# 13.B.2 TRANSPORTATION ELEMENT


TOGETHER WE PLAN NATIONAL CITY

CITY OF NATIONAL CITY

# TRANSPORTATION ELEMENT

Draft February 2023

# Contents

# Figures



# Tables

# Introduction

## Background and Purpose

This Transportation Element is a transportation plan for the movement of people and goods and identifies the general location and extent of existing and proposed major roadways, transportation routes, terminals, air and water ports, and pedestrian and bikeway facilities. National City's dense and compact urban form lends itself well to mixed-use and pedestrian friendly-development, and the urban core is well-served by multimodal transportation options including public transit service. This Element addresses the evolving needs of mobility through the development of an integrated, multimodal circulation network that accommodates both local and regional trips, and supports public transit, walking, bicycling, vehicular traffic and parking.

The City's circulation system is strongly correlated with the Land Use Element, which supports increased densities and a mix of uses that reduce reliance on personal vehicles by making walking and bicycling more comfortable and convenient. This system benefits people and the environment by providing a wider range of mobility options; making transportation more inclusive and affordable; reducing greenhouse gas emissions and air pollution; increasing activity on the street to support businesses and improve safety and addressing public health by promoting physical activity. National City desires to build on these existing assets and investments by pursuing smart growth planning and infrastructure policies to incentivize development patterns that are more environmentally and financially sustainable. By encouraging new development to occur around existing public transit nodes and

bike/ pedestrian infrastructure, National City is endeavoring to better accommodate projected future growth.

The Transportation Element focuses on the multimodal mobility and connectivity of the City's transportation system and is complementary to the other elements within the General Plan as well as the updated elements of the Focused General Plan Update. These coordinated elements include the Land Use, Housing and Safety Elements.

## Relationship to State Law

California state law (Government Code Section 65302(b)) requires that a general plan include a circulation element that consists of "the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals...and other local public utilities and facilities, all correlated with the land use element of the [general] plan." This Transportation Element includes all information required of circulation elements.

### *Complete Streets*

In 2008, the State of California passed Assembly Bill 1358 (AB 1358), the California Complete Streets Act. This bill requires that all circulation elements developed after January 1, 2011, include a complete streets approach that balances the needs of all users of the street, including motorists, pedestrians, bicycles, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation. A core focus of this Transportation Element is providing complete streets throughout the community.

### *Vehicle Miles Traveled*

With the passage of Senate Bill 743 (SB 743) in 2013, the State of California changed the method of measuring transportation impacts to vehicle miles traveled (VMT). Starting on July 1, 2020, automobile delay and level of service (LOS) may no longer be used as the performance measure to determine the transportation impacts of land development projects under the California Environmental Quality Act (CEQA). VMT, the new required metric, shifts the focus of the analysis of transportation impacts away from automobile delay to the levels of automobile use. Utilizing VMT as a metric creates a closer alignment with statewide policies to reduce greenhouse gas (GHG) emissions and encourages the development of smart growth, complete streets, and multimodal transportation networks.

### *Environmental Justice*

The passage of Senate Bill 1000 (SB 1000) requires the inclusion of an environmental justice element, or related goals, policies, and objectives integrated in other elements, that identifies disadvantaged communities, as defined, within the area covered by the general plan of the city, county, or city and county. "Disadvantaged communities" refer to an area identified by the California Environmental Protection Agency pursuant to Section 39711 of the Health and Safety Code or

an area that is a low-income area that is disproportionately affected by environmental pollution and other hazards that can lead to negative health effects, exposure, or environmental degradation. "Low-income area" means an area with household incomes at or below 80% of area median income (AMI), as defined and determined by the Department of Housing and Community Development.

The bill also requires the environmental justice element, or related environmental justice goals, policies, and objectives integrated in other elements, to identify objectives and policies to reduce the unique or compounded health risks in disadvantaged communities, as specified, identify objectives and policies to promote civic engagement in the public decision making process, and identify objectives and policies that prioritize improvements and programs that address the needs of disadvantaged communities.

## *Key Policy Drivers*

Several key policy drivers have been identified to guide the development of the City's transportation system and support citywide goals for a sustainable and prosperous National City. These policy drivers complement and are consistent with the vision and guiding principles established in National City's General Plan. The General Plan details five key guiding principles that lay the foundation for its goals, policies, and implementation programs.

- Smart Growth: Recognize the importance of linking land use and transportation planning
- Quality of Life: Improve the quality of life for everyone within National City
- Health and Safety: Seek opportunities to improve public health and safety performance
- Education: Emphasize the importance of schools by making them focal points within every neighborhood
- Economic Development: Provide a framework for sound economic development strategies

The General Plan guiding principles are incorporated throughout the Transportation Element, as they are applicable to each component of the transportation system. Mobility and connectivity are linked to each guiding principle and support the City's vision of becoming a sustainable community that reduces its impact on the environment, maintains economic health, and improves quality of life for all.

## Complete "10-Minute" Neighborhoods

### *Summary*

- In a complete "10-minute" neighborhood, residents can meet most of their daily needs through a short walk, bike ride, transit trip, or vehicle drive
- Encourages transportation investments that support the development of a complete and balanced network that works in tandem with the City's land use goals and helps establish complete communities

### *Description*

In a complete "10-minute" neighborhood, residents can meet most of their daily needs through a short walk, bike ride, transit trip, or vehicle drive. The time it takes to travel is generally 10 minutes or less. Complete communities provide improved access to goods and services through the development of a balanced and complete transportation network. This is consistent with the City's smart growth goals which seek to balance population, housing, and economic growth with the needs of the community. By enabling more people to walk, bike, and take transit, the City can increase access to key destinations, including schools. Increased access in the transportation network will also help the City make progress towards its climate action goals to reduce GHG emissions and VMT, improving air quality as well as public health by providing more opportunities to utilize active transportation.

A focus on complete communities will improve the quality of life for residents, particularly those in disadvantaged communities. Enhancing multimodal transportation options will support low-income residents who rely on these modes.

To be successful, a complete community must have a balanced mix of origins, destinations, and connections. Origins refer to the starting point of a trip, which is often a place of residence. Destinations refer to where people want to go, such as school, work, or a local shop or business. Connections refer to the infrastructure in between, such as a sidewalk, bike facility, transit route, or street, that helps people travel from one point to another. This policy driver, which builds upon the recommendations of the INTRAConnect (2020) study, encourages transportation improvements that work in tandem with the City's land use goals and help establish complete communities.

## Economic Development

### *Summary*

- The transportation network plays a key role in connecting people with needed goods and services, and a well-performing transportation network is vital to economic development
- Encourages transportation improvements that help the City grow economic opportunities that benefit National City through measures such as:

- Resource management, including curb management and parking management
- Partnerships with other agencies, such as the Port of San Diego, U.S. Navy, and the Metropolitan Transit System (MTS), to address mobility challenges and pursue funding opportunities

### *Description*

The transportation network plays a key role in connecting people to needed goods and services, and a well-performing transportation network is vital to economic development. National City is a hub of regional activity; multiple uses, including the Port of San Diego-owned National City Marine Terminal and Naval Base San Diego, have regional economic importance. These uses, however, are not directly controlled by the City. On-going coordination between the City and partner agencies, such as the Port of San Diego, U.S. Navy, and MTS, is necessary to manage traffic congestion along key corridors and pursue funding opportunities to address on-going issues. One key challenge for the City is improving waterfront access for local residents. The Homefront to Waterfront (2020) study provides specific recommendations, such as the implementation of a Neighborhood Electric Vehicle (NEV) program, to improve connectivity to the City's waterfront assets. Partnerships with key agencies can help leverage funding opportunities such as capital grant programs, to implement these and other improvements.

National City's downtown acts as a key economic engine for the City, as well, as discussed in the Downtown Specific Plan (2017). Downtown's existing assets include a diverse residential population of families and seniors, numerous civic, educational, and recreational amenities, a broad variety of established businesses, and a strong employment base. The Downtown Specific Plan provides the framework to leverage these assets into a vibrant urban core that serves the existing population and encourages new residents and businesses to locate downtown. As one of the guiding principles of the General Plan, effective management of the City's resources, such as curb area, on-street parking, and parking requirements, is also key to the City's on-going economic development efforts. This policy driver encourages the implementation of transportation improvements that help the City grow economic opportunities that benefit National City.

## Safety and Resilience

### *Summary*

- The safe functioning of the transportation network is key to community well-being
- Promotes the development of a robust and resilient transportation network that safely accommodates all users, maintains access for critical lifeline services during an emergency event, and supports national security

### *Description*

The safe functioning of the transportation network is key to community well-being. In 2014, the SMART Foundation Plan comprehensively studied the City's transportation network and documented areas with bicycle and pedestrian safety issues. The plan recommends several facility improvements to encourage walking and biking and improve user safety. In addition to supporting travel, the plan also notes that the street serves as an important public space; how it is designed, such as the presence of lighting and access points, can influence the perception of safety. This theory, known as Crime Prevention Through Environmental Design (CPTED), encourages proper, well-designed spaces to deter criminal acts before they occur. The establishment of this policy driver reflects the General Plan's health and safety goals to encourage healthier living, reduce crime, and reduce risks of injury and environmental damage. This policy driver emphasizes the City's commitment to examining the built environment to support the health and wellbeing of all residents.

The transportation network also provides another key function as critical infrastructure during emergency events. During an emergency, roadways provide access for lifeline services, such as police and fire protection and medical attention. As discussed in the Safety Element, portions of National City are susceptible to flooding, wildfire, earthquake, and/or other risks. Furthermore, California's Fourth Climate Change Assessment: San Diego Region Report (2018) and County of San Diego Multi-Jurisdictional Hazard Plan (2018), indicate that the impacts of climate change and sea level rise will likely affect the City with increasing frequency and severity. To ensure that residents have adequate access to lifeline services during an emergency is paramount for public health, safety, and welfare.

In addition, portions of the City's transportation network are designated Strategic Highway Network (STRAHNET) connectors, which support the Department of Defense's domestic operations. STRAHNET includes roads deemed necessary for the emergency mobilization and peacetime movement of resources to support U.S. military operations. Overall, this policy driver promotes the development of robust and resilient transportation network that safely accommodates all users and maintains access for critical lifeline services during an emergency event.

## New Mobility and Emerging Technology

### *Summary*

» Focuses on preparing the City to be future-ready and leverage transportation technology in a manner that is consistent with its overarching values and climate action goals, and supports the creation of an integrated transportation network

» Positioning of the City to compete for regional, state, and federal grants to explore "new mobility," transportation demand management (TDM), and transportation systems management (TSM) as potential tools

### *Description*

Technology has evolved rapidly in the past few years to offer a broad suite of new transportation options, including micromobility (e-bikes, e-scooters, etc.), microtransit (on-demand transit services such as NEVs that provide flexible transit service in defined areas), the pending prevalence of autonomous vehicles, and more. Advancements in broadband technology and the expansion of internet access have enabled telecommuting. Other improvements, such as coordinated signal timing, can maximize the operational capacity of the transportation network without having to physically expand infrastructure. These advancements present exciting opportunities to improve the City's overall network function; however, there will continue to be uncertainty regarding the effectiveness of these options as transportation technology evolves and changes.

This policy driver focuses on preparing the City to be future-ready and leverage transportation technology in a manner that is consistent with its overarching values and climate action goals; it also supports the creation of an integrated transportation network. Incorporating new mobility and transportation technologies will create more opportunities for the City to meet the evolving mobility needs of residents, which can lead to more successful implementation of projects and programs and improve the quality of life for all. In addition, this policy driver focuses on positioning the City to compete for regional, state, and federal grants to explore "new mobility," TDM, and TSM as potential tools.

## History of Transportation In National City

### *Early National City*

National City boasts a rich transportation history as the second oldest city in San Diego County. The transportation history of the City predates its incorporation in 1887. In 1882, the Santa Fe Rail Depot was constructed in and served as the southern terminus of the original transcontinental railroad and is currently the only original remaining terminus still standing.

In 1887, the San Diego Land and Town Company opened the first commuter-type train dedicated to passengers. This suburban steam line, named the National City and Otay Railway (NC&O), shuttled buyers in San Diego to new housing divisions south of the City of San Diego. At the same time, the San Diego region began preliminary discussions on electric street cars as a transit option. From 1887 through 1925, John D. Spreckels built and expanded streetcar service throughout the region including opening the Third Avenue Streetcar Line in 1906, connecting Chula Vista and National City to San Diego.

The first motor bus in the region went into service in 1922,

operating between National City and Chula Vista. The introduction of the motor bus began a long transition from rail to bus service, eventually ending with the elimination of all rail transit in 1949. Rail transit was not reintroduced to the region again until 1981.

### *Freeway*

The introduction of the freeway marked the next major change as part of National City's transportation history. In 1934, Highway 101 opened, connecting the San Ysidro border to National City. As part of the new Montgomery Freeway, this facility was upgraded from 1943 through 1958, providing better automobile access from San Ysidro up through San Diego. This freeway was eventually incorporated as part of the Interstate-5 freeway. While this freeway provided better connectivity for both the City of National City and the communities south of National City to the City of San Diego and north of the region, the freeway bisected the harbor side communities of National City from the rest of the City.

The passing of the Federal Highway Act in 1956 contributed to the introduction of new freeways around and through National City. Planning for the I-805 freeway began in 1956, and was eventually constructed between 1970 and 1975, providing an additional north-south freeway connection to ease congestion on the existing I-5 freeway. Similarly, the State Route 54 freeway that borders the southern edge of National City was planned for in the early 1960s. However, the construction was not completed and the freeway did not open to commuters until 1992.

Through this period, the automobile became the dominant means of transportation in the region. Based on this modal shift, urban decentralization increased leading to greater congestion on freeways and roadways into and out of major job and population centers such as downtown San Diego. National City's proximity to downtown San Diego and the three freeways bordering and running through the City exemplify the challenges posed by the built freeway environment.

## *Reintroduction of Light Rail Transit (LRT)*

In the late 1975, the Metropolitan Transit Development Board (MTDB) was created due to the passage of California Senate Bill 101. In 1980, MTDB created the San Diego Trolley, Inc. (SDTI) as a wholly-owned subsidiary of the MTDB. The objective of SDTI was to operate and maintain a light rail system for the region. In 1981, operations began on a "South Line" (today known as the "Blue Line") connecting downtown San Diego to the US/Mexico Border at San Ysidro. In National City, two stations opened, serving the community at 8th Street and 24th Street. In 1983, 15-minute service was introduced, and average daily ridership exceeded 14,000. By 1991, peak hour service expanded to 7.5-minute headways in response to increased demand. Today the Blue Line is one of the busiest LRT lines in the country.

## *Complete Streets*

In 2008, the State of California passed AB 1358, the California Complete Streets Act. Complete streets are defined as an approach to transportation infrastructure that balances the needs of all users of the street, including motorists, pedestrians, bicycles, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation. Based on 2010 Census data, approximately 10% of households in National City do not own a personal automobile, highlighting the need for walking, biking, and transit-oriented infrastructure.

Over the last decade, the City of National City has been aggressive in providing for those multimodal needs, rapidly planning for, designing, and constructing projects based on these infrastructure needs. The National City General Plan Update in 2011 identified a network of designated community corridors throughout the City (see Figure T-7 on page 45). These corridors represented locations for proposed multimodal improvements to increase the comfort of walking and/or bicycling on these roads. In 2014, the City produced the S.M.A.R.T Foundation Plan (Safe, Multi-modal, Accessible Routes to...Transit , Work, School, Services and Recreation) based upon improvements to the walkability and bikeability of the community.

The opportunities and constraints, as well as goals and future projects identified in the SMART Foundation Plan were expanded upon as part of the INTRAConnect Plan (Integrating Neighborhoods with Transportation Routes for Al Connections), approved in 2020. The INTRAConnect Plan was designed as a guide for improving neighborhoods so that residents can walk, take transit, bike, or take a short drive to meet their daily trip needs. The plan also introduced the concept of a "10-Minute Neighborhood," or community where most daily trips and many weekly trips can be made by foot within 10 minutes, or by bike in five minutes, or by driving in three minutes. The "10-Minute Neighborhood" synthesizes both the transportation needs of a community with the "Smart Growth" development in infill areas.

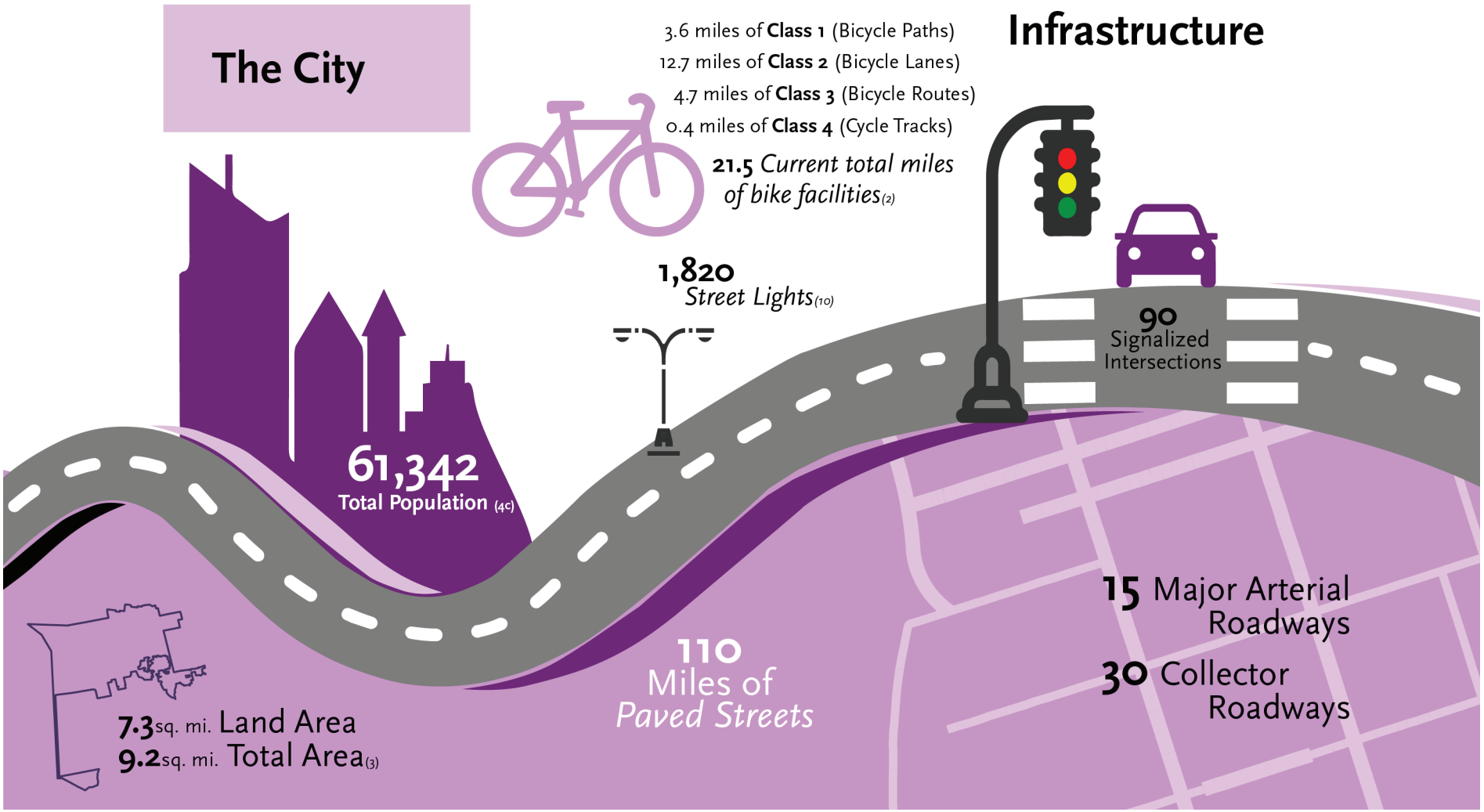
## *Future of Transportation*

Technology is quickly shifting mobility access, usage, and expectations. Emerging private services, such as transportation network companies (TNCs), micromobility (shared scooters and bikes), microtransit, and automated vehicles have already affected travel behavior across the country. Additionally, systems that require real time data collection and transmission, electric drive systems, and users accessing information continue to increase the demand on enabling systems, such as electric grids and broadband networks.

As new services emerge, the City must ensure a holistic circulation system that serves the needs of residents and visitors, and helps accomplish interrelated City goals, such as safety, complete streets, equity, and environmental sustainability. As mobility continues to evolve, the City may establish frameworks for partnerships with mobility providers, data collection and dissemination, prioritization of projects and funding, and guidance for usage of City assets. Creation of a strong foundation of goals, objectives, and policies will ensure that emerging technology will complement and enhance the mobility system.

# Mobility by the Numbers

## ON TRACK WITH MOBILITY



## Collision Data

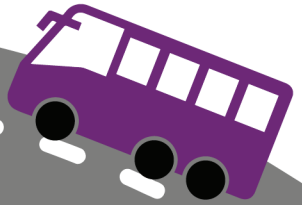
**977**
*Roadway Collisions*(1)

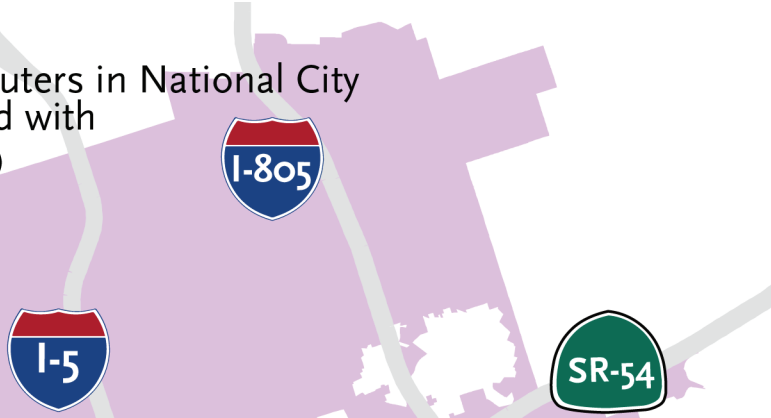
**167**
*Pedestrian Collisions*(1)

**85**
*Bicycle Collisions*(1)

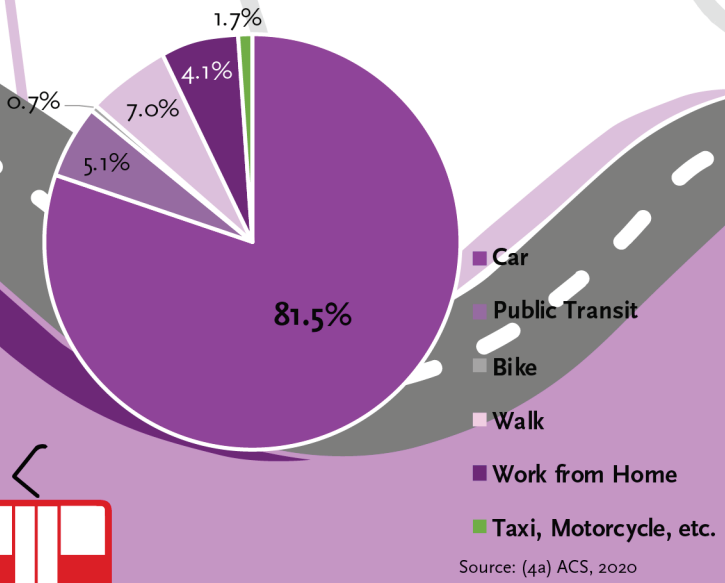
**4.6 %** of public transit commuters in National City report residing in a household with **no vehicle available to them.**(3)

**Over 1/4**
of National City households are already *"low-car/no-car" households*(3)






## Modes of Everyday Commute

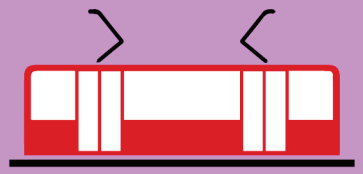



Source: (4a) ACS, 2020

# Highest

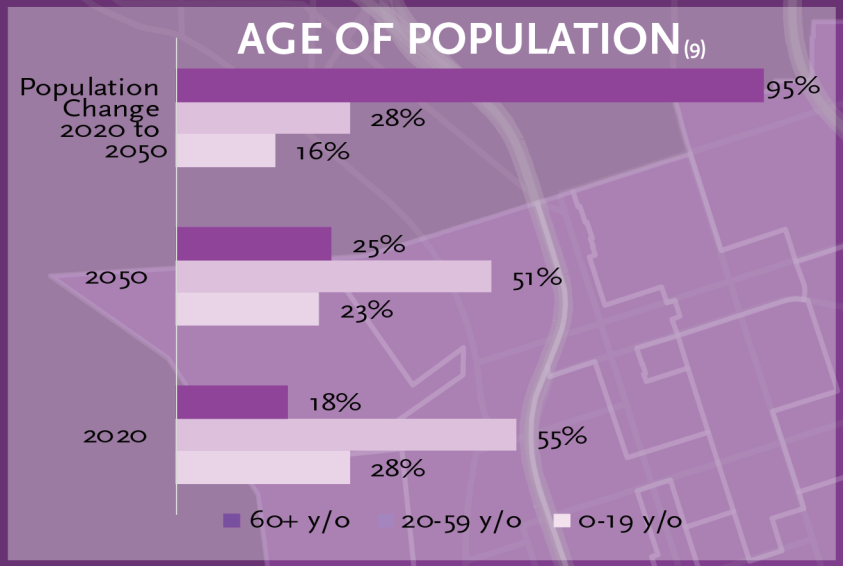
*public transit ridership rates* in San Diego County(6)

**Transit Services via 8th St and 24th St**
San Diego Trolley Stations(3)
+ 9 local bus routes



# The Community
*La Comunidad*

## AGE OF POPULATION (9)




National City census tracts score within the **81-85 % Disadvantaged Community** category or worse. (9)

## Employment Demographics

**66.6%** Labor Force Participation Rate (4b)

**7.5%** Unemployment Rate (4b)

**5,676** Armed Force Personnel (4d)

**25,778** Employeed Civilians (4d)

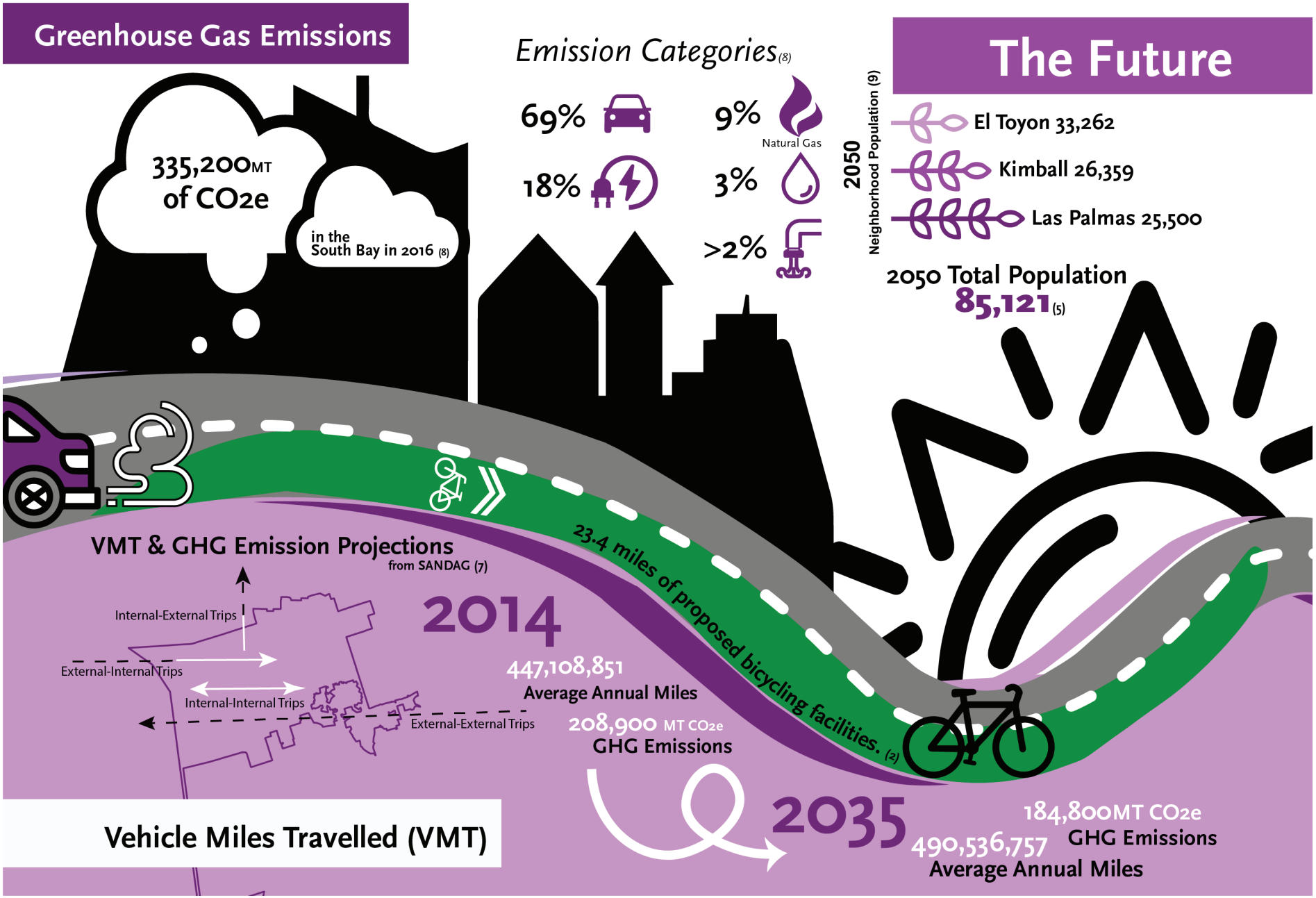
**16,854** Not in Labor Force (4d)

## Economics & Business

**74%** *make <$60k* (9)

**$43,168** *Median Income* (9)


*Deterrents* to walking, biking, & taking transit locally.
Limited Time
Fear Over Personal Safety/Crime
Distance
Concerns over Traffic Safety
Factors that *encourage* walking, biking, & taking transit locally.
>Street & Walkway Lighting
>Pedestrian Infrastructure
>Cleaner Streets
>Transit Services
A
B
C
D
F
Neighborhood Walking Scores(9)


Greenhouse Gas Emissions
335,200MT of CO2e
in the South Bay in 2016 (8)
Emission Categories (8)
69%
9%
Natural Gas
18%
3%
>2%
The Future
2050 Neighborhood Population (9)
El Toyon 33,262
Kimball 26,359
Las Palmas 25,500
2050 Total Population
85,121 (5)
VMT & GHG Emission Projections
from SANDAG (7)
Internal-External Trips
External-Internal Trips
Internal-Internal Trips
External-External Trips
2014
447,108,851
Average Annual Miles
208,900 MT CO2e
GHG Emissions
23.4 miles of proposed bicycling facilities. (2)
2035
184,800MT CO2e
GHG Emissions
490,536,757
Average Annual Miles
Vehicle Miles Travelled (VMT)

## *INFOGRAPHIC REFERENCES*


1. National City, Citywide Collisions (2013-2017)
2. National City, Bicycle Master Plan (2023)
3. National City, Downtown Specific Plan (November 2017)
4. U.S. Census Bureau (ACS): 4a) 5-Year Estimate Subject Tables, Commuting Characteristics by Sex, Table S0801 (2020); 4b) 5-Yr Est. Subject Tables, Employment Status, Table S2301 (2020), 4c) 5-Yr Est S.T., Demographics & Housing Est., Table DP05 (2020); 4d) 5-Yr Est. S.T., Employment Status for the Population 16 Yrs & Over, Table B23025 (2020)
5. SANDAG, Online Current Estimates Data: Data Surfer (2018)
6. Fermanian Business & Economic Institute, The San Diego Metropolitan Transit System: A Study of its Economic Impact, (2019)
7. EPIC, Greenhouse Gas Emissions Inventory & Projections (January 2019)
8. SANDAG, ReCAPS City of National City Snapshot (November 2019)
9. National City, INTRAConnect Plan Draft (February 2020)
10. National City, Street Light Maintenance (Accessed June 2020)
11. The Noun Project, Icons (2020)


# Pedestrian Routes

## Existing Setting

National City is made up of multimodal communities with high rates of pedestrian activity. As part of the smart growth vision, the City has a taken a proactive approach to addressing the safety of existing pedestrian routes, as well as the barriers to walkability within the planning area. The City's Capital Improvement Program (CIP) identifies, prioritizes, and coordinates the financing and timing of major public improvements throughout the City. One of the primary goals of the CIP is to identify, fund and deliver infrastructure improvements that support walkability. The City's Safe Routes to School (SRTS) program engages the community to assist with identifying barriers to walking and proposes solutions to create safe and accessible walking corridors between schools and feeder neighborhoods. Typical traffic safety enhancements include flashing warning beacons, radar speed feedback signs, pedestrian countdown signal, and school crosswalk enhancements such as high intensity signing and striping, flashing signs, in roadway warning lights, raised crosswalks, curb overextension refuge islands, etc. The SRTS programs supplements infrastructure improvements funded through the City's CIP with public outreach education and entourage activities aimed at increasing the number of children who walk to and from school.

The City's Americans with Disabilities Act (ADA) transition plan, which is updated annually, outlines the procedures to be used in updating the City's current inventory and prioritizing improvements. From 2013-2019, National City installed 16.9 miles of new sidewalk and installed and/or upgraded 675 curb ramps for ADA compliance. Figure T-1 on page 26 highlights these recently completed sidewalks in addition to opportunities for sidewalk gap closures throughout the City. Table T-1 lists the recent sidewalk improvements, ADA improvements, and other pedestrian enhancements made through the CIP.

**TABLE T-1:** Recently Completed Capital Improvement Program (CIP) Projects – Pedestrian Enhancements

| Project | Year Completed | Pedestrian Enhancements |
|---|---|---|
| Coolidge Avenue Safe Routes to School | 2014 | • Enhanced crosswalks with high intensity signing and striping<br>• Wider sidewalks, pedestrian curb ramps and raised crosswalk<br>• New lighting, landscaping, and storm water bio-retention areas<br>• Decorative benches and bike racks<br>• Traffic calming measures such as corner bulb-outs |
| 8th St Safety Enhancements | 2015 | • New traffic signal at "M" Avenue<br>• Enhanced crosswalks with high intensity signing and striping<br>• Pedestrian refuge island and overhead advanced warning beacons for new crosswalk at "K" Avenue<br>• New sidewalks and pedestrian curb ramps for ADA compliance<br>• Traffic calming measures such as corner bulb-outs and a "road diet" |
| 8th St Smart Growth | 2015 | • Enhanced crosswalks with high intensity signing and striping<br>• New, wider sidewalks and pedestrian curb ramps for ADA compliance<br>• New lighting, landscaping, and decorative benches<br>• Traffic calming measures such as corner bulb-outs and a "road diet" on E. 8th Street between National City Boulevard and Highland Avenue |
| A Avenue Green Street | 2015 | • Enhanced crosswalks with pedestrian refuge islands and corner bulb-outs for traffic calming<br>• Pedestrian actuated flashing crosswalk signs, and high intensity signing and striping<br>• New sidewalks and pedestrian curb ramps for ADA compliance |
| Downtown – Westside Community Connections | 2015 | • Corner bulb outs for traffic calming<br>• Pedestrian curb ramps for ADA compliance<br>• Enhanced crosswalks with corner bulb-outs and high intensity signing and striping |

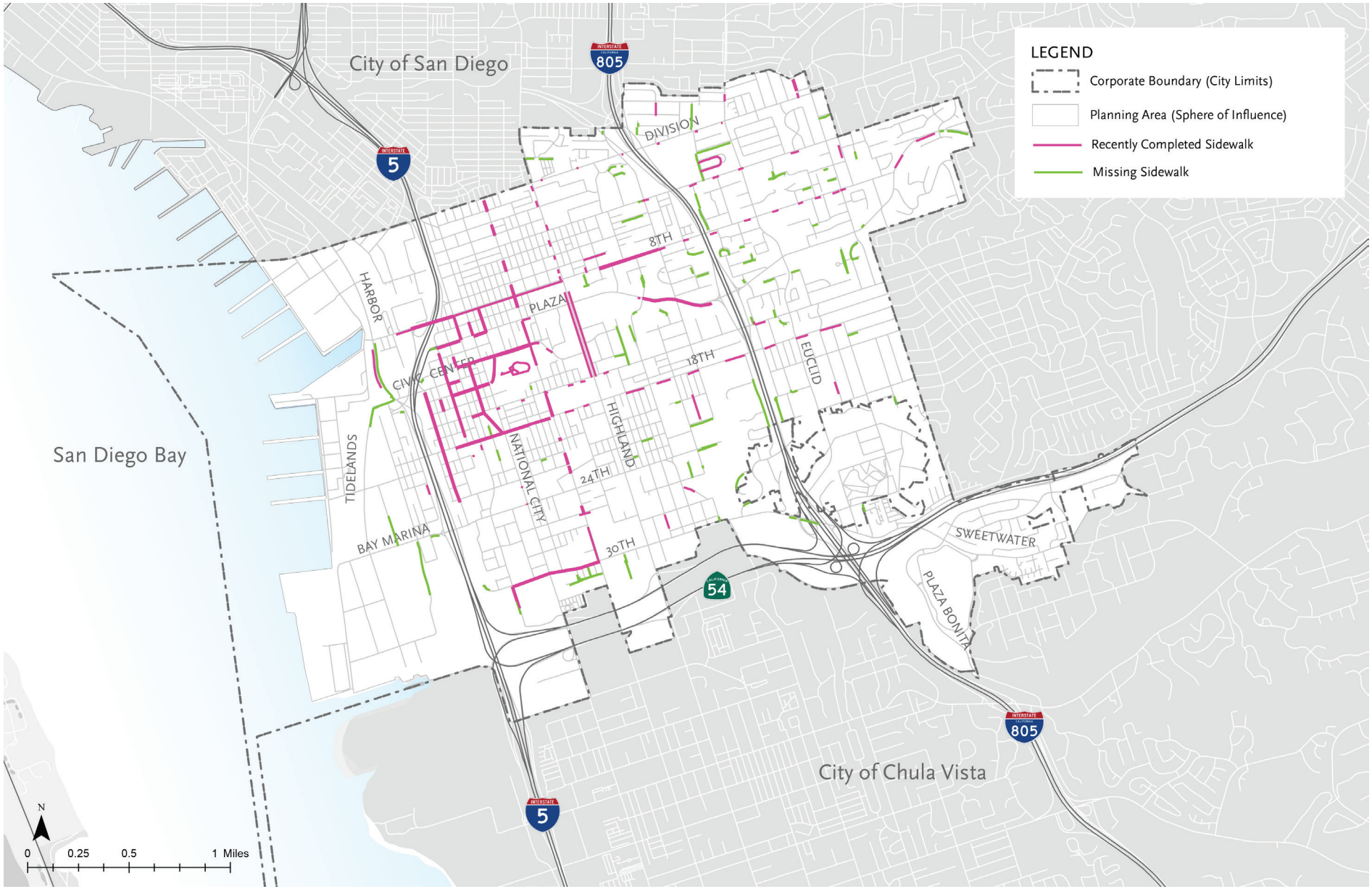
**TABLE T-1:** Recently Completed CIP – Pedestrian Enhancements (Cont.)

| Project | Year Completed | Pedestrian Enhancements |
|---|---|---|
| Highland Ave Safety Enhancements | 2016 | • Enhanced crosswalks with pedestrian refuge islands and high intensity signing and striping<br>• Pedestrian curb ramps for ADA compliance<br>• New streetlights<br>• Reduce travel lanes to two lanes with protected left-turn pockets to calm traffic<br>• Enhance signing and striping, corner bulb-outs, and refuge islands<br>• Convert parallel parking to angle parking on the east side of the street |
| D Avenue Community Corridor | 2016 | • Enhanced crosswalks with pedestrian refuge islands<br>• Corner bulb-outs for traffic calming<br>• Pedestrian actuated flashing crosswalk signs, and high intensity signing and striping<br>• Pedestrian curb ramps for ADA compliance<br>• Traffic calming roundabout |
| Paradise Valley Road Safe Routes to School | 2016 | • New sidewalk, curb and gutter, and lighting along the west side of Paradise Valley Road between E. 8th Street and E. Plaza Boulevard to provide a "gap closure" along this key walking route to/from Ira Harbison Elementary School |
| El Toyon Park Improvements | 2017 | • Pedestrian lighting<br>• Walking paths<br>• Curb ramps and raised crosswalk<br>• New park restrooms |
| Kimball Park Improvements | 2017 | • Pedestrian plaza<br>• Improved lighting<br>• Walking paths and curb ramps<br>• New park restrooms |

**TABLE T-1:** Recently Completed CIP Projects – Pedestrian Enhancements (Cont.)

| Project | Year Completed | Pedestrian Enhancements |
|---|---|---|
| Pedestrian Midblock Crossing Project | 2018 | • New LED fixtures at 30 signalized intersections Citywide<br>• Install pedestrian level LED streetlights at 16 midblock crosswalks<br>• ADA curb ramps, corner bulb-outs, sidewalks, and solar powered flashing crosswalk signs with high intensity striping at 6 midblock crosswalks |
| 18th St Community Corridor | 2018 | • Raised crosswalk and enhanced crosswalks with high intensity striping<br>• New sidewalks and pedestrian curb ramps for ADA compliance<br>• Enhanced crosswalks with high intensity striping<br>• New plaza area with lighting, landscaping, benches, and bike racks in front of Kimball Elementary School<br>• Traffic calming measures such as corner bulb-outs at school crosswalks<br>• Storm water treatment infiltration areas |
| Westside Pedestrian and Bicycle Enhancements | 2018 | • Enhanced crosswalks with high intensity signing and striping<br>• Raised crosswalk<br>• New sidewalks and pedestrian curb ramps for ADA compliance<br>• New lighting, landscaping, benches, bike racks and public art<br>• Traffic calming roundabout |
| Alley Improvements Project | 2018 | • Reconstructing eight existing alleys subject to drainage issues with new concrete alleys<br>• Pedestrian curb ramps for ADA compliance |
| Highland Ave Traffic Signal Modifications | 2019 | • ADA enhancements<br>• Pedestrian countdown signal heads<br>• Audible pedestrian push button systems |
| Euclid Avenue Bicycle and Pedestrian Enhancements | 2020-2022 | • New sidewalks and pedestrian curb ramps for ADA compliance<br>• Curb extension at the intersection of Euclid Avenue and Plaza Boulevard |

**FIGURE T-1:** Recently Completed Sidewalks and Missing Sidewalks Slated for improvement



# Future Pedestrian Corridors and Improvements

## *Pedestrian Corridors*

The pedestrian network within the City of National City includes new classifications for two types of pedestrian corridors. These pedestrian corridors are sensitive to the land use context and provide opportunities for additional enhancements to both pedestrian safety and the pedestrian walking experience.

- **Walkable Retail Corridor:** This corridor type is intended to increase the comfort and experience of walking in commercial and mixed-use areas. Along these corridors, pedestrian amenities such as street furniture, shade, and pedestrian scale lighting are encouraged. Crosswalk infrastructure is also encouraged to provide pedestrians safe access to businesses and uses on both sides of the street.
- **Pedestrian Safety Corridor:** This corridor type is intended to maximize the safety of walking in residential, park and school zone areas. Along these corridors, traffic calming features such as roundabouts, traffic circles, and pop-outs are encouraged to provide greater safety for pedestrians. Crosswalk infrastructure is also encouraged to provide pedestrians safe access to both sides of the street.

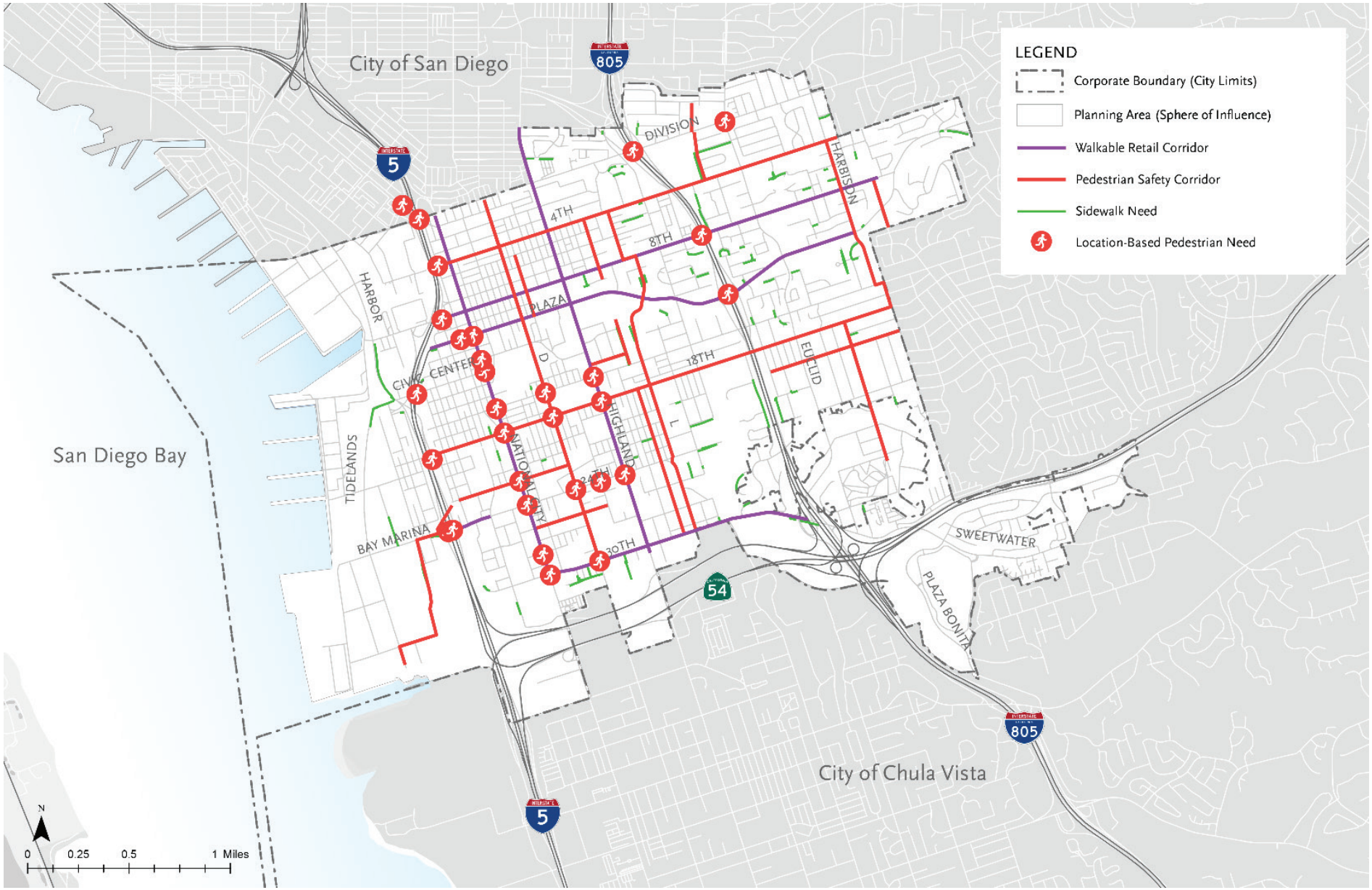
## *Pedestrian and Walkability Improvements*

The 2019-2024 CIP has identified an additional 337 ADA ramp upgrades, installations, and improvements, and the 2025-2029 CIP is identifying the remaining 1,380 ramps in the City for improvement. Some of these upcoming pedestrian CIP improvements include:

- 8th Street corridor (between K and Palm Avenues): Traffic calming and pedestrian facility enhancements, including installation of a traffic signal at the intersection of E 8th Street and L Avenue
- Coolidge Avenue: Improved pedestrian safety and access and traffic calming, including the installation of new sidewalks, ADA curb ramps, bulb-outs, crosswalks and signing, and striping enhancements
- City-wide: Repairs to deteriorated curb, gutter and sidewalks throughout the City

The City has also identified a number of spot locations throughout National City where improvements are needed to improve pedestrian safety, user experience, or both. These locations, along with the identification of the Walkable Retail and Pedestrian Safety Corridors are shown in Figure T-2 on page 28.

**FIGURE T-2:** Pedestrian Corridors and Location-Based Pedestrian Needs



# Goals and Policies

## ***PEDESTRIAN NETWORK***

**Goal T-1: A universally accessible, safe, comprehensive, and integrated pedestrian system.**

| | |
|---|---|
| **Policy T-1.1:** | Create a network of safe and comfortable walking environments. |
| **Policy T-1.2:** | Require new development and redevelopment to incorporate pedestrian-oriented street designs that provide a safe and comfortable environment for walking. |
| **Policy T-1.3:** | Ensure pedestrian network provides safe access to transit, schools, parks, recreation centers, shopping districts, and other key destinations. |
| **Policy T-1.4:** | Promote walking as the primary travel mode to schools. |
| **Policy T-1.5:** | Ensure pedestrian safety at intersections and mid-block crossings. |
| **Policy T-1.6:** | Ensure safe and comfortable access by less mobile segments of the population consistent with the Americans with Disabilities Act. |
| **Policy T-1.7:** | Encourage the application of Universal Design to the pedestrian system. |
| **Policy T-1.8:** | Provide a continuous pedestrian network within and between neighborhoods that links transit, schools, housing, jobs, parks, and retail free from major barriers. |
| **Policy T-1.9** | To reinforce community connections, encourage and facilitate pedestrian access through wayfinding and signage for facilities connecting to transit, schools, parks, recreation centers, shopping districts, and other key destinations. |

### *Why is this Important?*

Improving the pedestrian system through enhancements to walkability, including more attractive streetscapes, continuous well paved sidewalks, proximity of destinations, adequate lighting, and safe street crossings is found to encourage pedestrian activity within the community. Improving pedestrian access to schools supports the General Plan's guiding education principle of making schools neighborhood focal points. An increased reliance on walking and decreased reliance on motorized transport has both health and environmental benefits and supports the City's climate action goals. The principle of Universal Design states that infrastructure that meets the needs of people with disabilities is also a best practice for people without disabilities.

# Bikeways

## Existing Setting

National City is home to a range of bicycle facilities that create both local and regional bicycle connectivity and holds a commitment to the development and improvement of active transportation connections. Improving these connections supports the City's climate action goals to reduce GHG emissions and VMT, as well as creating successful complete "10-Minute Neighborhoods." Bicycle facilities within the planning area can be broken down into five classifications that are summarized here:

### BIKE FACILITY CLASSIFICATIONS

**Class I Bike Path:** Paved rights-of-way separated from the street

**Class II Bike Lane:** On street facilities designed for bikes with striping and stencils

**Class III Bike Route:** Streets shared with motor vehicles that are designated for bicycle travel with signage

**Class III Bike Boulevard:** An enhanced Class III Bike Route where additional traffic calming features are provided to reduce vehicular speeds and improve safety for cyclists.

**Class IV-Cycle Track:** Exclusive bikeway with a physical separation from motor vehicle travel lanes, parking lanes, and sidewalks

Improving local and regional bicycle connectivity and enhancing bicycle safety is a component of both the City's CIP infrastructure and SRTS programs. From 2013-2022 the City has constructed approximately 2.61 miles of new bicycle facilities as shown in Figure T-3. Table T-2 highlights the recently completed CIP projects that improved the bicycle mode environment within the planning area.

In addition to the local serving bikeways, the planning area also contains two regional bikeways: the Bayshore Bikeway and the Sweetwater River Bikeway.

The Bayshore Bikeway is a 26-mile regional bicycle route that encircles San Diego Bay and passes through the planning area along Harbor Drive and Tidelands Avenue and provides a link to the nearby cities of San Diego, Coronado, Imperial Beach, and Chula Vista. This route also provides an alternative transportation option to many industrial and military job sites.

The Sweetwater River Bikeway is located along the southern border of National City with segments in Chula Vista. It runs parallel with the Sweetwater River Flood Control Channel. It is approximately 1.7 miles long and varies between eight and ten feet in width. It connects to the Bayshore Bikeway at the Sweetwater Channel near the Gordy Shields Bridge. Figure T-3 shows a map of the existing and planned local and regional bikeways.

*Class II buffered bicycle lane along Euclid Avenue*

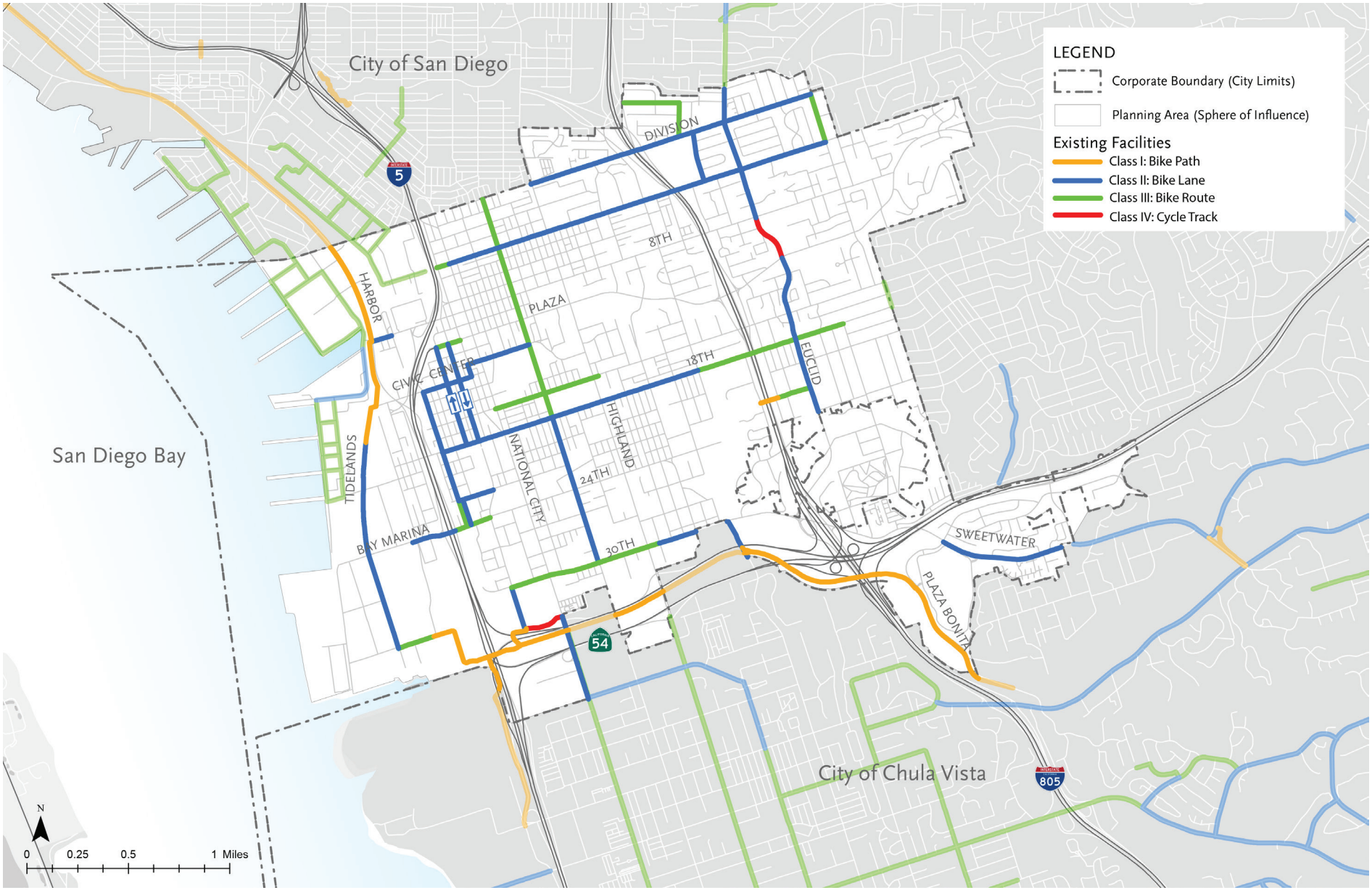
**TABLE T-2:** Recently Completed Capital Improvement Program Projects – Bicycle Enhancements

| Project | Year Completed | Bicycle Enhancements |
|---|---|---|
| Coolidge Avenue Safe Routes to School | 2014 | • New bike racks |
| 4th St Community Corridor | 2014 | • Green bike boxes at four signalized intersections<br>• New Class II bike lanes with reverse angle parking for bicycle safety |
| 8th St Smart Growth | 2015 | • New bike racks<br>• New Class II bike lanes with signage on 8th Street between Harbor Drive and Roosevelt Avenue |
| D Avenue Community Corridor | 2016 | • New Class II bike lane and class III sharrows with signage<br>• Reverse angle parking for bicycle safety<br>• Green bike boxes at two signalized intersections, E. 18th Street and E. 24th Street<br>• Enhanced crosswalks with pedestrian refuge islands<br>• Corner bulb-outs for traffic calming<br>• Pedestrian actuated flashing crosswalk signs, and high intensity signing and striping<br>• New traffic calming roundabout at E. 12th Street |
| Downtown Westside Community Connections | 2016 | • New Class III sharrows with signage |
| Bicycle Parking Enhancements | 2017 | • Custom bicycle racks for parks, public buildings, business districts and other destinations along bicycle corridors |
| 18th St Community Corridor | 2018 | • Green bike boxes at two signalized intersections, National City Boulevard and "D" Avenue<br>• New bike racks<br>• New Class II bike lane between Wilson Avenue and "D" Avenue<br>• New sharrows with signage between "D" Avenue and Granger Avenue |
| Division St Traffic Calming | 2018 | • 1 mile of Class II bike lanes with signage on Division Street between Highland Avenue and Euclid Avenue |
| Westside Pedestrian and Bicycle Enhancements | 2018 | • Class II bike lanes with signage on Civic Center Drive, Wilson Avenue and W. 22nd Street<br>• New bike racks |

**TABLE T-2:** Recently Completed Capital Improvement Program Projects – Bicycle Enhancements (Cont.)

| Project | Year Completed | Bicycle Enhancements |
|---|---|---|
| Harbison Avenue Road Diet Project | 2019 | • New Class III sharrows |
| 16th Street Corridor | 2019 | • Implementation of Road Diet<br>• Class III Sharrows with signage<br>• Reverse Angle Parking |
| National City Boulevard Inter City Bike Connection | 2020-2022 | • New Class 4 along W33rd St and National City Boulevard over the SR-54 overpass |
| Sweetwater Road Bicycle Enhancements | 2020-2022 | • Class II bike lanes with signage on Sweetwater Road<br>• Transition striping |
| Euclid Avenue Bicycle and Pedestrian Enhancements | 2020-2022 | • Class II bike lanes with signage on Euclid Avenue<br>• Transition striping<br>• Curb extension at the intersection of Euclid Avenue and Plaza Boulevard |
| Paradise Drive and Grove Street Bicycle Enhancements | 2020-2022 | • Southbound Class II bike lane on Paradise Drive between 9th Street and 10 Street<br>• Northbound Class II bike lane on Grove Street between 12th Street and Plaza Boulevard<br>• Class III bike routes on Paradise Drive and Grove Street |
| Westside Bicycle Enhancements | 2020-2022 | • Northbound Class II bike lanes on Coolidge Avenue<br>• Southbound Class II bike lanes on Hoover Avenue |
| Sweetwater River Bikeway Connections/ 30 th Street Bicycle Enhancements | 2020-2022 | • Class II bike facilities on 30th Street from I Avenue to 2nd Avenue<br>• Class II bike lanes on 2nd Avenue from 30th Street to the Sweetwater River Bikeway<br>• Class III bike route on 30th Street from |
| Hoover Avenue Bicycle Enhancements | 2020-2022 | • Class II bike lanes on Hoover Avenue from W 30th Street to W 33rd Street |
| Roosevelt Bicycle Enhancements | 2020-2022 | • Class II bike lanes on Roosevelt Avenue from 8th Street to National City Boulevard/ Division Street |
| Bicycle Parking Enhancements | 2020-2022 | • New bike racks |

**FIGURE T-3:** Existing Local and Regional Bikeways

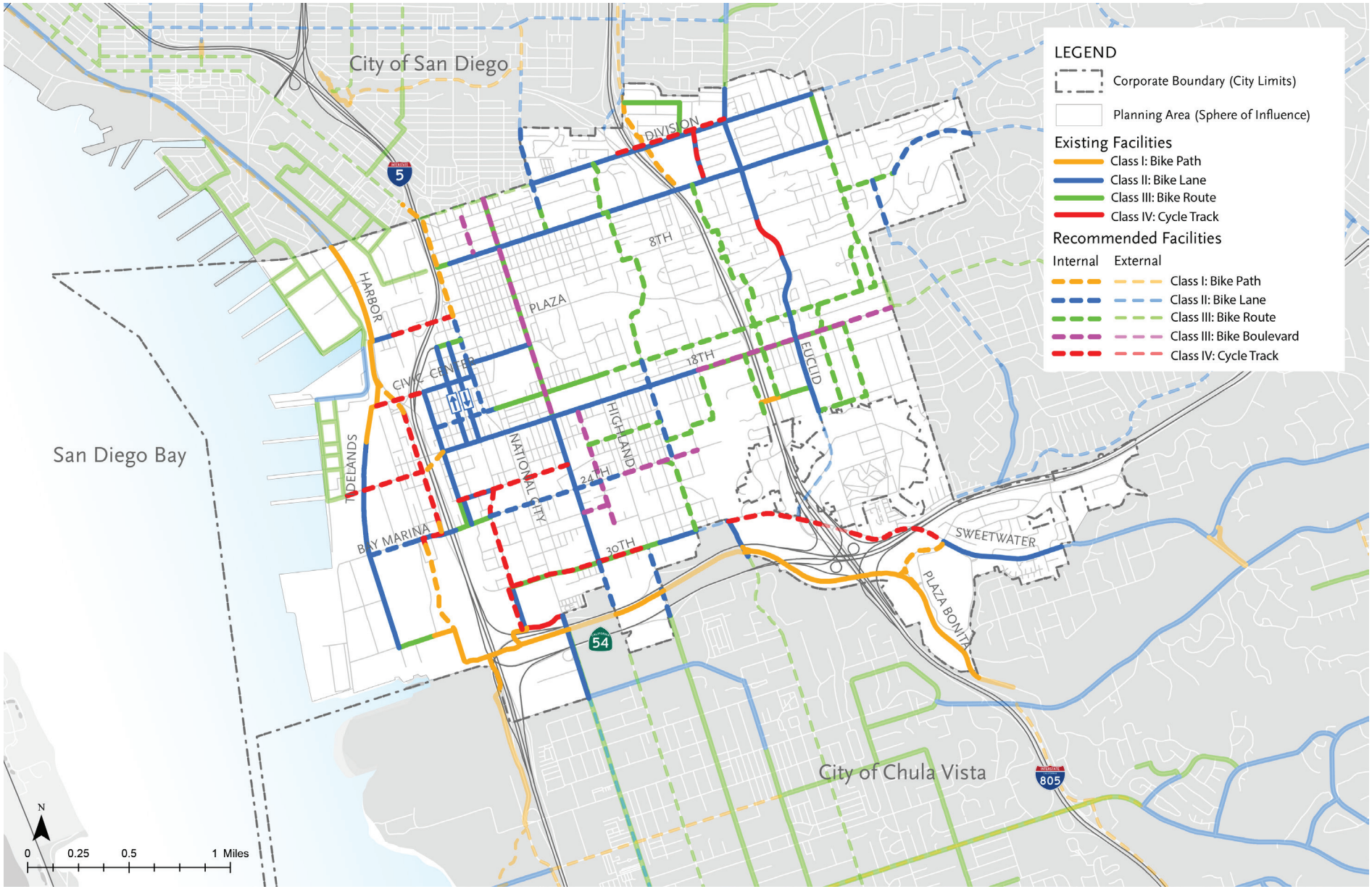


# Future Bikeway Improvements

## *Future Bikeway Facilities*

As part of recently adopted planning efforts by the City of National City and the concurrently adopted Bicycle Master Plan Update, the City has identified additional local bikeways through the City. These planned local and regional bicycle facilities are found in Figure T-4.

**FIGURE T-4:** Existing + Future Local and Regional Bikeways



# Goals and Policies

## ***BIKEWAY SYSTEM***

**Goal T-2: A safe, comprehensive, and integrated bikeway system.**

| | |
|---|---|
| **Policy T-2.1:** | Create a safe and comfortable network of bicycling facilities to access transit, schools, parks, recreation centers, shopping districts, and other key destinations. |
| **Policy T-2.2:** | Require new development and redevelopment to provide safe, secure end-of-trip bicycle facilities, where appropriate. |
| **Policy T-2.3:** | Require new development and redevelopment to provide safe and comfortable bicycle routing to community connections such as transit, schools, parks, recreation centers, shopping districts, and other key destinations, where appropriate. |
| **Policy T-2.4:** | Encourage existing businesses and new development or redevelopment projects to promote bicycling and provide personal lockers and shower rooms. |
| **Policy T-2.5:** | Encourage bicycling through education and promotion programs in conjunction with local school districts. |
| **Policy T-2.6:** | Encourage and facilitate cycling through wayfinding and signage for facilities connecting to transit, schools, parks, recreation centers, shopping districts, and other key destinations. |
| **Policy T-2.7:** | Promote the safety of cyclists at intersections and mid-block crossings that are in the bicycle network. |

### *Why is this Important?*

Bicycling provides a very viable alternative to most in-town trips that are typically taken by car if the necessary infrastructure to provide for cyclist safety and connectivity is in place. Comprehensive bicycle infrastructure and facilities are an important component of creating a balanced and complete transportation network. This balance is important to the City's smart growth goals, and for establishing complete communities with enhanced multimodal access to key destinations for all. Bicycling is also a non-polluting, low-cost, and sustainable form of transportation that with greater use can help reduce greenhouse gas emissions and the City's carbon footprint, and serves as a form of physical activity, resulting in health benefits for the cyclist.

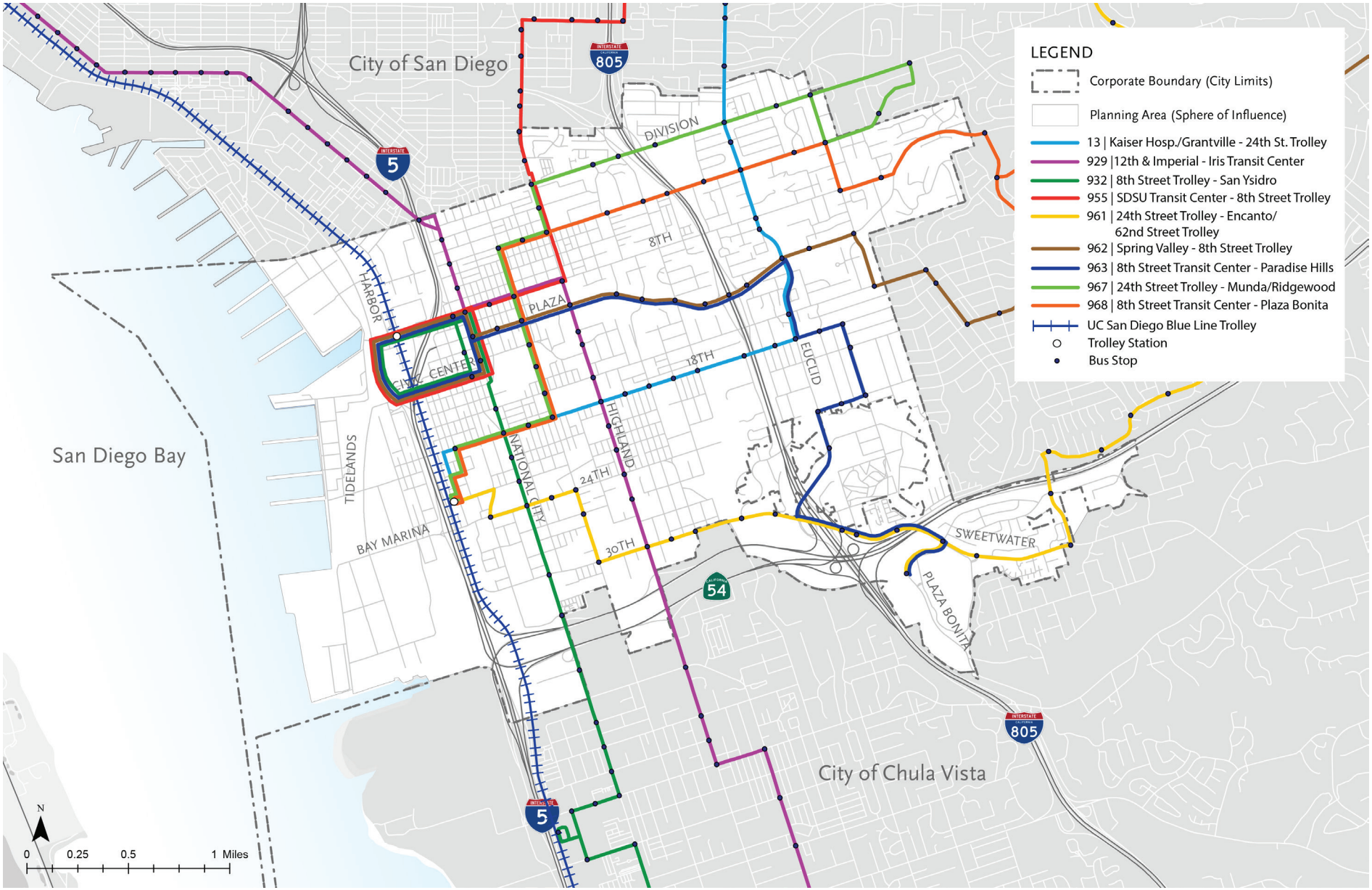
# Public Transit

## Existing Setting

Residents of National City rely more on public transportation than commuters throughout San Diego County. Of the estimated 25,531 working residents of the City (US Census Bureau ACS 2017), 6.9% commute to work using public transit, compared to the county's average of 3.4%. The City's urban core is well served by multimodal transportation options that allow for local and regional trips to be made without a car. In support of this multimodal system, National City is building on existing assets by encouraging development near transit nodes, including additional transit improvements in CIP projects. Recently completed improvements include new benches at bus stops throughout downtown National City, and streetscape enhancements on 8th Street encourage connections to and from the 8th Street Trolley Station. Improving connections and access supports the City's climate action goals to reduce GHG emissions and VMT.

National City is served by a regional transit system operated by MTS. There are ten bus routes running through the planning area with a total of 205 bus stops. Additionally, the planning area includes two MTS Trolley stations, which are located on the Blue Line Trolley running from Old Town and Downtown San Diego to the US-Mexico border. The 8th Street Trolley Station is located near the intersection of 8th Street and Harbor Drive, and the 24th Street Trolley Station is located near the intersection of 22nd Street and Wilson Avenue. Figure T-5 highlights the regional public transit system throughout the planning area.

**FIGURE T-5:** Regional Public Transit System




*San Diego Trolley*

## Future Transit Improvements

Several regional transit projects are envisioned in the future that will affect transit options for National City residents. These potential improvements include:

- Corridor and Regional Transit Service – Improvements to accommodate transit along I-5 and I-805. These improvements may include a new rail line (MTS Purple Line), new express service (MTS Blue Line Express), and/or new transit focused mobility hubs within the City.
- The planning area will also be served by the South Bay Rapid, which launched full-service operations in January 2019. The 26-mile BRT provides high-speed transit connections between downtown San Diego and the Otay Mesa Border Crossing along the I-805 managed lanes and a dedicated transitway through eastern Chula Vista. The South Bay Rapid currently includes 12 stations within the public right-of-way and will add four future infill stations including the East Plaza Boulevard Station in National City.

# Goals and Policies

## ***PUBLIC TRANSIT***

**Goal T-3: Increased use of transit systems.**

| | |
|---|---|
| **Policy T-3.1:** | Encourage responsible agencies to provide an accessible and convenient transit network to access schools, parks, recreation centers, shopping districts, and other key destinations. |
| **Policy T-3.2:** | Ensure that access, boarding, bus stop and shelter facilities to meet the needs of transit users. |
| **Policy T-3.3:** | Provide multimodal access to transit stops, including end of trip facilities for bicyclists and pedestrians, including children and youth, seniors, and persons with disabilities. |
| **Policy T-3.4:** | Encourage transit use by providing convenient carpool pickup and park-and-ride locations near transit centers. |
| **Policy T-3.5:** | Encourage transit providers to post route maps and pick up/drop off times at each stop. |
| **Policy T-3.6:** | Work with transit providers to maintain and enhance services within the City that are timely, cost-effective, and responsive to growth and redevelopment. |
| **Policy T-3.7:** | Encourage responsible agencies and businesses to provide shuttle service between transit stations and other key destinations. |
| **Policy T-3.8:** | Work with responsible agencies to provide convenient bus stop locations. |

### *Why is this Important?*

Expanding use of the transit system will help the community meet numerous goals and objectives set forth in the General Plan including increasing mobility, preserving and enhancing neighborhood character, improving air quality, reducing storm water runoff, reducing paved surfaces, and fostering compact development and a more walkable city. Transit connections to key destinations are also important factors of a complete "10-minute neighborhood." Improving public transit options, access, and connectivity allows for more trips to be made without a car and supports the City's climate action goals to reduce GHG emissions and VMT. A convenient, efficient, and affordable transit system greatly expands equitable transportation options. When the throughput of transit passengers is faster than those in personal vehicles, transit can be a better choice than driving.

# Vehicular Circulation System

## Existing Setting

The planning area currently has approximately 110 miles of paved streets and 90 signalized intersections. The existing roadway system generally follows a traditional grid pattern. The main regional freeway facilities through the planning area are I-5, I-805, and SR-54. Both I-5 and I-805 provide north-south movement while SR-54 is an east-west corridor.

The City has approximately 14 major arterial roadways providing circulation across the City and to major destination points throughout the region. These streets are typically four lanes and are generally spaced at half-mile intervals. Additionally, the City is served by approximately 31 collector roadways that operate as local conduits to take users in and out of neighborhoods and business districts onto the arterial routes. These are generally two-lane roads with signalized intersections.

### *Roadway Classifications*

The street system within the planning area includes major roadways, which are broken down into four classifications: freeways, arterials, collectors, and local roads. Figure T-6 identifies the locations of these various roadway typologies within the planning area. Definitions of these classifications are provided on the chart to the right.

**NATIONAL CITY ROADWAY CLASSIFICATION**

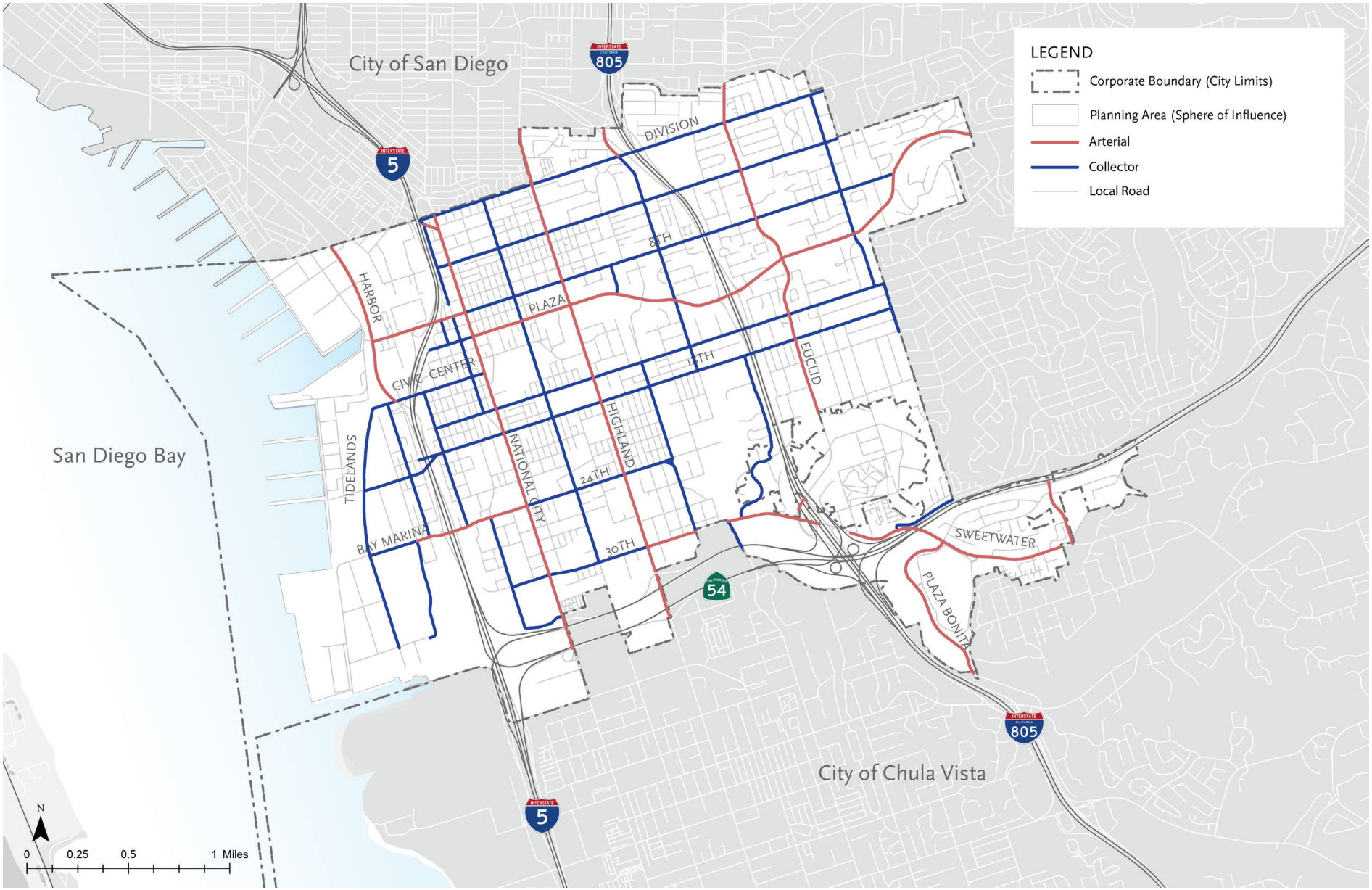
**Freeway:** A state-designated, high-speed, high-capacity route with limited direct access that serves statewide and interregional transportation needs.

**Arterial:** A major local traffic channel, providing circulation across the City and access to major destinations throughout the region. These are usually comprised of four to six driving lanes, often with synchronized signals to help traffic flow.

**Collector:** A local conduit that distributes vehicular traffic from neighborhoods or business districts onto arterials and sometimes to other collectors. These may serve as alternate routes to arterials for movement across the city.

**Local:** A low capacity, low-speed road providing direct access to individual properties within neighborhoods. These roads usually consist of two driving lanes.

**FIGURE T-6:** National City Roadway Classification



## Community Corridors

The National City street system plan also includes a community corridor street typology in addition to the four roadway classifications. The community corridors classification is focused more on the qualitative characteristics of a roadway rather than the quantitative properties specified in the functional classifications. This street type is applied to arterials, collectors, and local streets and is intended to increase the comfort of walking and/or bicycling on these roads through traffic calming measures such as on-street parking, bulb-outs, or roundabout; streetscape improvements such as landscaping, street trees, and medians; pedestrian enhancements such as wider sidewalks and street furniture; and bicycle improvements such as designated bicycle lanes and bike rack facilities. Community corridors reflect the City's commitment to reinvesting in its multimodal network and adding to the sense of community identity with their visible enhancements. Figure T-7 identifies the location of designated community corridors in National City. Community corridors are subdivided into four categories:

- Main Street Commercial Districts (see Figure T-8)
- Main Street Linear Commercial Corridors (see Figure T-9)
- Multimodal Streets (see Figure T-10)
- Green Streets/Urban Trails (see Figure T-11)


*National City Boulevard*

**FIGURE T-7:** Community Corridors

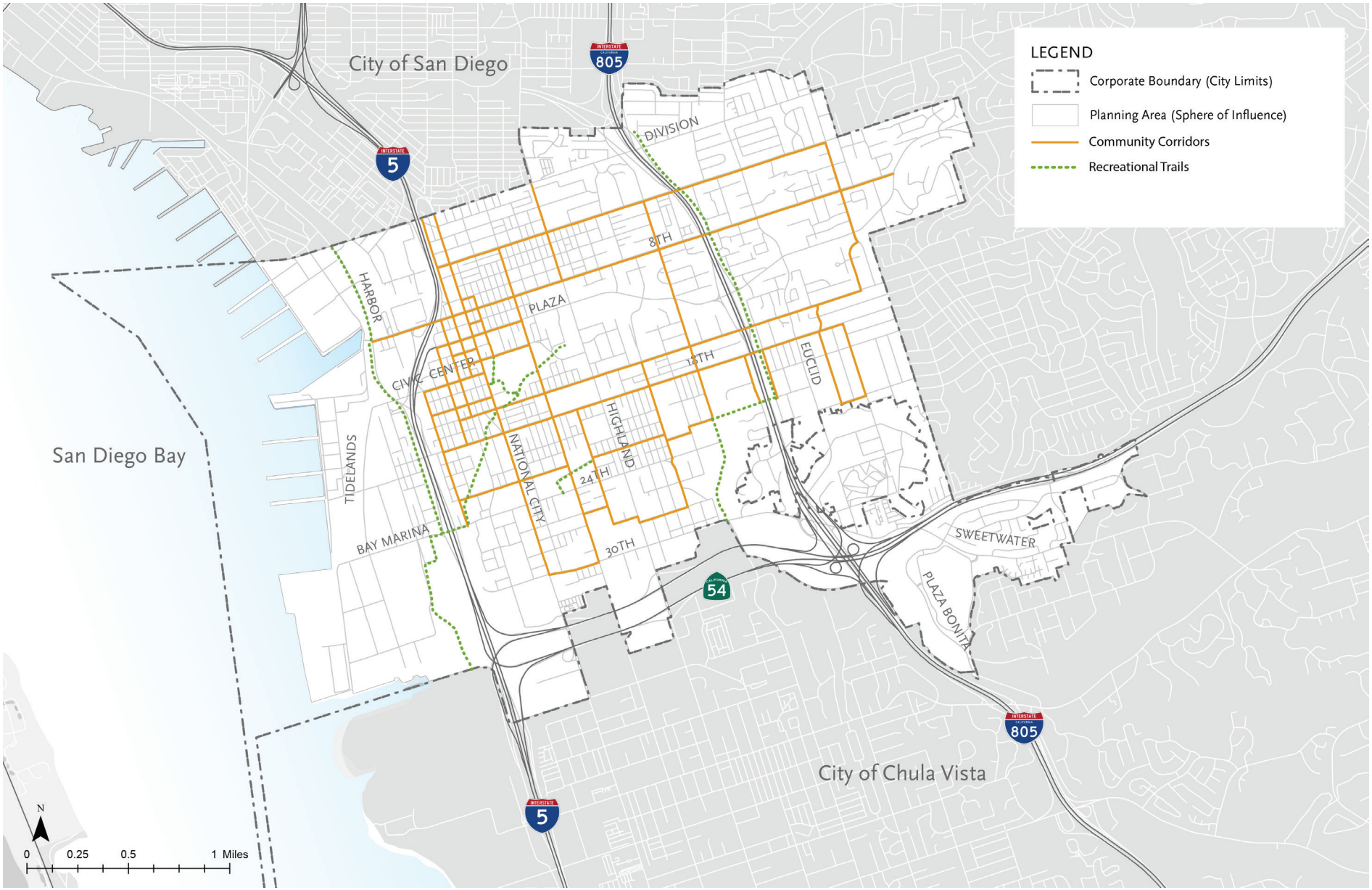


**FIGURE T-8:** Main Street Commercial District Community Corridor (Main Street - 8th Street)

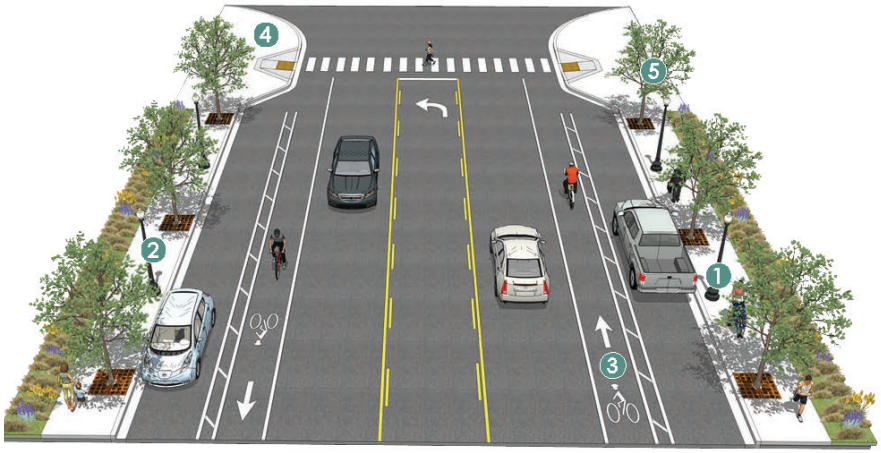

1. Banners
2. Themed street furnishings
3. 10 feet wide walkways
4. Angled parking
5. Bulb-outs for shortened pedestrian crossing
6. Highly visible and short pedestrian crossing distances
7. Medians for scale and design treatments

**FIGURE T-9:** Main Street Linear Commercial District Community Corridor (Main Street - National City Boulevard)


1. Lighting
2. Themed street furnishings
3. 10 feet wide walkways
4. On-street Parking
5. Highly visible pedestrian crossing distances
6. Landscaped median

*Source: National City Downtown Specific Plan*

**FIGURE T-10:** Multimodal Community Corridor (Multimodal Corridor)



1. Widened sidewalks
2. Lighting
3. Buffered bike lanes on each side
4. Bulb-outs
5. Street trees for pedestrian safety and comfort

**FIGURE T-11:** Green Street or Urban Trail Community Corridor (Urban Trail/Green Street)

1. Interpretative panels
2. Urban trail markers and art
3. Permeable surfaces for parking
4. Large canopy trees for urban forestry, urban heat island reduction, stormwater runoff reduction, traffic calming, and safety
5. Bioswales

*Source: National City Downtown Specific Plan*

## *Speeds*

All of the city's arterials and collectors have posted speed limits enforceable per the California Vehicle Code (CVC) and determined by an engineering traffic speed survey. Factors that are used to determine speed limits include 85th%ile speeds, collision data, and roadway conditions not readily apparent to drivers. Engineering and traffic surveys for speed limits are conducted once every five years by governing municipalities to comply with Section 40802(a) of the CVC and the national Uniform Vehicle Code. Engineering and traffic surveys may be extended to every seven years or every 10 years if a registered engineer evaluates the section of the highway and determines that no significant changes in roadway or traffic conditions have occurred.

A speed survey was recently conducted between 2016 and 2017 and posted speed limits were updated throughout the City. The survey identified all roadway segments that required an increase or decrease in speed limit. The resulting citywide posted speed limits can be seen in Figure T-12.

## *Parking*

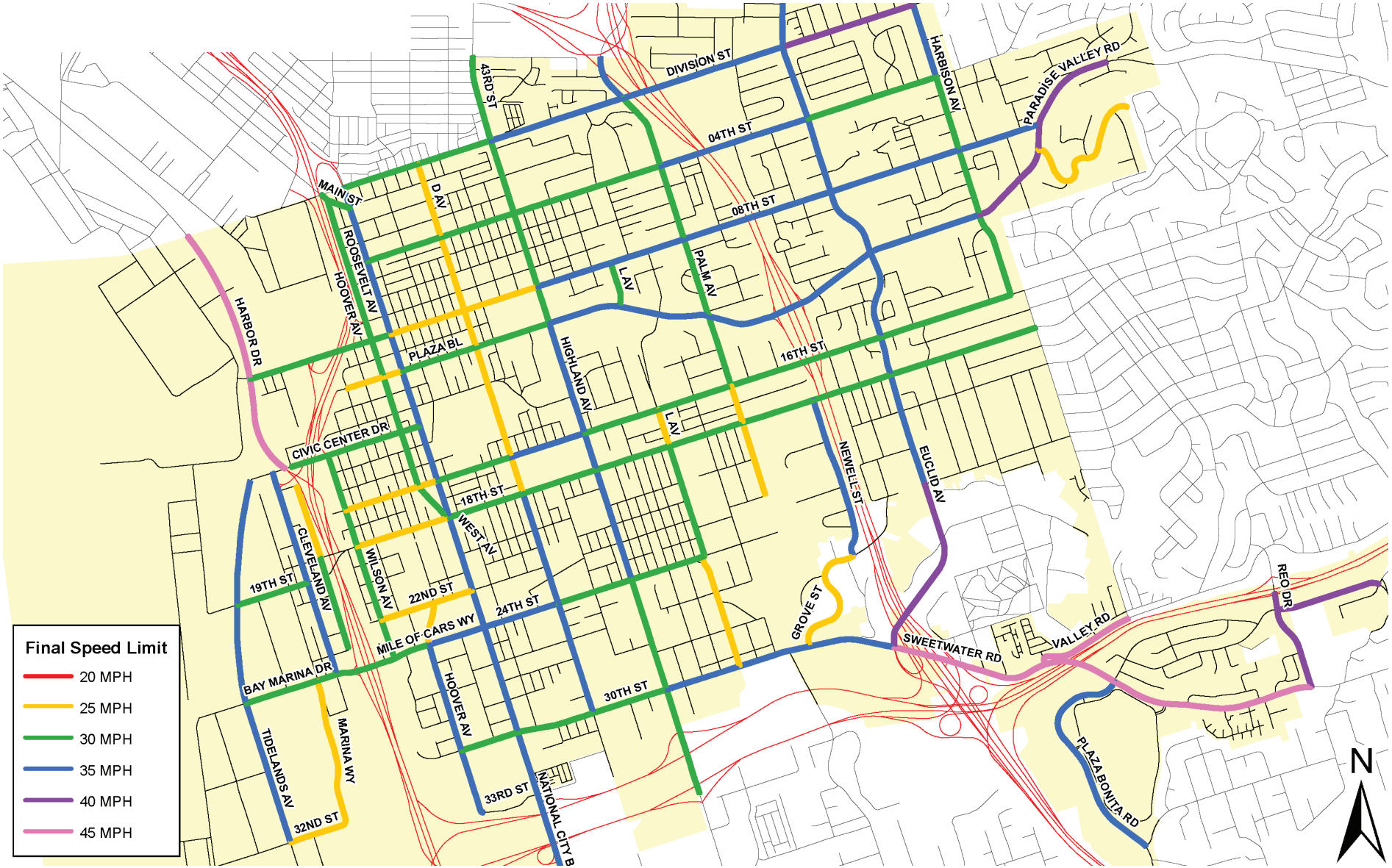
National City has a variety of parking options including on-street parking with and without time restrictions (up to four hours), off-street parking lots, and residential garages, carports, driveways, etc. Designated permit parking districts are located in select neighborhoods to protect residents from the parking impacts of nearby non-residential uses such as industrial shops (see Figure T-12 on page 49). Permit parking districts are governed by city council permits parking policies and the City's municipal code. In these areas, the City charges an annual fee to residents for a parking permit. On-street signage designates the allowable amount of time vehicles without proper permits may park before being liable for citations. Parking for commercial vehicles and large trucks is restricted on certain streets as well and is also identified by on-street signage.

As part of its smart growth vision, and to expand on the multimodal nature of the City, National City is focused on addressing and managing parking needs and demands.

The Downtown Specific Plan addresses a number of parking management strategies for National City. The "Smart Parking" Plan aims to understand how to best meet the community's present and future parking needs in order to identify strategies to address parking issues and propose a comprehensive parking management framework based on unique local conditions and national best practices. Some of the most important parking issues for residents, the business community, and other stakeholders during engagement for the Downtown Specific Plan included the following:

- Reducing the visual dominance of parking
- Focusing improvements in areas that are well served by regional transit and supported by local walking/biking infrastructure
- Identifying cost-effective parking demand management tools that will protect residential neighborhoods from the

**FIGURE T-12:** National City Posted Speed Limits



impacts caused by parking "spillover" from adjacent commercial or mixed-use areas

» Improving the City's parking management functions (including integrated pricing, signage, and enforcement) to make the most efficient use of the existing parking supply and help ensure the creation of new parking supply as necessary to meet future demand

A complete list of these community and stakeholder parking priorities can be found in the Downtown Specific Plan.

The Parking Action Plan (PAP) was also prepared to initiate the first phase of implementation of a comprehensive Parking Management Plan. The PAP identified parking management strategies to address existing and future parking demand:

» Parking Enforcement: Consistent and efficient parking enforcement using the latest technology

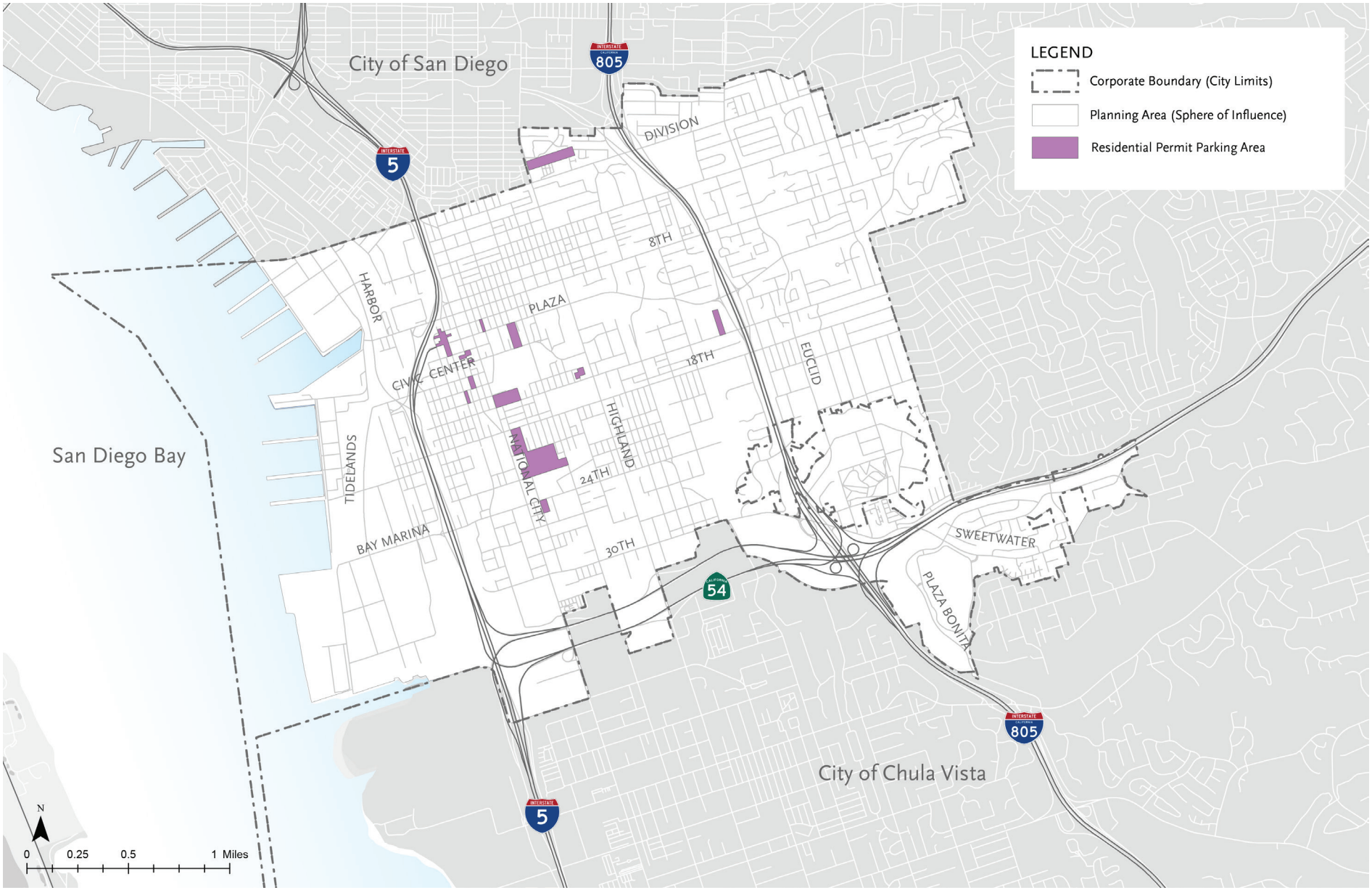
» Parking Capacity: The PAP recommends converting parallel parking to angled parking and prohibitions on oversized vehicle parking

» Parking Utilization: The PAP recommends implementing a variety of parking strategies to increase access to local businesses during the day, while providing overnight parking for residents after business hours. Strategies include implementing parking meters in business districts combined with time restricted parking zones within one block of the meters, and residential permit parking for the surrounding neighborhoods. The PAP also recommends implementing an online permit parking management system.

As part of the parking management study, existing demographics and transportation characteristics that could affect parking demand in National City were analyzed. This analysis focused primarily on data for commute trips from the US Census Bureau's 2014 American Community Survey (ACS). Findings from the analysis showed that one-third of National City workers commute by more efficient and sustainable modes than single-occupant vehicles. This suggests that additional planned investments in transit and other mobility choices in the future, supported by appropriate parking management policies, could feasibly reduce even more of the employee commuter trips that contribute to peak period traffic and parking congestion. Findings also showed that over one-fourth of National City households are already "low-car/no car" households and that a significant majority of National City workers are "choice transit riders" in that they reside in households with access to a vehicle. Implementing parking management policies and parking regulations for new development that accommodate existing "low car/no car households" and "choice transit riders" will be an important part of ensuring the success of the City's parking management.

Title 11 (Vehicles and Traffic) of the Municipal Code is undergoing an update; this section is and will be consistent with updates to Title 11. Future updates to Title 11 shall incorporate any changes to parking policy, as applicable.

**FIGURE T-13:** Residential Permit Parking Areas



# Future Vehicular Improvements

## *New Community Corridors*

As part of recently adopted planning efforts by the City of National City, active community engagement, and the incorporation of new corridor typologies in the Focused General Plan Update, the City has also expanded the number of Community Corridor network throughout the City. The addition of these Community Corridors allows for residents and visitors to travel throughout the City using different modes of transportation as identified in the Community Corridor typology. Additionally, these Community Corridors align with the new Walkable Retail Corridors, Pedestrian Safety Corridors and Traffic Calming Corridors and Districts. The expanded Community Corridor network is shown in Figure T-14.

## *Traffic Calming Corridors And Districts*

The safe functioning of the transportation network is key to community well-being. As part of this key policy driver, a new vehicular roadway classification has been added along select corridors and areas of the City. Traffic Calming Districts and Traffic Calming Corridors are areas and corridors within the City that have been designated for additional traffic calming measures to reduce vehicular speeds and improve multimodal safety. Along these corridors, traffic calming features such as roundabouts, traffic circles, and pop-outs are encouraged to provide greater safety for all users. These Traffic Calming Corridors and Districts were identified as areas of high importance and potential during active community engagement and align with the incorporation of new corridor typologies in the Focused General Plan Update. The Traffic Calming Districts and Corridors are documented in Figure T-15.

## *Streetscape*

- 8th Street Streetscape - Public improvements to support downtown revitalization
- Marina Gateway Streetscape - Streetscape and street improvements and plaza construction

## *Local Vehicular Circulation*

- City-wide - Repairs of bituminous pavements in various locations
- City-wide - Annual pavement maintenance project complete sealing and resurfacing on the streets
- Harbor Drive - Improvements to the intersection of Harbor Drive and Civic Center

**FIGURE T-14:** New Community Corridors

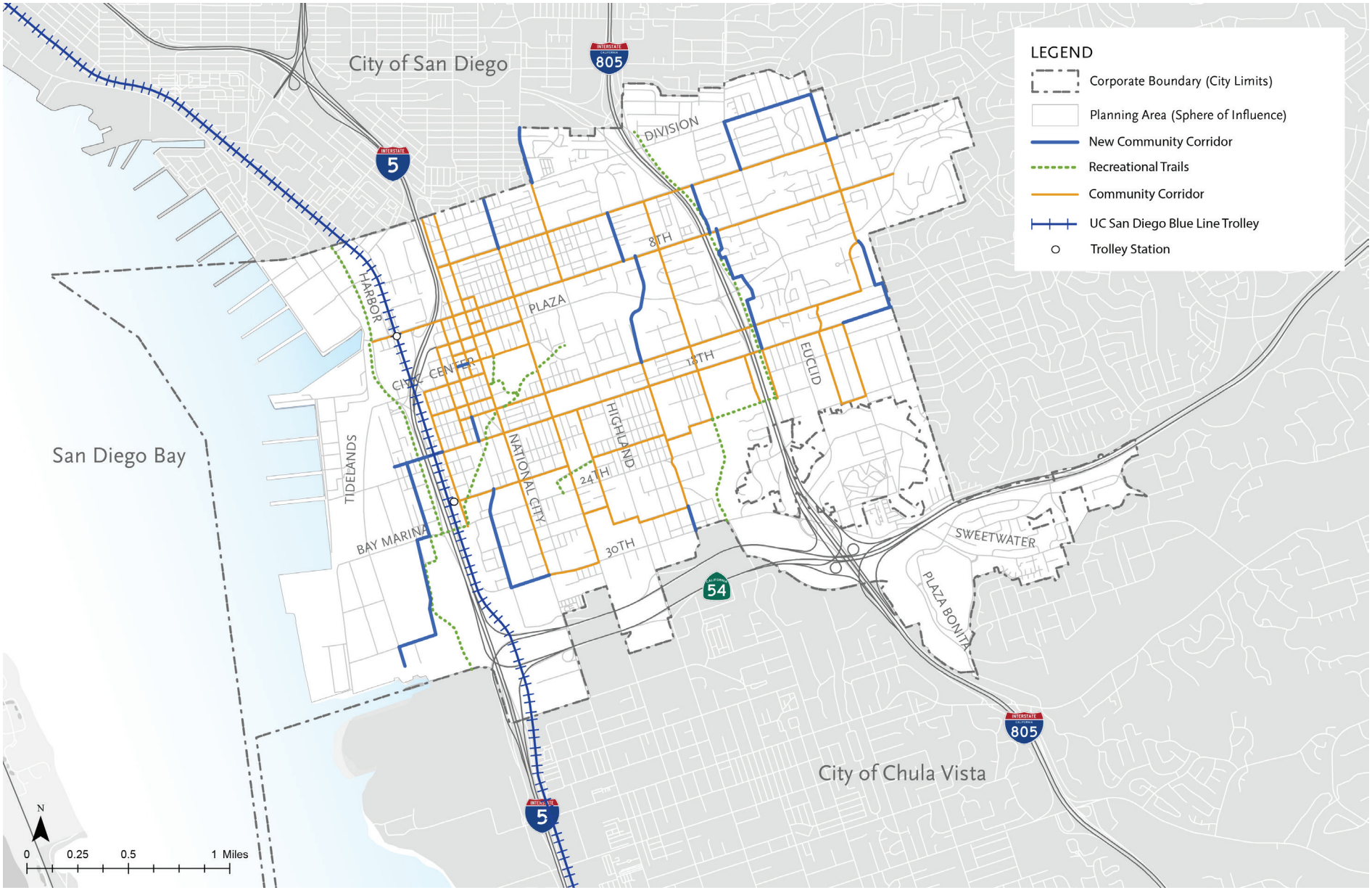
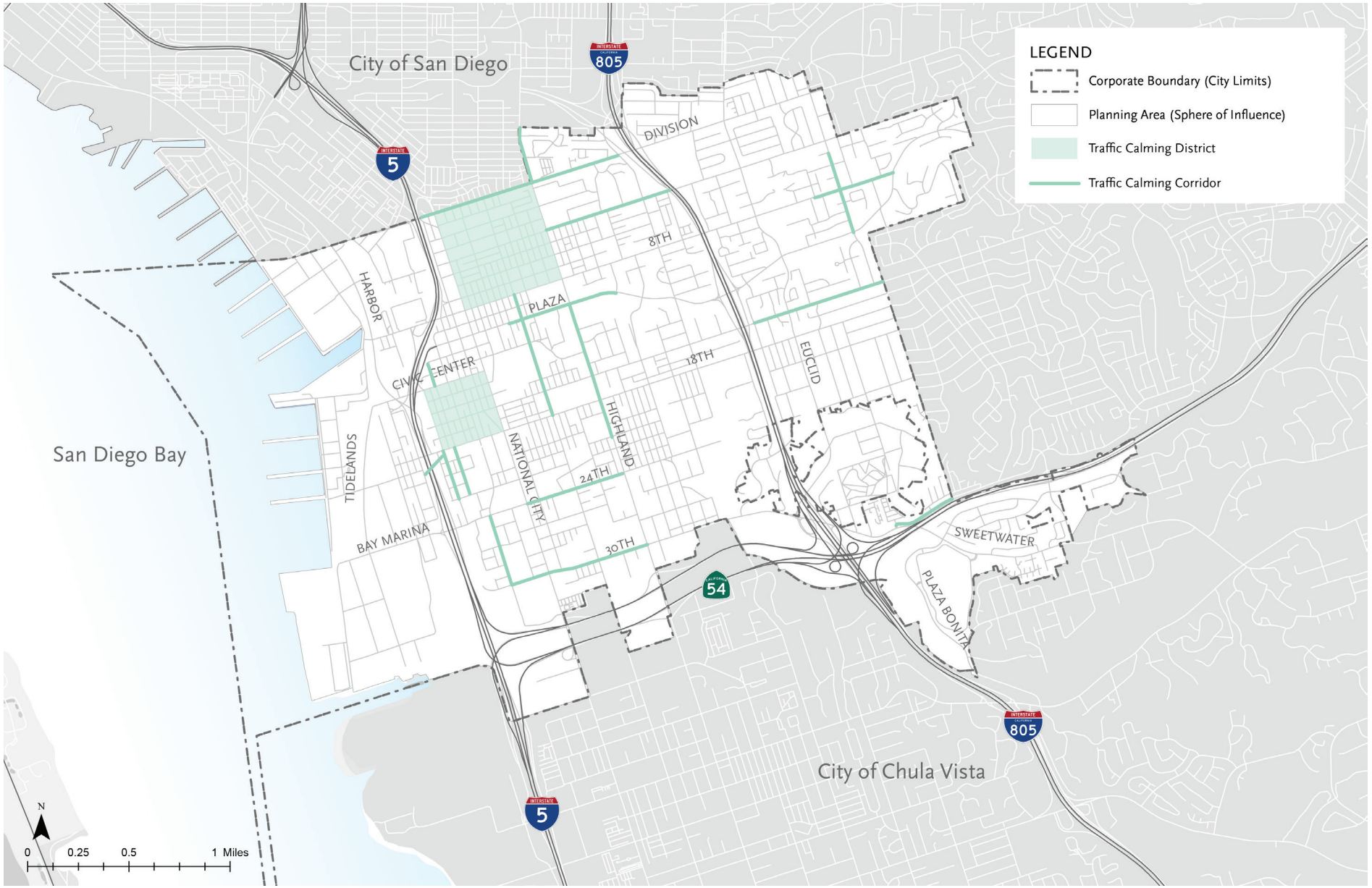


**FIGURE T-15:** Traffic Calming Districts and Corridors



# Goals and Policies

## ***LAND USE AND CIRCULATION LINKAGES***

**Goal T-4: Coordinated land use and circulation planning.**

| | |
|---|---|
| **Policy T-4.1:** | Allow, encourage, and facilitate transit-oriented development, mixed-use, and infill projects in appropriate locations to reduce vehicular trips. |
| **Policy T-4.2:** | Require new development to provide and enhance connectivity to new and existing transportation facilities via the provision of key roadway connections, sidewalks, and bicycle facilities. |
| **Policy T-4.3:** | Require new development and redevelopment to provide good internal circulation facilities that meet the needs of walkers, bicyclists, children, seniors, and persons with disabilities. |
| **Policy T-4.4:** | Work with state, regional, and local transportation entities to improve and expand transportation facilities and services that link residents to important land use destinations such as workplaces, schools, community and recreation areas, and shopping opportunities. |
| **Policy T-4.5:** | Exact fees on new development and redevelopment sufficient to cover the fair share portion of that development's impacts on the local and regional transportation system, including multimodal facilities, and/or directly mitigate its impacts to the transportation system through construction of improvements. |
| **Policy T-4.6:** | Partner with other agencies, such as the San Diego Association of Governments (SANDAG), the Port of San Diego, U.S. Navy, and MTS, to address mobility challenges, expand transportation options and mode choice, and pursue funding opportunities. |
| **Policy T-4.7:** | Encourage public health by increasing access to nutritious food using the circulation system, including roadways, transit routes, bike lanes, and pedestrian paths with grocery destinations, farmers markets, and social service providers. |

### *Why is this Important?*

Coordinated planning of land uses and the circulation system aims to ensure the efficient flow of vehicles, pedestrians, bicyclists, and transit operations within a community. Improvements or changes to the City's circulation system must be considered in conjunction with changes to land use patterns to ensure that adequate capacity will be accommodated for all modes of transportation. This comprehensive approach will better serve the needs of the community, especially low-income residents who are more reliant on transit and active transportation modes and are most vulnerable to displacement. It will also support main streets and local retail, and access to community destinations such as parks and schools.

## *MOBILITY FRAMEWORK*

**Goal T-5: A comprehensive circulation system that is safe and efficient for all modes of travel.**

| | |
|---|---|
| **Policy T-5.1:** | Develop and maintain an interconnected, grid- or modified grid-based transportation system that sustains a variety of multimodal transportation facilities. |
| **Policy T-5.2:** | Enhance connectivity by eliminating gaps and barriers in roadway, transit, bikeway, and pedestrian networks. |
| **Policy T-5.3:** | Project transportation impacts shall be measured by VMT in accordance with CEQA and to assist the City in meeting their climate action goals. |
| **Policy T-5.4:** | Work with Caltrans, SANDAG, MTS, and other responsible agencies to identify, plan, and implement needed transportation improvements. |
| **Policy T-5.5:** | Encourage traffic circulation improvements that minimize land acquisition and major construction, such as, but not limited to, enhanced road markings, synchronized traffic signals, Intelligent Transportation System (ITS) network management and more left turn restrictions. |
| **Policy T-5.6:** | Enhance the quality of life in the City's neighborhoods and minimize impacts on schools, hospitals, convalescent homes and other sensitive facilities through the implementation of traffic calming measures in these areas to reduce vehicle speeds and discourage cut-through traffic. |
| **Policy T-5.7:** | Improve circulation for specific areas of the City such as at the Harbor Drive/Tidelands Avenue/Civic Center Drive Intersection and the area west of National City Boulevard, south of 22nd Street and north of Mile of Cars Way. |
| **Policy T-5.8:** | Consider road diets, where appropriate, to improve safety, increase efficiency of pick-up and drop-off operations at schools, and provide greater separation between pedestrians and vehicles. |
| **Policy T-5.9:** | Maintain a roadway circulation system with multiple alternative routes, to the extent feasible, to ensure mobility in the event of emergencies, and to minimize the need for capacity increases on particular streets. As needed, use signage to direct traffic to alternative routes during peak periods. |

| | |
|---|---|
| **Policy T-5.10:** | Consider roundabouts as an intersection traffic control option, where feasible and appropriate. |
| **Policy T-5.11:** | Maintain safety throughout the circulation system by taking opportunities to introduce a safe design speed of any new roadways or during improvements to existing roads or intersections. |
| **Policy T-5.12:** | Reduce crash risk on arterial streets by consolidating and minimizing driveways whenever possible. |
| **Policy T-5.13:** | Continue to promote ITS to reduce travel times, traffic congestion, greenhouse gas emissions, and enhance safety for drivers, pedestrians, and cyclists. |
| **Policy T-5.14:** | Ensure mobility and transportation options for individuals whose access to automobile transportation is limited by age, income, or disability. |
| **Policy T-5.15:** | Consider a Complete Streets approach in the design of all street improvements projects that balance the needs of cyclists, pedestrians, transit, and drivers in support of access to community-serving destinations such as schools, housing, jobs, parks, and shops. |
| **Policy T-5.16:** | Create collaborations with community-based organizations and local leaders to engage and educate community on transportation planning processes. |
| **Policy T-5.17:** | Prioritize safety for all users of the mobility system through a combination of design, enforcement, and education. Minimize harm through the development and implementation of a Local Road Safety Plan (LRSP), Systemic Safety Analysis Report Program (SSARP), a Vision Zero Action Plan, or other relevant plans. |

### *Why is this Important?*

Recent revisions in planning law recognize the importance of planning for multiple modes of transportation, which provide for the needs of all users, (including pedestrians, bicyclists, mass transit riders, motorists, etc.). (See AB 1358 [2008]; SB 375 [2008].) Recent revisions in environmental regulations also require that VMT be used to determine transportation environmental impacts. (See SB 743 [2013].) Walking and bicycling provide the additional benefits of improving public health and reducing treatment costs for conditions associated with reduced physical activity including obesity, heart disease, lung disease, and diabetes.

## *REGIONAL CIRCULATION PLANNING*

**Goal T-6: Coordination with the regional mobility system.**

| | |
|---|---|
| **Policy T-6.1:** | Consult with SANDAG regarding updates to and implementation of the Regional Transportation Plan (RTP). |
| **Policy T-6.2:** | Work with Caltrans and adjacent jurisdictions to plan and implement future roadway connections and circulation improvements. |
| **Policy T-6.3:** | Consult with MTS regarding updates to the Bus Rapid Transit (BRT) and local bus routes and related activities. |

***Why is this Important?***

The Transportation Element is part of a larger body of plans and programs that guide the development and management of the transportation system. SANDAG, as the regional planning agency, is responsible for developing the RTP, which includes a long-range vision for buses, the Trolley, rail, highways, major streets, bicycle travel, walking, goods movement, and airport services. SANDAG also oversees the planning, financial programming, project development, and construction functions of MTS. Caltrans manages more than 50,000 miles of California's highway and freeway lanes, provides inter-city rail services, and permits public-use airports and special-use hospital heliports. Due to the highly integrated and complex nature of the region's transportation facilities, it is important that local transportation planning efforts be considered with the regional system to attain the greatest efficiencies and benefits for the City.

## *VEHICULAR PARKING*

**Goal T-7: Parking provided and managed in a way that balances economic development, livable neighborhoods, environmental health, and public safety with a compact, multimodal environment.**

| | |
|---|---|
| **Policy T-7.1:** | Ensure balance among visitor, business, and residential parking needs. |
| **Policy T-7.2:** | Require new development and redevelopment to locate off-street parking facilities behind storefronts to create a more inviting environment adjacent to the street, where feasible. |

| | |
|---|---|
| **Policy T-7.3:** | Require parking lots to provide shade through the use of landscaping (i.e., a tree canopy) and encourage the use of solar photovoltaic shading to reduce the heat island effect, where feasible. |
| **Policy T-7.4:** | Where appropriate, provide on-street diagonal parking to increase the number of spaces and slow traffic to create more pedestrian-friendly streets. |
| **Policy T-7.5:** | Require the use of Universal Design standards in parking design and compliance with the ADA accessibility guidelines. |
| **Policy T-7.6:** | Provide clearly marked pedestrian paths between on-street parking, off-street parking facilities, and the buildings they serve, where feasible. |
| **Policy T-7.7:** | Allow for shared parking and parking requirement reductions for mixed-use and transit-oriented development. |
| **Policy T-7.8:** | Establish parking time limitations, where appropriate. |
| **Policy T-7.9:** | Establish public parking fees, where appropriate. |
| **Policy T-7.10:** | Ensure development does not overbuild parking by examining parking minimums and maximums by neighborhood and use, creating partnerships with shared mobility options, and utilizing TDM programs where possible. |

***Why is this Important?***

Adequate parking is essential for both residents and visitors and to the economic viability of commercial establishments within a community. However, concentrated parking areas can create substantial environmental impacts including, but not limited to, hot-spots and increased stormwater run-off and pollution. Parking lots can also interfere with pedestrian and bicycle circulation. Creating more transparency in parking costs and passing on these costs to drivers can decrease the demand for driving, and make other modes of transportation more attractive. In determining what constitutes sufficient parking, the City may take into consideration: 1) the overall effectiveness of the circulation system for pedestrians, bicyclists, motorized vehicles; 2) the particular needs of a specific location and/or project, and 3) the need for increased densities and mixed-use development intended to aid in the reduction of personal vehicle use and the corresponding reduction in air pollution, energy consumption, greenhouse gas emissions, and other environmental effects.

# Goods Movement

## Existing Setting

### *Truck Routes*

Demand for goods movement is primarily driven by activities relating to the Port of San Diego, Naval Base San Diego and the shipyard building businesses along Harbor Drive. These facilities serve as key origins and destinations for truck freight. National City has designated trucking routes originating mainly from the National City Marine Terminal and linking to regional highways. The truck routes through National City are either classified as "primary" or "alternate" routes. Primary routes are generally described as the most direct routes to freeways and are used for regional delivery. Alternate routes are those roads used to move trucks through the City to local destinations.

National City's primary truck routes include:

- Tidelands Avenue from 24th Street to Civic Center Drive
- Harbor Drive from Civic Center Drive to the northern City limit
- National City Boulevard from 24th Street to southern City limit;
- Roosevelt Avenue from 8th Street to the northern City limit
- All of Euclid Avenue (from Sweetwater Road to the northern City limit)
- Bay Marina Drive from Tidelands Avenue to Interstate 5
- 24th Street from Interstate 5 to National City Boulevard
- 30th Street/Sweetwater Road from National City Blvd. to the eastern City limit

- Plaza Bonita Center Way/Reo Drive from 30th Street/ Sweetwater Road to Tonawanda Drive
- Plaza Boulevard/Paradise Valley Road from Highland Avenue to the eastern City limit

National City's alternate truck routes include:

- Highland Avenue from Plaza Boulevard to 30th Street
- Civic Center Drive from Harbor Drive to National City Boulevard
- National City Boulevard from 24th Street to Plaza Boulevard
- Roosevelt Avenue from 8th Street to Plaza Boulevard
- Plaza Boulevard from Roosevelt Avenue to Highland Avenue

The presence of these truck routes contributes to high parking demand in the City. The most common area for truck parking is on Roosevelt Avenue between Division Street and 8th Street. Parking at this location provides access to the Harbor Drive Corridor via 8th street, a preferred truck route for the San Diego Unified Port District. There is also high demand for truck parking west of the I-5, between Civic Center Drive and 32nd Street, with access to the preferred truck route on Tidelands Avenue. While truck parking and staging areas are important to marine terminal operations and provide economic benefits by increasing the efficiency of goods movement, it also creates impacts in the surrounding community including loss of parking, visual impacts, noise and occasional blockages of bicycle lanes. Current on street parking prohibitions for trucks are located along Bay Marina Drive and Cleveland Avenue, to protect from these impacts. General parking restrictions west of the I-5, including no parking and parking time restriction signs on 8th street, Civic Center Drive, Mckinley Avenue, Marina Way, and 32nd Street, also limit truck parking and associated community impacts.

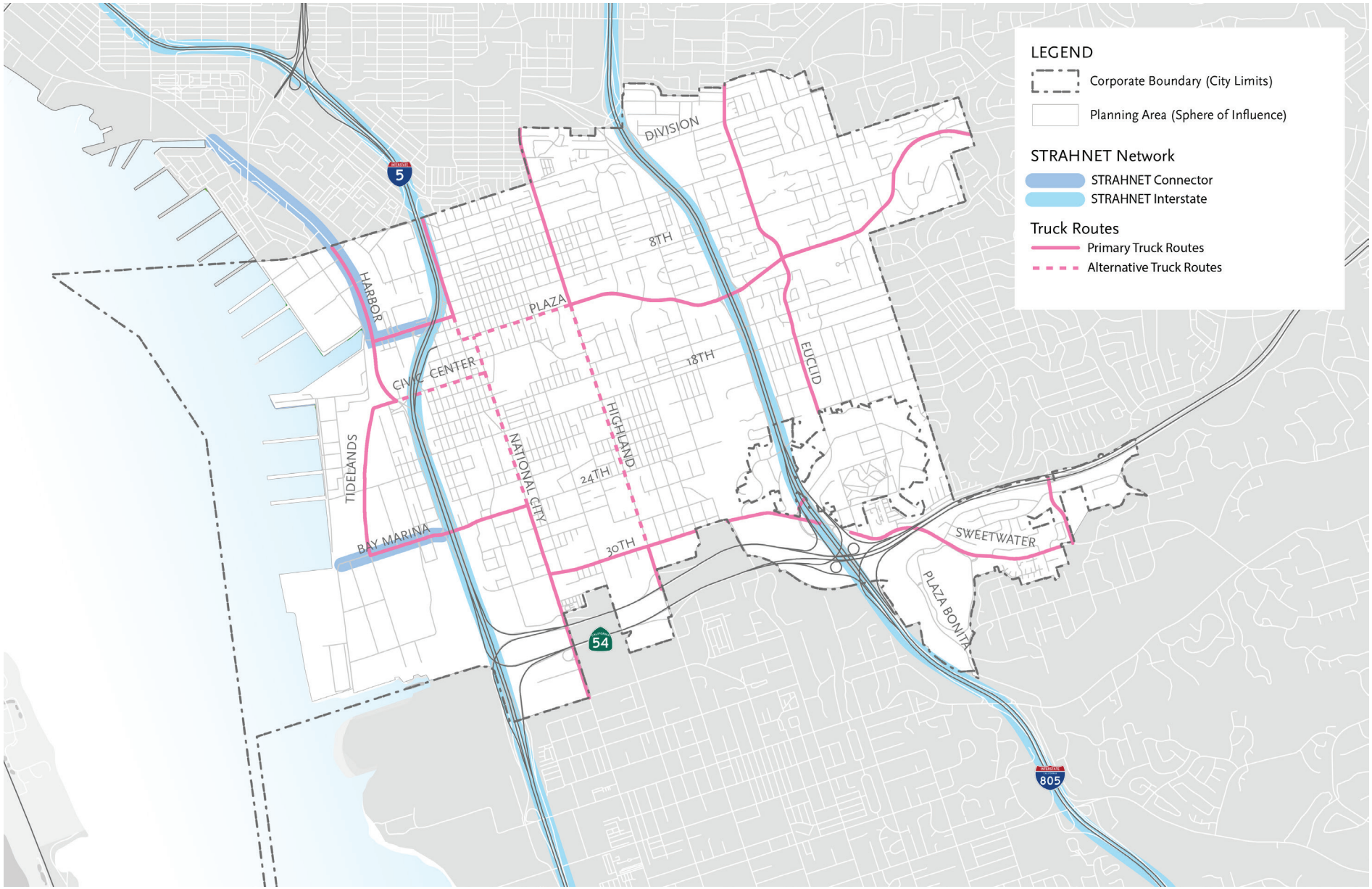
### *STRAHNET*

The STRAHNET is critical to the Department of Defense's (DoD) domestic operations. STRAHNET is a system of roads deemed necessary for emergency mobilization and peacetime movement of heavy armor, fuel, ammunition, repair parts, food, and other commodities to support U.S. military operations. The Surface Deployment and Distribution Command Transportation Engineering Agency (SDDCTEA) is the DoD designated agent for public highway matters, including STRAHNET and STRAHNET Connectors. Figure T-16 on page 62 shows the routes and STRAHNET corridors.

### *Freight Rail*

Rail lines within the planning area are primarily used to transport lumber, cars, and containers that have entered the country via the Port of San Diego at the National City Marine Terminal. The Burlington Northern Santa Fe Railway and the San Diego and Imperial Valley Railway are the two companies currently operating on the rail lines within the planning area. There is no passenger rail service in National City, however,

**FIGURE T-16:** Routes and STRAHNET Corridors



the Blue Line Trolley provides key connecting services at the 8th street station to Naval Base San Diego, and at the 24th street station to the Naval Base San Diego and the National City Marine Terminal.

## *National City Marine Terminal*

National City is home to a major marine terminal owned by the Port of San Diego. The Port's marine terminals are vital components of the San Diego region's working waterfront, which includes maritime operators, ship builders, and other commercial and industrial businesses. The National City Marine Terminal (NCMT) is located at the westerly terminus of Bay Marina Drive. The terminal is a 125-acre complex with eight cargo berths totaling 4,926 feet of berthing space. On average, cargo vessels arrive at NCMT every 1-2 days, and in 2017 NCMT saw 37% of the Port of San Diego's cargo total. The NCMT's main inventory consists of vehicles, lumber, and cargo. One out of every ten imported vehicles in the United States arrives through the NCMT. The facility is operated by Pasha Automotive and Distribution Services, and the terminal serves as the primary port of entry for a variety of automobile manufacturers. In-and-out freight movements of vehicles total about 50 per day, and each truck carries an average of eight vehicles.

NCMT also houses six on-dock tracks that used for storage and (un)loading operations. The combined holding capacity of these tracks at NCMT is approximately 143 railcars, with an effective capacity of approximately 120 railcars. Currently NCMT averages one train per day, with the capacity to accommodate one additional inbound train and two additional inbound/outbound trains.

## *Air Transportation*

Although no airports are located within the planning area, there are three airports located near National City: the San Diego International Airport (SDIA) at Lindbergh Field, the Naval Air Station (NAS) North Island located in Coronado, and Brown Field Municipal Airport located south of the planning area in the Otay Mesa community.

SDIA is located approximately 5 to 6 miles northwest of National City. It is the 29th largest airport in the U.S. in terms of passenger traffic and the only major large hub airport served by a single runway5. The San Diego Regional Airport Authority forecasts that by 2030, passenger traffic at SDIA will increase from the existing 17.5 million passengers to 32 million passengers annually. To meet the increasing air transportation demand at SDIA, the Airport Authority is updating the SDIA Master Plan to guide the long-term phased development of SDIA through 2030. The Airport Authority is addressing and maximizing terminal conditions and capacity, vehicle parking capacity, multimodal ground connections, and passenger and cargo needs.

NAS North Island is located in Coronado, across the Bay from SDIA. NAS North Island is the only west coast installation that provides direct access from an aircraft carrier to an

airfield. The Naval Outlying Field at Imperial Beach is a component of North Island and serves as an important location for Naval helicopter training.

Brown Field is a port-of-entry into the United States for private aircraft coming from Mexico into California. Brown Field is also heavily used by military and law enforcement agencies.

## Future Goods Movement Improvements

Goods movement projects have regional significance, and are often initiated by regional agencies such as the Port of San Diego, SANDAG and Caltrans. These projects impact the community while improving goods movement access to the Port of San Diego Marine Terminals. A subset of those projects are identified below:

- Closure of Tidelands Avenue between Bay Marina Drive and 32nd Street & W 28th Street between Tidelands Avenue and Quay Avenue to accommodate new land uses and accommodations for the National City Marine Terminal
- The reevaluation, realignment, and reconstruction of the primary access point to the National City Marine Terminal
- Harbor 2.0 - a Freight Signal Priority project along Harbor drive to move goods more efficiently between the Port of San Diego terminals and throughout the region. The project will also feature additional improvements to maintain and improve safety for other users of Harbor Drive

# Goals and Policies

## ***GOOD MOVEMENT SYSTEM***

**Goal T-8: A safe and efficient system for the movement of goods that supports commerce while enhancing the livability of the community.**

| | |
|---|---|
| **Policy T-8.1:** | Work with the responsible and affected agencies to enhance infrastructure to facilitate timely movement of goods and security of trade, including facilities used for efficient intermodal transfer between truck, rail, and marine transport. |
| **Policy T-8.2:** | Enforce the use of designated truck routes for both local and regional goods transport. Route truck traffic away from residential zones and promote safety at crossings. |
| **Policy T-8.3:** | Work with the responsible and affected agencies to improve the roadway connection between Tidelands Avenue and Harbor Drive for greater efficiency of freight goods movement. |
| **Policy T-8.4:** | Work with railroad operators to facilitate the transport of goods by rail through the community by coordinating schedules to minimize impacts during peak travel periods. |
| **Policy T-8.5:** | Work with the Port District on land use and transportation planning efforts to mitigate impacts and improve goods movement related to the marine terminal. |

### *Why is this Important?*

The San Diego region plays an important national role in the movement of goods through both the presence of the Port and the proximity of the U.S.-Mexican border. Efficient movement of goods via car, truck, rail, air, or marine transport is vital to the economic health of the community and entire region.

## *GOOD MOVEMENT ENVIRONMENTAL AND COMMUNITY IMPACTS*

**Goal T-9: Reduce environmental and community impacts to create a clean environment and improve the quality of life for those communities most impacted by goods movement.**

| | |
|---|---|
| **Policy T-9.1:** | Work with the Port District on land use and transportation planning efforts to promote land uses that are conducive to mitigating impacts to the environment and improving goods movement related to the marine terminal. |
| **Policy T-9.2:** | Work with the responsible and affected agencies to establish a standardized performance-based metric used for monitoring and reducing GHG emissions and criteria pollutants of freight vehicles, equipment, and operations. |
| **Policy T-9.3:** | Identify and document the needs of environmental justice communities to prioritize projects in freight corridors that are targeted to avoiding, reducing, or mitigating impacts on the environment and communities. |
| **Policy T-9.4:** | Promote noise and other pollution abatement strategies associated with goods movement operations near residential or other sensitive areas. |

### *Why is this Important?*

It is important to support a system that balances commercial goods movement with the health and quality of life priorities of the community. Given the large role of the San Diego region in the national movement of goods, it is vital to continue to integrate environmental health considerations and encourage the reduction, avoidance, or mitigation of negative impacts to the environment and communities. These factors are essential to supporting healthy communities, a clean environment, and improving the quality of life for communities affected by goods movement operations.

# New Mobility, Transportation Systems Management, and Transportation Demand Management

## Existing Setting

### *New Mobility*

New mobility encompasses the range of transportation, connectivity, and technology changes that shape the future of mobility. As advancements in micromobility, microtransit, and automation continue to evolve, National City is committed to leveraging these new transportation technologies and programs as tools for its smart growth and climate action goals.

Senate Bill 1151 authorizes any City in San Diego County to establish an NEV transportation plan to identify locations where NEVs can safely operate and new opportunities for implementation of NEV infrastructure. The Downtown Specific Plan includes a proposed NEV shuttle system that would be accommodate both on-street and off-street in multi-use paths. The system would provide connectivity throughout Downtown, as well as connections to the trolley stations and the Naval Base San Diego.

National City is also addressing new mobility in current projects and plans. The Homefront to Waterfront Project focuses on micromobility, mini-hubs, and NEVs, to support existing mobility services and incentivize the development and use of new mobility options. The project recommends mobility and mini-hubs to provide connections to existing and planned transit service, improved access to the bikeway network, and enhanced opportunities for rideshare and shared bike/scooter drop off and use.


## *Transportation Systems Management (TSM)*

TSM strategies aim to improve the efficiency of transportation infrastructure. Successful improvements reduce congestion, VMT, and GHG emissions. TSM strategies include improvements to intersections, traffic signals, and street circulation, as well as bicycle and pedestrian infrastructure. Some existing TSM strategies within the City of National City include coordinated signal timing along major arterials throughout the City.

## *Transportation Demand Management (TDM)*

TDM is the application of strategies and policies used to encourage alternate transportation options with the goal of improving mobility, reducing traffic congestion, VMT, and GHG emissions. Utilizing TDM tools is a key component of reaching the City's climate action goals.

The Downtown Specific plan establishes a parking reduction bonus program to incentivize developers to adopt TDM measures. Table T-3 on page 69 includes a list of TDM measures that will qualify developers for a parking reduction. The incorporation of these elements will aid in reducing trips generated by these developments and incentivize mode shifts to walking, biking, transit, carshare, or ride-share options.

**TABLE T-3:** TDM Measures from the Parking Reduction Bonus Program

| | |
|---|---|
| **Site Design** | • For employment uses, provide a changing room/shower<br>• Provide secure bike parking internal to building<br>• Widen adjacent public walkways beyond 8' in total width<br>• Provide work lofts with flex space for "at-home" work or small business |
| **Land Use/Tenant Mix** | • Include mixed-use for local serving retail & services in building<br>• Provide senior housing or assisted care housing<br>• Provide cash out (money back if parking not used) for owners, renters, or tenants<br>• Unbundle parking from leases or sales & require pay parking<br>• Unbundle free parking for commercial leases<br>• Provide priority parking for certified vanpool or carpool users<br>• Provide reserved space for carshare<br>• Tenant provided with rent credit for each employee allowed to telework |
| **Programmatic** | • Provide cash out (money back if parking not used) for owners, renters, or tenants<br>• Unbundle parking from leases or sales & require pay parking<br>• Unbundle free parking for commercial leases<br>• Provide priority parking for certified vanpool or carpool users<br>• Provide reserved space for carshare<br>• Tenant provided with rent credit for each employee allowed to telework |
| **Near Site Features** | • Provide a drop-off zone for Ridesharing such as Uber/Lyft/taxis<br>• Finance improvements for an enhanced transit stop<br>• Provide carshare reserved spaces on street (such as Car2Go)<br>• Provide small parking for NEV, motorcycles or scooters<br>• Provide additional off-site bike parking beyond on-site bike parking |
| **Funding** | • Provide membership in carsharing programs if available<br>• Provide membership in bikesharing programs if available<br>• Property manager to subsidize (75%) transit passes for one car tenants<br>• Property management to subsidize (75%) transit for on-site employers<br>• Property manager to subsidize (75%) passes for tenants to give to customers<br>• Property manager to offer links to SANDAG rideshare/iCommute/RideMatcher |

## Future New Mobility, TSM, and TDM Improvements

National City is committed to leveraging the continued advancements in micromobility as tools for its smart growth and climate action goals. Micromobility, including bikes, scooters, and NEVs, provide additional access to the bicycle network and opportunities for links with transit. Encouraging the use of micromobility by developing programs, facilities, and connected paths will support the overall bicycle network.

Figure T-17 on page 71 illustrates how the future active transportation and micromobility network can overlap and interface with existing transit routes and stations.

Through the 2021 Regional Plan, SANDAG has developed a transportation vision that includes a mobility hub recommendation in National City. 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. SANDAG's Regional Mobility Hub Implementation Strategy identified potential mobility hub opportunities at the 8th Street Trolley Station. 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. Implementation of the mobility hub concept can expand upon these transit station investments to enhance the waiting area with technology amenities, expand curb space to accommodate wayfinding and support operation of shared mobility services and related amenities.

National City's Homefront to Waterfront project has developed mobility hub typologies for potential intersection and mid-block hubs.

Figure T-18 highlights these typologies for future integration with the City's overall new mobility goals and policies.

**FIGURE T-17:** Future Active Transportation and Micromobility Network

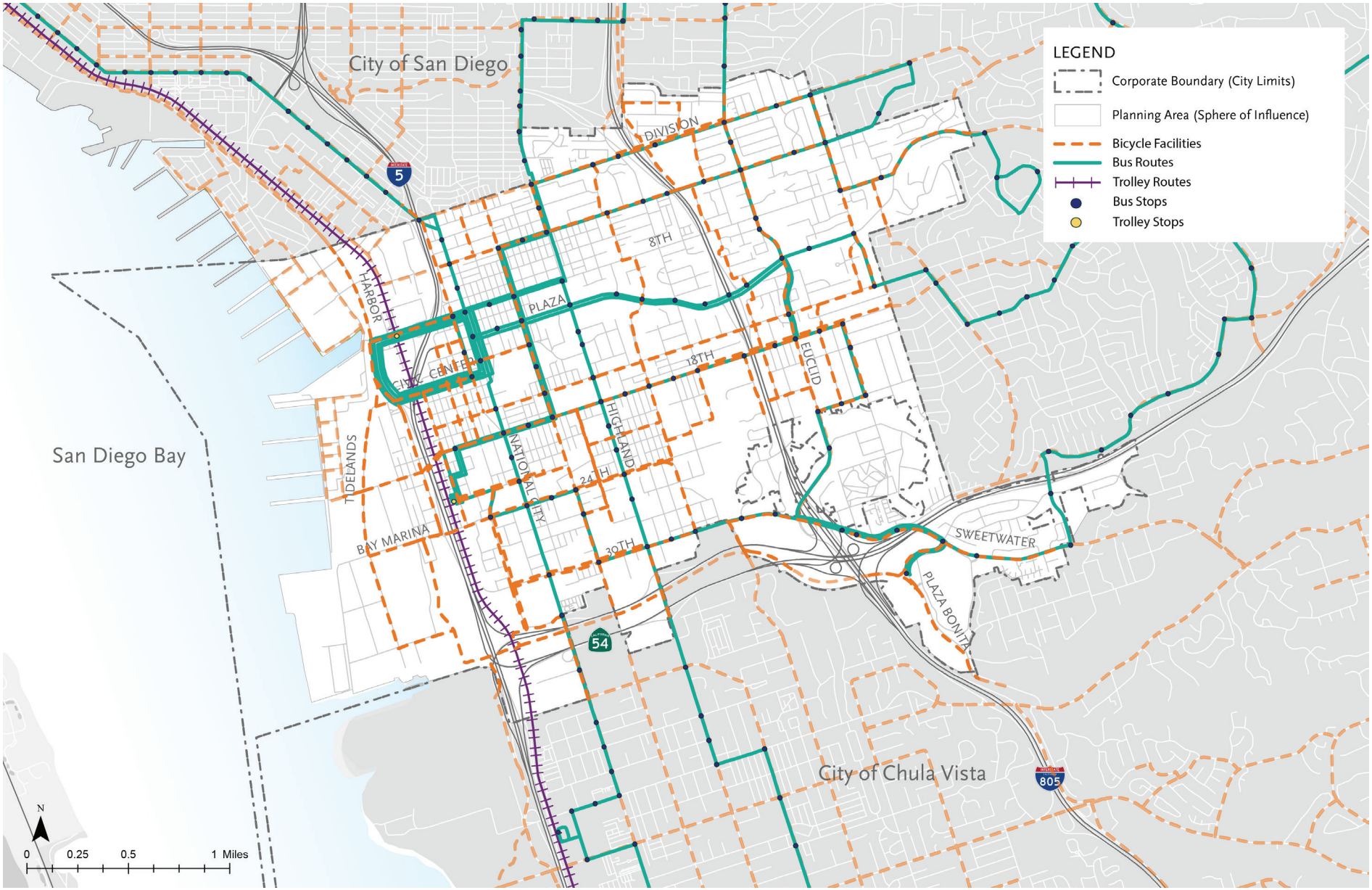
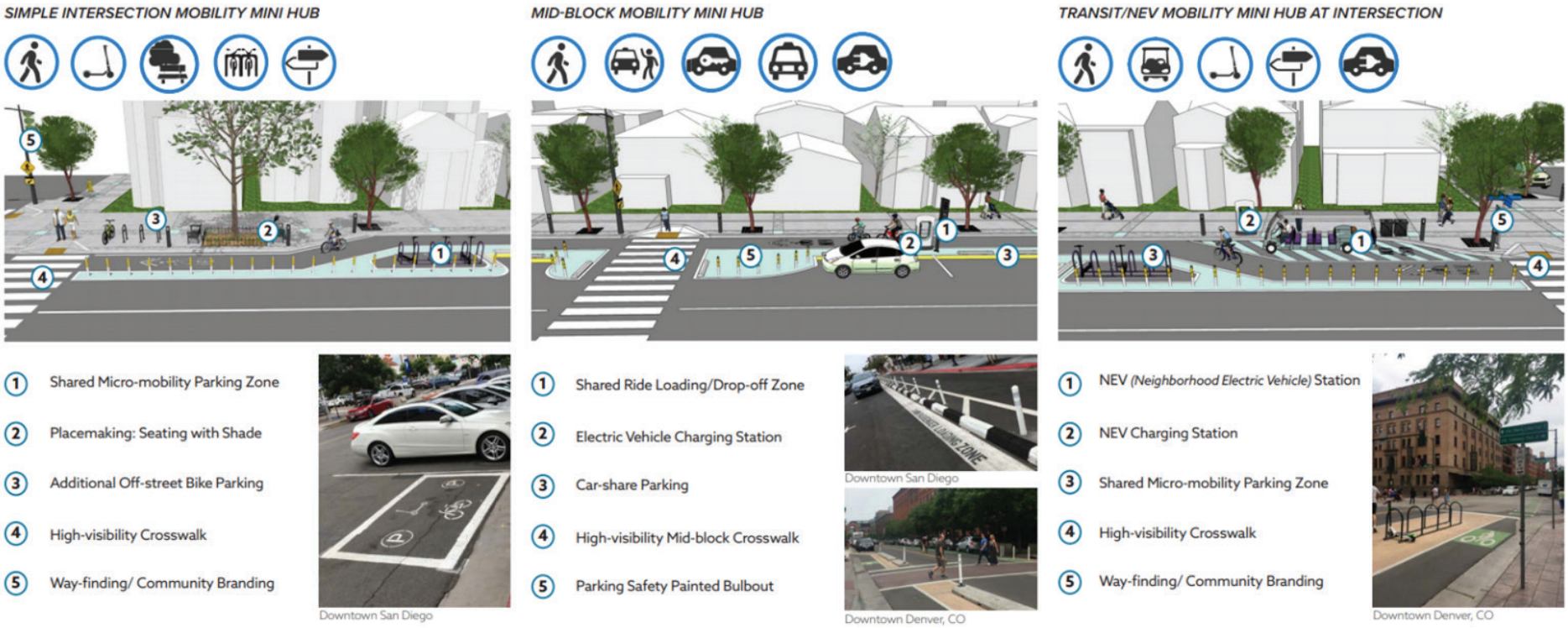


**FIGURE T-18:** Mobility Hubs




*Source: National City Homefront to Waterfront*

# Goals and Policies

## ***ALTERNATIVE MODES OF TRAVEL***

**Goal T-10: Increased use of alternative modes of travel to reduce peak hour vehicular trips, save energy and improve air quality.**

| | |
|---|---|
| **Policy T-10.1:** | Encourage businesses to provide flexible work schedules for employees. |
| **Policy T-10.2:** | Encourage employers to offer shared commute programs and/or incentives for employees to use transit, bicycles or other shared and non-motorized mobility options. |
| **Policy T-10.3:** | Require new developments to provide adequate bicycle parking and support facilities. |
| **Policy T-10.4:** | Encourage carpooling and other shared commute programs. |
| **Policy T-10.5:** | Encourage the use of alternative transportation modes. |
| **Policy T-10.6:** | Prioritize attention to transportation issues around schools to reduce school-related vehicle trips. |
| **Policy T-10.7:** | Seek opportunities to reduce vehicle trips before requiring physical roadway improvement. |
| **Policy T-10.8:** | Create a safe and comfortable network of micromobility (bicycles, scooters, etc.) facilities to transit, schools, parks, recreation centers, shopping districts, and other key destinations. |
| **Policy T-10.9:** | Encourage and facilitate micromobility through wayfinding and signage. |
| **Policy T-10.10:** | Ensure new transportation plans and projects are communicated with community members in various languages. |
| **Policy T-10.11:** | Create collaborations with community-based organizations and local leaders to engage and educate community on transportation planning processes. |

### *Why is this Important?*

Reducing vehicular trips, especially at peak commuting times, can be accomplished through improvements to pedestrian circulation, bike and transit systems, increased use of carpooling, and accommodations made by employers to allow for flexible work schedules, including work from home provisions. Trip reduction, by whichever means, translates into less traffic congestion, fewer greenhouse gas emissions and improved regional and local air quality.

# Goals and Policies

## *NON-SINGLE OCCUPANCY VEHICLE MOBILITY*

**Goal T-11: Increase access to multimodal, non-single occupancy vehicle mobility options for all residents and visitors.**

| | |
|---|---|
| **Policy T-11.1:** | Explore partnerships with private mobility providers to enhance existing transportation network. |
| **Policy T-11.2:** | Create a framework and standards for data collection and management for private mobility providers. |
| **Policy T-11.3:** | Pilot new technologies to engage and educate community, and collect information for integration into overall mobility system |
| **Policy T-11.4:** | Create New Mobility Strategic plan, setting goals, priorities, and guidelines for implementation and evaluation of new mobility projects |
| **Policy T-11.5:** | Identify opportunities for implementation of electric vehicle (EV) infrastructure in coordination with the private sector, prioritizing EV infrastructure targeted to communities most impacted by air pollution. |
| **Policy T-11.6:** | Create accessible wayfinding, including various languages, ADA compliant signage and signals, and non-internet reliant communication options for services such as transit, paratransit, and shared mobility services. |

***Why is this Important?***

Travel behavior continues to change with advances in technology and evolving mobility. Improving access to multimodal transportation options can help meet the needs of residents as demand for new transportation options increases, as well as further prepare the City to be future-ready and leverage transportation technology in a manner that is consistent with its overarching values and climate action goals.

# Public Utilities and Facilities

Public utilities and facilities include electricity, water, sewage, and telecommunication systems, among others. The California Public Utilities Commission (CPUC) holds the exclusive power and sole authority to regulate privately-owned or investor-owned public utilities. This exclusive power extends to all aspects of the location, design, construction, maintenance, and operation of public utility facilities. Nevertheless, the CPUC has provisions for regulated utilities to work closely with local governments and give due consideration to their concerns.

The transportation network is affected by the locations and requirements of public utilities and facilities. Transportation projects and plans must consider these requirements to ensure that the service of public utilities and facilities is maintained. These considerations may impact the type, size, and location of new transportation projects. Some transportation projects may also increase or change utility needs, which must be coordinated with all appropriate public utilities for successful implementation.

## Goals and Policies

### ***PUBLIC UTILITIES AND FACILITIES***

**Goal T-12: Align utility infrastructure planning and implementation with land use, transportation, and future growth needs.**

| | |
|---|---|
| **Policy T-12.1:** | Create a "dig once" policy for all utility projects. |
| **Policy T-12.2:** | Expand broadband capacity throughout city, prioritizing the needs of low-income residents to access education and jobs. |

***Why is this Important?***

The location of public utilities and facilities has impacts on the transportation network. Connections to transportation infrastructure, how roadways function, and overall community character are influenced by these utility and facility needs. Measures to consider and coordinate with utility and facility needs will support the development of transportation projects and advancements throughout the city.