TRANSPORTATION HIGHLIGHTS**

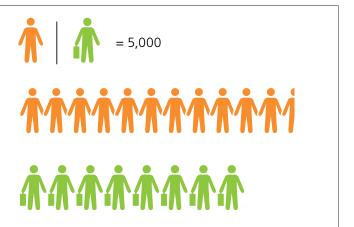
#### 2020 Population and Employment

#### **POPULATION** = 57,741

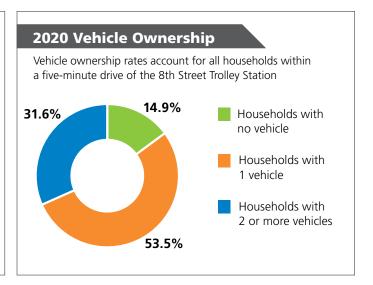
By 2020, over 57,000 people will live within a five-minute drive of the 8th Street Trolley Station.

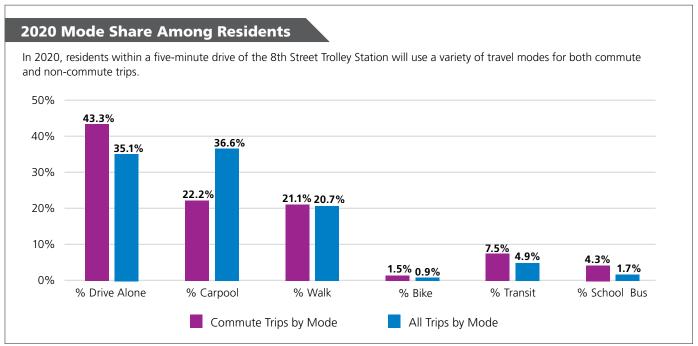
#### **EMPLOYMENT** = 41,093

In 2020, over 40,000 jobs will be accessible within a five-minute drive of the 8th Street Trolley Station.



# 2020 Transit Services BUS local bus LIGHT RAIL Trolley HEAVY RAIL HEAVY RAIL





Source: Series 13: 2050 Regional Growth Forecast/San Diego Forward: The Regional Plan in ABM 13.2.2













Photos courtesy of SANDAG and the City of National City

#### **MOBILITY HUB OPPORTUNITIES**

The 8th Street Trolley Station is located a short distance from major waterfront employers, including Naval Base San Diego. The station provides a convenient Park & Ride option for the Blue Line Trolley that connects downtown to the U.S./Mexico border. As part of the San Diego Trolley Renewal Project, the Blue Line was renovated to provide a more comfortable transit experience for riders. The renovation included signal optimization for improved service, new shelters, raised platforms, and next arrival signage. Implementation of the mobility hub concept can expand upon these transit station investments to enhance the waiting area with technology amenities like WiFi and USB charging ports. Existing passenger loading zones, where feasible, can also be expanded to accommodate designated curb space with clear wayfinding signage for seamless passenger loading and unloading.

A surface lot with over 120 parking spaces may provide an opportunity to support operation of some shared mobility services and related amenities. These services expand the reach of transit by filling gaps in the local bus network. Motorized shared services help fulfil connections beyond the first or last mile. Given the Trolley station location west of Interstate 5, trips destined for locations beyond the National City civic center may be difficult via walking or biking. Electrified and other motorized shared services could be explored along with amenities that support their operation – EV charging infrastructure and dedicated parking or loading areas. Subsides for qualifying residents and employees could also be considered.

Additionally, the Trolley station's somewhat isolated location limits access to retail stores and eateries so the opportunity to allow mobile retail services and food vendors to operate during periods of heavy station use could be explored. Transit lot occupancy is routinely higher than two-thirds pointing to an opportunity to enhance parking management efforts using real-time availability and reservation technology while facilitating more flexible use of parking areas based on changing demands.

Beyond the immediate station area, the City of National City is making several multimodal improvements to enhance the walking and biking experience - pedestrian pathways, curb bulbouts, traffic circles, improved lighting, bike boxes, reverse angled parking, and effective wayfinding signage. The city's proximity to the 24-mile Bayshore Bikeway invites the opportunity for residents and visitors to use the facility to make inter-city connections while pursuing a healthy, active lifestyle.



#### RECOMMENDED MOBILITY HUB FEATURES

Mobility hubs depend on a complementary suite of transportation services, amenities, and technologies to deliver a seamless and reliable travel experience. Providing context-sensitive mobility hub features leverages existing transportation investments while anticipating the future of mobility in the San Diego region. Pedestrian, bike, and motorized solutions all play a role to enhance connections to transit while extending its reach into communities. The incorporation of electrified mobility options coupled with real-time technologies will reduce our region's carbon footprint while providing a fully integrated trip planning experience. As on-demand and autonomous services become more ubiquitous, transit stations and their surrounding communities will need to adapt to ensure these services effectively meet the needs of users while positively contributing to the transportation landscape.



# ENHANCED TRANSIT WAITING AREAS

The Trolley station could offer enhanced station amenities like WiFi, USB charging ports, and an interactive transportation kiosk that displays real-time information about regional travel options.



#### PASSENGER LOADING ZONES

Designated passenger loading zones could be used by on-demand ridehailing and microtransit services dropping off passengers and responding to real-time ride requests.



#### **BIKESHARE**

Bikeshare complements existing bike and pedestrian facilities—traffic circles, bike boxes, reverse angled parking, effective wayfinding. The Bayshore Bikeway provides a great opportunity to encourage biking for both commute and recreational trips. Integration of electric bikes can assist riders with longer trips, and membership subsidies could reduce financial barriers.



#### ON-DEMAND RIDESHARE

Increased use of pooled, ondemand rideshare services can enhance mobility for both residents and employees. Subsidies could be provided to ensure equitable access. Employers could partner with service providers to offer convenient transit connection options for employees while minimizing parking demand at employment sites.



#### **MICROTRANSIT**

On-demand, shared autonomous shuttles could align with Trolley arrival times then transport riders to port, civic, and commercial destinations. Major waterfront employers could partner to subsidize this service.



# ELECTRIC VEHICLE CHARGING

Electric shared mobility services like bikeshare, microtransit, and on-demand vehicles require fast EV charging points to support operations. Siting charging stations and/or wireless charging technology near the Trolley station and passenger loading zones will ensure a connected network of conveniently located charging opportunities.



# MOBILE RETAIL SERVICES

The availability of retail services like grocery, dry cleaning, and package delivery stations during peak travel times can help commuters complete daily errands while en route to or from the Trolley station.



#### UNIVERSAL TRANSPORTATION ACCOUNT

An integrated system that offers National City residents and employees a seamless way to find, access, and pay for a wide range of mobility services and amenities is a key component of a mobility hub.







BRIEFING BOOK











Appendix C.
Bayshore Bikeway Fact Sheet

# **BAYSHORE BIKEWAY**

#### FACT SHEET







#### Overview

The Bayshore Bikeway is envisioned as a separate bike path that will extend for 24 miles around San Diego Bay. Planning for the bikeway began in the 1970s. In 2006, SANDAG updated the Bayshore Bikeway Plan and identified an alignment that uses railroad, utility, and other public rights-of-way. About 16 miles of the bikeway have been built to date.

Construction of the bikeway is paid for by federal, state, and local funds, including the regional *TransNet* half-cent sales tax for transportation, administered by SANDAG.

The Bayshore Bikeway is a regional asset that also is part of the California Coastal Trail, an initiative of the State Coastal Conservancy to create a 1,200-mile network of public trails from Oregon to Mexico. The bikeway takes riders through some of the most scenic areas in San Diego County, as well as to employment centers around San Diego Bay.

#### **Recent Accomplishments**

Construction of segments 4 and 5 — between Harbor Drive at 32nd Street and the National City Marina — was completed in phases. The first phase, along Harbor Drive between 32nd and Vesta streets, was completed in April 2015. Construction between Vesta Street and Civic Center Drive was completed in February 2018. Segments 4 and 5 were funded by a \$2.5 million grant from the State Coastal Conservancy, federal Transportation Enhancement funds, and *TransNet*.

#### **Future Construction**

A total of \$3,023,000 from federal and state government, *TransNet* sales tax, and the County of San Diego is programmed to

plan, design, and construct an extension of the bike path that currently ends at Palomar Street in Chula Vista; this segment is expected to begin construction in December 2019. The remaining gap that continues to Main Street will be completed pending the outcome of a proposed private development in the area. The rest of the planned bikeway in Chula Vista will be finished in conjunction with future redevelopment of the city's bayfront. As a condition of the redevelopment, the Bayshore Bikeway will be extended from J Street to the Chula Vista Marina and north to the existing bike path at E Street.

The planned Barrio Logan segment of the bikeway extends from 32nd Street north to the Convention Center. When finished, it will complete a major portion of the loop along the east side of San Diego Bay. This project is fully funded with a combination of funds from *TransNet* and the state Active Transportation Program. Final design is underway and construction is scheduled to be completed in May 2020.

#### **Bikeway Milestones**

The first leg of the bikeway was built in 1976 when National City received \$50,000 from SANDAG to widen the Chollas Creek Bridge on Harbor Drive. The following year, the Bay Route Bikeway Steering Committee was formed by the County of San Diego and the cities of Coronado, Imperial Beach, Chula Vista, National City, and San Diego. As a result of their efforts, the state Legislature passed Senate Bill 283, which provided about \$1 million for bikeway construction. By 1983, nearly \$1.5 million had been spent to build the bikeway on unused railroad right-of-way along the Silver Strand in Coronado and on Harbor Drive in the City of San Diego.

# SANDAG

401 B Street, Suite 800 San Diego, CA 92101 (619) 699-1900 Fax (619) 699-1905 sandag.org



SANDAGregion



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(Continued on reverse)









Development of the bikeway gained further momentum when the Bayshore Bikeway Working Group was formed in 1989. The group consists of an elected official from the County of San Diego and each of the five cities around the bay, as well as representatives from the San Diego Unified Port District and the biking community. The group's leadership has helped to complete the following projects, totaling more than \$13 million in improvements:

- » In 1993, the San Diego Unified Port District extended the Tidelands Park section of the path to the ferry landing in Coronado.
- In 1997, the City of Imperial Beach created the section of the bike path along the bayfront, from 7th Street to 13th Street. This 1.2-mile project was constructed primarily within the old Coronado Branch Line of the San Diego & Arizona Eastern Railway right-of-way.
- In 1998, Caltrans built a half-mile connection between Marina Way in National City and the Sweetwater River Bikeway. This path passes under Interstate 5 and the San Diego Trolley line at State Route 54, and provides a connection for people to ride east to Plaza Bonita.
- In 2004, a 1-mile bridge and bike path opened at the SR 54/I-5 interchange, which enables bike riders to cross the Sweetwater River and connect to National City and Chula Vista. The bridge was named in honor of longtime Bayshore Bikeway advocate and senior cycling champion Gordy Shields. Before the project was completed by Caltrans, riders had to travel east from the bayfront to cross the river on National City Boulevard. Now, they can reduce their travel distance by more than 2 miles and ride along the bay within a right-of-way reserved for people walking and biking.

- » In 2009, a 1.1-mile extension of the bikeway through the San Diego Bay National Wildlife Refuge opened. Built by the City of San Diego, this segment provides a more direct route between Imperial Beach and Chula Vista and replaced the old route along Palm Avenue. The project extended the Imperial Beach section of the path at 13th Street to Main Street in Chula Vista, using a combination of former railroad right-of-way and berms along the Otay River. Two new bridges were built to span the Otay River channel and preserve existing historic railroad bridges.
- » In March 2012, SANDAG completed a 1.8-mile segment of the bikeway between Palomar Street and H Street in Chula Vista.

#### **Regional Collaboration**

Construction of the Bayshore Bikeway requires collaboration between local, regional, state, and federal agencies, as well as public and private property owners. The bikeway crosses through land or easements owned by the U.S. Navy, Port District, Metropolitan Transit System, and others.

#### For More Information

Visit *KeepSanDiegoMoving.com/ BayshoreBikeway* or contact Senior
Public Outreach Officer, Brandy Sweitzer at brandy.sweitzer@sandag.org or
(619) 595-5610.





BRIEFING BOOK









# Appendix D.

Naval Base San Diego, Broadway Complex, & Naval Medical Center **Mobility Report Cards** 

	Mobility Report Card Naval Base San Diego (at 32nd Street)						
Me	obility Options		Supportive Programs/Infrastructure		Related	Infrastructure Project Types	
		On Base	City of San Diego	National City			
(À of o	Walking/Biking	Wetside walkable     Pedestrian bridges (external and internal) helps people cross Harbor Drive     Sharrows	Bayshore Bikeway along Harbor Drive     Sidewalks on adjacent local roads     Removing pedestrian bridges	Bayshore Bikeway along Harbor Drive     Sidewalks on adjacent local roads	i de la companya de l	Active Transportation  Local Roads	
	Public Transit	No public transportation exists on base	Pacific Fleet Station - Trolley Only Harborside Station - Trolley Only MTS Route 929 direct access to base border MTS Route 932, 955, 962, 963 travels through city and stops at 8th Street Transit Center	24th Street Transit Center - Trolley & local bus routes     8th Street Transit Center - Trolley & local bus routes		Transit Infrastructure	
	Microtransit	AV Shuttle Pilot     Internal Shuttle on wet side	No current programs	No current programs		Local Roads	
	Carpool & Vanpool	5% carpool, 8% vanpool     Designated carpool and vanpool reserved parking spaces on-base	Limited parking at Trolley Stations/Transit Centers     No HOV lanes on freeways leading to base	Limited parking at Trolley Stations/Transit Centers     No HOV lanes on freeways leading to base		Freeway Network Parking	
	Carshare	Limited government fleet     No current carshare partnerships	• Zipcar	No current programs	(I)	Parking	
<b>(</b>	On-Demand Rideshare	Waze Carpool     Uber and Lyft with Security Clearance	Waze Carpool, Uber, Lyft	Waze Carpool, Uber, Lyft		Local Roads  Curbside Designation	
m	Bikeshare	• Lime Pilot	• Lime, Discover Bike, JUMP	• Lime		Active Transportation  Local Roads	
<b>(2)</b>	Electric Bike & Scootershare	• Lime Pilot	Bird, Razor, Lime, Wheels, Wind	• Lime		Active Transportation  Local Roads	
	Neighborhood Electric Vehicle (NEV)	No current partnerships	Circuit, formerly known as FRED	No current programs	**************************************	Active Transportation  Local Roads	
?	Other	Removing parking on wet side for pier security clearance Parking lots on wet side repurposes to shipping workspace areas No parking for contractors on base	Limited street parking close to base Limited parking at trolley stations Smart Growth Opportunity Area: Barrio Logan Freight Signal Priority Pilot	Limited street parking close to base Limited parking at trolley stations Smart Growth Opportunity Areas: Downtown National City, Plaza Boulevard and 8th Street		Parking Transit Infrastructure	

Data current as of December 2018

Mobility Report Card Naval Base San Diego Broadway Complex						
Mo	obility Options	Supportive Programs/Infrastructure		Related	Related Infrastructure Project Types	
		On Base	City of San Diego			
(بغره الم	Walking/Biking	Base small and walkable	Sidewalks on adjacent local roads     Bike facilities along Harbor Drive, Broadway, and Pacific Highway     Bayshore Bikeway adjacent to base	<b>1.66</b>	Active Transportation  Local Roads	
	Public Transit	Multiple transit routes adjacent to the facility	MTS Route 932, 992, 280, and 290     Seaport Village Trolley Station     America Plaza Trolley Station     Santa Fe Depot     Ferry Terminal located adjacent to base, connect Downtown San Diego to Coronado		Transit Infrastructure	
	Microtransit	No shuttle service within base	Circuit, formerly known as FRED		Local Roads	
	Carpool & Vanpool	6% carpool / 2% vanpool     No designated carpool / vanpool spaces	No current programs	P	Freeway Network Parking	
	Carshare	Limited Government Fleet     No Current Private Carshare Programs	• Zipcar	P	Parking	
<b>(1</b> )	On-Demand Rideshare	Waze Carpool     Uber and Lyft with Security Clearance	Waze Carpool, Uber, UberPool, Lyft, LyftLine Express		Local Roads  Curbside Designation	
m	Bikeshare	• Lime Pilot	Lime, Discover Bike, JUMP	Asia Elle	Active Transportation  Local Roads	
(Fig.)	Electric Bike & Scootershare	• Lime Pilot	Bird, Razor, Lime, Wheels, Wind	Asia H	Active Transportation  Local Roads	
	Neighborhood Electric Vehicle (NEV)	No Current Partnerships	Circuit, formerly known as FRED	<b>*</b> ****	Active Transportation  Local Roads	
?	Other	<ul> <li>Removing parking on base, relocating parking to lot east of the 8th Transit Center</li> </ul>	Limited street parking close to base Privately owned parking lots in Downtown Smart Growth Opportunity Area: Centre City / Downtown	P	Parking Transit Infrastructure	

	Mobility Report Card Naval Medical Center						
Mo	obility Options	Supportive Prog			Infrastructure Project Types		
	, , , , , , , , , , , , , , , , , , ,	On Base	City of San Diego		, ,,		
(Àoro)	Walking/Biking	Base walkable	Sidewalks on adjacent local roads	\$ofo	Active Transportation		
					Local Roads		
	Public Transit	Internal tram on base to connect buildings to parking lots	MTS Route 7 and 215		Transit Infrastructure		
	Microtransit	No current programs	Circuit, formerly known as FRED, limited to Downtown, service area bordered off by I-5		Local Roads		
	Carpool & Vanpool	• 10% carpool / 3% vanpool	HOV lanes on I-15 but not on SR 163 or SR 94.		Freeway Network Parking		
	Carshare	Limited Government Fleet No Current Private Carshare Programs	• Zipcar	P	Parking		
<b>(</b>	On-Demand Rideshare	Waze Carpool     Uber and Lyft with Security Clearance	Waze Carpool, Uber, Lyft		Local Roads  Curbside Designation		
	Bikeshare	No current programs	Lime, Discover Bike, JUMP		Active Transportation  Local Roads		
<b>(3)</b>	Electric Bike & Scootershare	No current programs	Bird, Razor, Lime, Wheels, Wind	į, ofo	Active Transportation		
	Neighborhood Electric Vehicle (NEV)	No current programs	Base does not fall within Circuit service area		Local Roads  Active Transportation  Local Roads		
?	Other	Limited Parking Available, only one access gate for vehicles	Limited street parking close to base, pedestrian accessible at ER gate Smart Growth Opportunity Area: Centre City / Downtown		Parking Transit Infrastructure		





BRIEFING BOOK

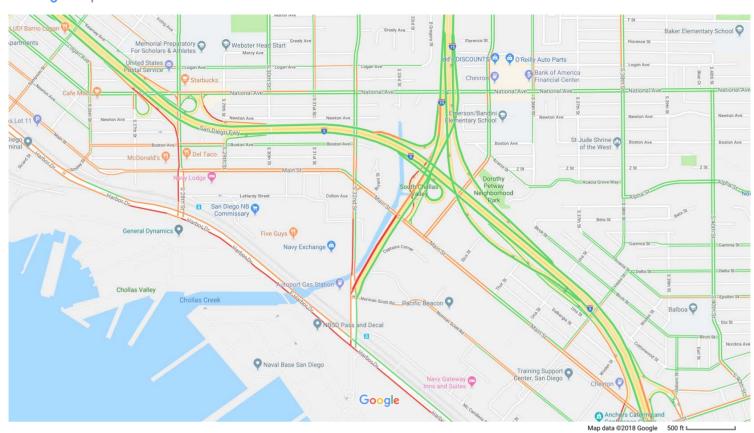




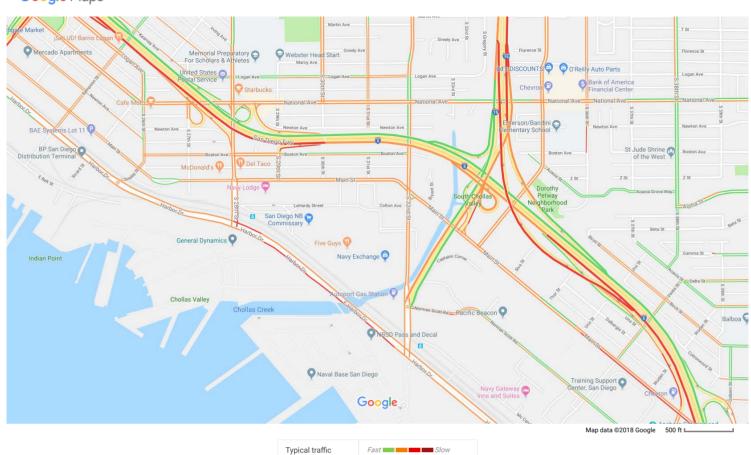


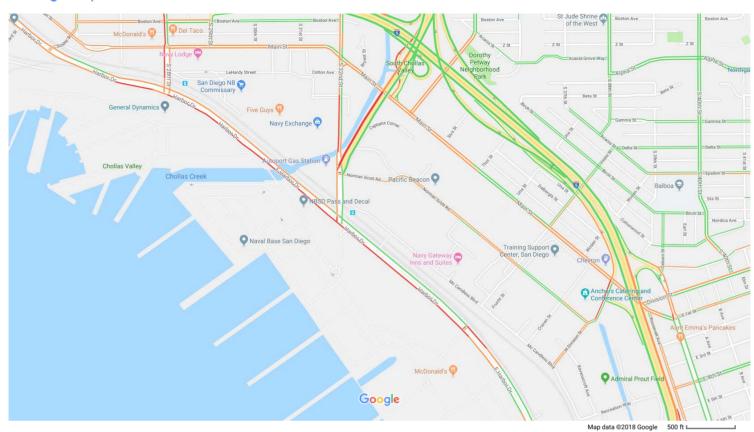


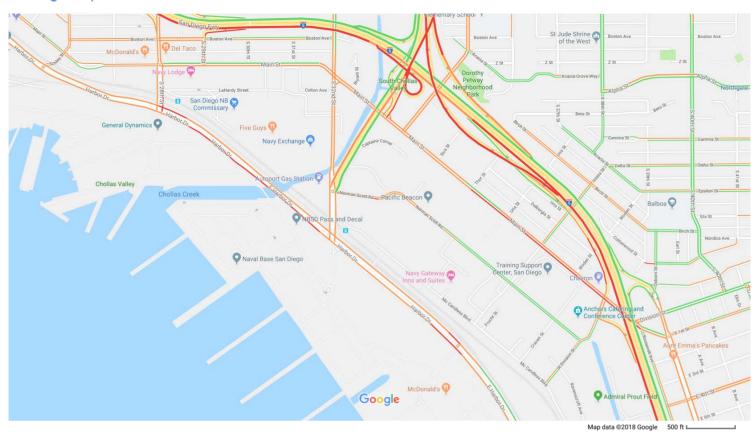
**Appendix E.**Google Maps Expected Traffic









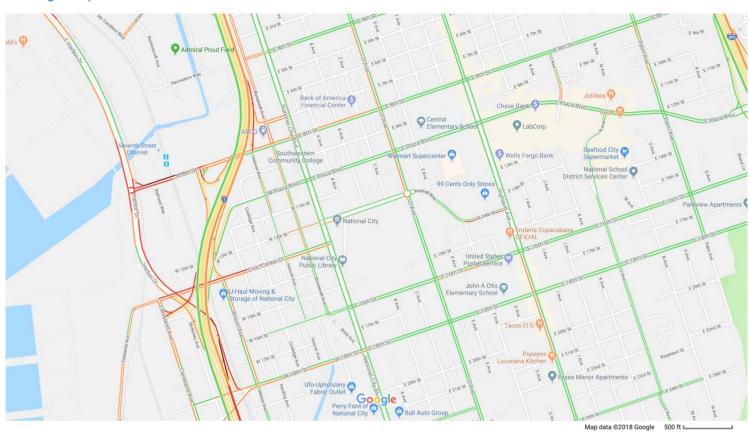


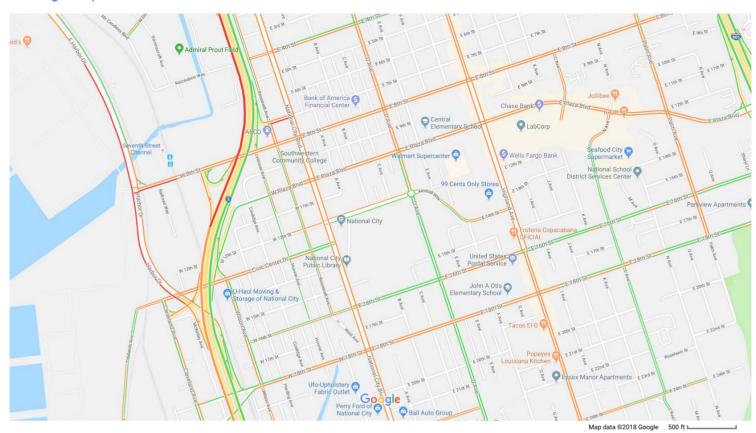


Google Maps

#### Google Maps

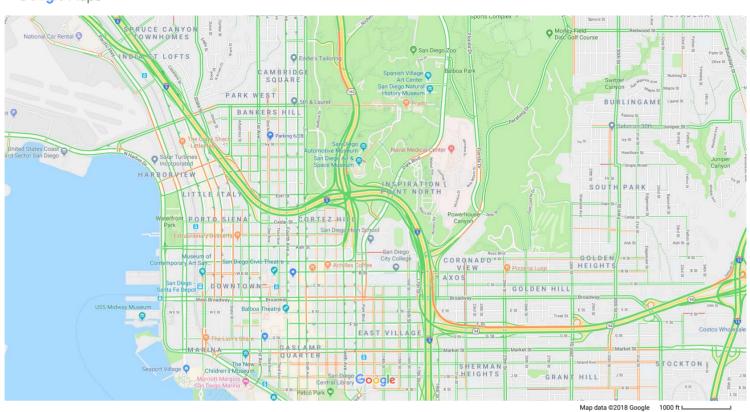
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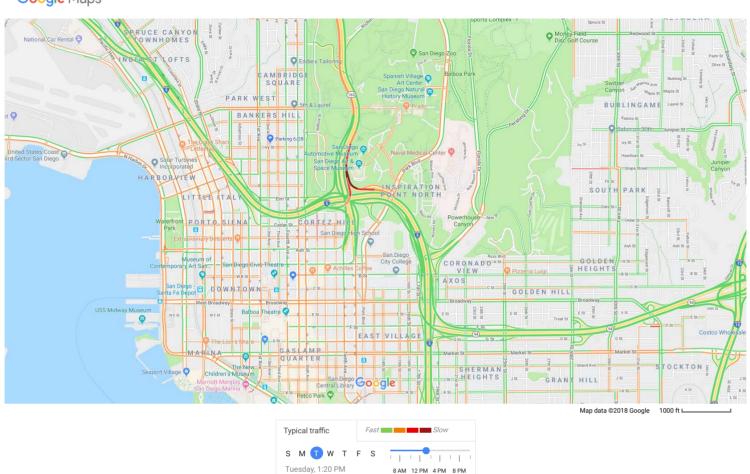
8/22/2018 Google Maps



Google Maps

#### Google Maps

8/22/2018



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