2 PROJECT DESCRIPTION

The project evaluated in this environmental impact report (EIR) is San Diego Forward: The 2021 Regional Plan ("the proposed Plan") (SANDAG 2021a). The proposed Plan is an update to San Diego Forward: The 2015 Regional Plan ("the 2015 Regional Plan"), adopted in October 2015, and the 2019 Federal Regional Transportation Plan ("the 2019 Federal RTP"), adopted in October 2019. The project location is the San Diego region, shown on Figure 2-1**.** The San Diego region is coterminous with San Diego County.

2.1 PROJECT BACKGROUND

Every 4 years the San Diego Association of Governments (SANDAG) is responsible for preparing an updated Regional Plan in collaboration with the 18 cities and County of San Diego, along with regional, State, and federal partners. The Regional Plan consists of the RTP/SCS for the San Diego region and the RCP. The most recently adopted Regional Plan, San Diego Forward: The 2015 Regional Plan, was approved in October 2015 by the SANDAG Board of Directors.

In October 2019, California Assembly Bill (AB) 1730 (Gonzalez) was signed into law, authorizing a 2-year extension for the RTP/SCS for the San Diego region and deeming the 2015 Regional Plan, its SCS, and Final EIR valid for State compliance, funding eligibility, and other purposes through 2021. SANDAG subsequently completed its 2019 Federal RTP, which complies with federal RTP requirements, achieves air quality objectives of the U.S. Department of Transportation (USDOT), and preserves funding for the region's planned transportation investments. The 2019 Federal RTP updated project costs and revenues and the regional growth forecasted from the 2015 Regional Plan. The 2019 Federal RTP is consistent with the Final EIR for the 2015 Regional Plan certified by the SANDAG Board of Directors on October 9, 2015. Pursuant to AB 1730, the 2019 Federal RTP was not a project for purposes of the California Environmental Quality Act (CEQA).

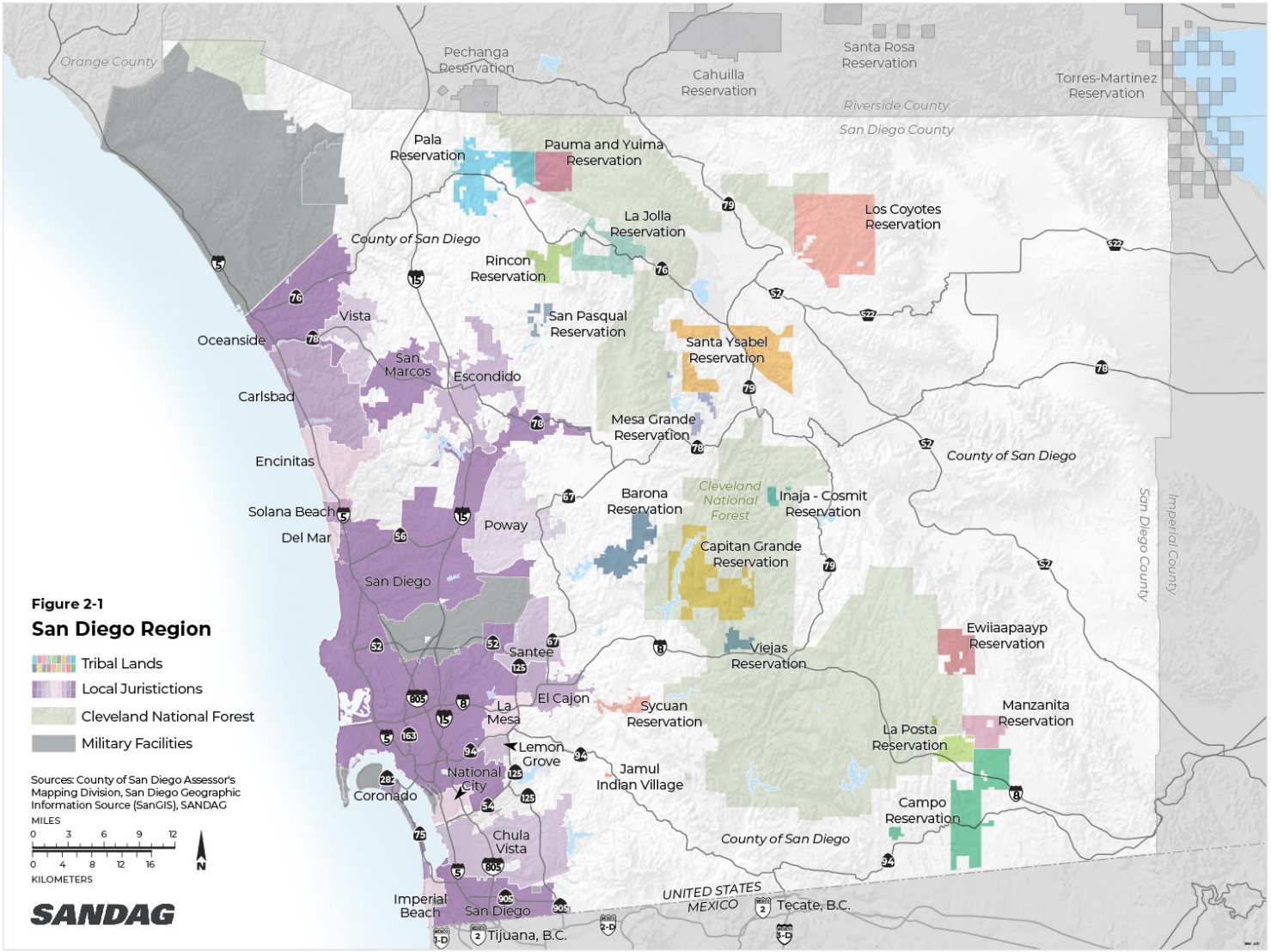
This EIR analyzes the environmental impacts resulting from the proposed Plan.

2.1.1 LEGISLATION INFLUENCING DEVELOPMENT OF THE PROPOSED PLAN

Development of the proposed Plan was guided by federal and State laws and regulations, as well as extensive engagement with the public.

FEDERAL REQUIREMENTS

To be eligible for federal transportation funding, USDOT requires every Metropolitan Planning Organization (MPO) to conduct long-range transportation planning and develop RTPs. Each MPO must develop a 20-year vision and goals plan matched to the unique characteristics of its region. MPOs in areas designated as "nonattainment" or "maintenance" for federal air quality standards must update their RTP every 4 years rather than every 5 years.


Orange County
Pechanga Reservation
Cahuilla Reservation
Santa Rosa Reservation
Torres-Martinez Reservation
Riverside County
San Diego County
Pala Reservation
Pauma and Yuima Reservation
La Jolla Reservation
Los Coyotes Reservation
County of San Diego
Rincon Reservation
San Pasqual Reservation
Santa Ysabel Reservation
Vista
Oceanside
San Marcos
Escondido
Carlsbad
Mesa Grande Reservation
Encinitas
Barona Reservation
Cleveland National Forest
Inaja - Cosmit Reservation
Solana Beach
Del Mar
Poway
Capitan Grande Reservation
San Diego
Imperial County
Ewiiaapaayp Reservation
Santee
Viejas Reservation
El Cajon
La Mesa
Sycuan Reservation
Manzanita Reservation
La Posta Reservation
Lemon Grove
National City
Jamul Indian Village
Coronado
Campo Reservation
Chula Vista
Imperial Beach
San Diego
UNITED STATES
MEXICO
Tecate, B.C.
Tijuana, B.C.
Figure 2-1
San Diego Region
Tribal Lands
Local Jurisdictions
Cleveland National Forest
Military Facilities
Sources: County of San Diego Assessor's Mapping Division, San Diego Geographic Information Source (SanGIS), SANDAG
MILES
0 3 6 9 12
0 4 8 12 16
KILOMETERS
N
SANDAG

Under Federal Highway Administration (FHWA) regulations (23 Code of Federal Regulations [CFR] 450.324, et seq., Metropolitan transportation planning and programming), an RTP must identify "transportation facilities (including major roadways, public transportation facilities, intercity bus facilities, multimodal and intermodal facilities, nonmotorized transportation facilities, and intermodal connectors) that should function as an integrated metropolitan transportation system, giving emphasis to those facilities that serve important national and regional transportation functions" (23 United States Code [USC] 134(i)(2)). RTP transportation network improvements must be "revenue constrained" (23 CFR 450.324(f)(11), meaning that the MPO has specified the public and private funds that are reasonably expected to be available and that are needed to implement the proposed transportation plan.

FHWA federal consultation requirements (23 CFR 450.316) for the proposed Plan include (1) a process involving the MPO, State and local air quality planning agencies, State and local transportation agencies, U.S. Environmental Protection Agency (EPA), and USDOT; and (2) a proactive public involvement process that provides opportunity for public review and comment by, at a minimum, providing reasonable public access to technical and policy information considered by the agency. Pursuant to 176(c) of the federal Clean Air Act (42 USC 7506(c)), SANDAG and USDOT, in consultation with EPA, must determine that the RTP and the Regional Transportation Improvement Program (RTIP) conform to the State Implementation Plan for air quality. The Air Quality Conformity Analysis for the proposed Plan is provided in Appendix C of the proposed Plan. See the proposed Plan's Appendices C, G, H, N, O, and Q for documentation of federal consultation requirements.

CALIFORNIA REQUIREMENTS

In addition to USDOT requirements, the proposed Plan is guided by several California statutory requirements.

California Regional Transportation Plan Guidelines

The State statutory requirements for RTPs are found in Government Code Section 65080 et seq., which states that an RTP must contain:

- A Policy Element that reflects the mobility goals, policies and objectives of the region.
- An Action Element that identifies programs and actions to implement the RTP.
- A Financial Element that summarizes the cost of implementing the projects in the RTP in a financially constrained environment.

The California Transportation Commission (CTC) has issued RTP Guidelines (CTC 2017) to clarify the planning practices needed to meet State statutory requirements for RTPs.

California Global Warming Solutions Act of 2006

The California Global Warming Solutions Act of 2006 (AB 32, Chapter 488, Statutes of 2006) required the California Air Resources Board (CARB) to develop and enforce regulations for reporting, verifying, and reducing statewide greenhouse gas (GHG) emissions to 1990 levels by 2020. The law requires CARB to adopt rules and regulations in an open public process to achieve the maximum technologically feasible and cost-effective GHG reductions.

AB 32 requires that CARB develop a Climate Change Scoping Plan (Scoping Plan) consisting of the main strategies California will implement to reduce statewide GHG emissions to 1990 levels by 2020. It must be

updated every 5 years. CARB released its initial Scoping Plan in 2008, with updates in 2014 and 2017. The 2017 Scoping Plan identifies how California can reach its 2030 climate target to reduce GHG emissions by 40 percent from 1990 levels, and substantially advance toward the State's 2050 climate goal to reduce GHG emissions by 80 percent below 1990 levels.

Sustainable Communities and Climate Protection Act of 2008

To help implement AB 32, the California Legislature passed the Sustainable Communities and Climate Protection Act of 2008 (Senate Bill [SB] 375, Chapter 728, Statutes of 2008), one of several steps the State has taken to implement AB 32. SB 375 required CARB to set regional targets for reducing GHG emissions from passenger vehicle use. In 2010, CARB established targets for 2020 and 2035 for each region in California governed by an MPO. SANDAG is the MPO for the San Diego region. SANDAG's State-mandated target is to reduce regional emissions of GHGs from cars and light trucks by 15 percent, per capita, by 2020, compared with a 2005 baseline (CARB 2017). By 2035, a 19 percent reduction is required. The Sustainable Communities Act does not require CARB to establish post-2035 targets.

To achieve the targets, SANDAG and other MPOs are required to develop an SCS as a component of the RTP. The SCS is required by Government Code Section 65080(b)(2)(B) to:

- Identify the general location of uses, residential densities, and building intensities within the region.
- Identify areas within the region sufficient to house all the population of the region, including all economic segments of the population.
- Identify areas within the region sufficient to house an 8-year projection of the regional housing need for the region.
- Identify a transportation network to serve the transportation needs of the region.
- Gather and consider the best practically available scientific information regarding resource areas and farmland in the region.
- Consider specified State housing goals.
- Set forth a forecasted development pattern for the region, which, when integrated with the transportation network, and other transportation measures and policies, will reduce the GHG emissions from automobiles and light trucks, to achieve, if there is a feasible way to do so, the GHG emission reduction targets approved by CARB.
- Allow the RTP to comply with federal Clean Air Act requirements related to air quality conformity.

Under SB 375, an SCS cannot be interpreted to supersede the land use authority of cities and counties within the region. Chapter 2 of the proposed Plan focuses on the SCS; however, components of the SCS are integrated throughout the Regional Plan chapters and appendices.

Appendix D of the proposed Plan documents compliance with SCS requirements and provides SCS-related background information.

Regional Housing Needs Assessment

The Regional Housing Needs Assessment (RHNA), required by State law (Government Code Section 65584[a]), quantifies the need for housing in the region and informs land use planning in addressing identified existing and future housing needs resulting from population, employment, and household growth.

As a council of governments, SANDAG is responsible for overseeing the RHNA process for the San Diego region. SANDAG, in consultation with the California Department of Housing and Community Development (HCD), assessed the region's housing needs in four income categories—very low, low, moderate, and above moderate. SANDAG and its member agencies developed a methodology for allocating a share of the RHNA Determination to each jurisdiction. SB 375 requires the RHNA to be integrated with the SCS.

Regional Comprehensive Plan for the San Diego Region

California law (AB 361, Chapter 508, Statutes of 2003) governs the contents and process for updates of the RCP for the San Diego region. Under AB 361, the RCP must be based on local general and regional plans and integrate land uses, transportation systems, infrastructure needs, and public investment strategies, within a regional framework, in cooperation with member agencies and the public. The RCP must be updated as necessary and be consistent with the RTP. Beginning with the 2015 Regional Plan, the RCP requirements have been integrated with the RTP/SCS in the Regional Plan.

Public Involvement Program for the Proposed Plan

To support the development of the proposed Plan, SANDAG implemented a comprehensive public outreach and involvement program consistent with State and federal requirements. Early in the planning process, SANDAG developed a Public Involvement Plan (PIP) to guide the public outreach program, which was updated in mid-2019. The PIP identifies public engagement techniques to involve the public and collect input for the proposed Plan, including public workshops, social media, visualizations, and other means. It describes how to connect with hard to reach communities such as tribal nations and low-income and minority populations. A detailed description of the PIP can be found in Appendix G of the proposed Plan.

2.2 PROPOSED PLAN BACKGROUND

The Vision of the proposed Plan is "A fast, fair, and clean transportation system and a resilient region." The proposed Plan sets three primary goals to achieve this Vision:

- The efficient movement of people and goods.
- Access to affordable, reliable, and safe mobility options.
- Healthier air and reduced GHG.

To achieve these goals, the proposed Plan uses a framework of coordinated land use and transportation strategies:

- **Invest in a reimagined transportation system**: Build a network and fund services that include multimodal roadways; an expanded network of fast, frequent, and low-cost transit; 21st century technology that manages the entire transportation system and connects people to on-demand services; and zero-emission options for vehicles and *micromobility*, which includes small, low-speed vehicles such as e-scooters, bikes, and other rideables that support short trips around a community.

- **Incentivize sustainable growth and development**: Collaborate with local jurisdictions and fund programs to accelerate housing production while also addressing equity, climate resilience, and mobility.
- **Implement innovative demand and system management**: Reduce solo driving and congestion through increased remote work, carsharing, vanpooling, pricing strategies, and parking management programs that leverage partnerships and technology.

2.2.1 DEVELOPMENT OF THE PROPOSED PLAN: A DATA DRIVEN PROCESS

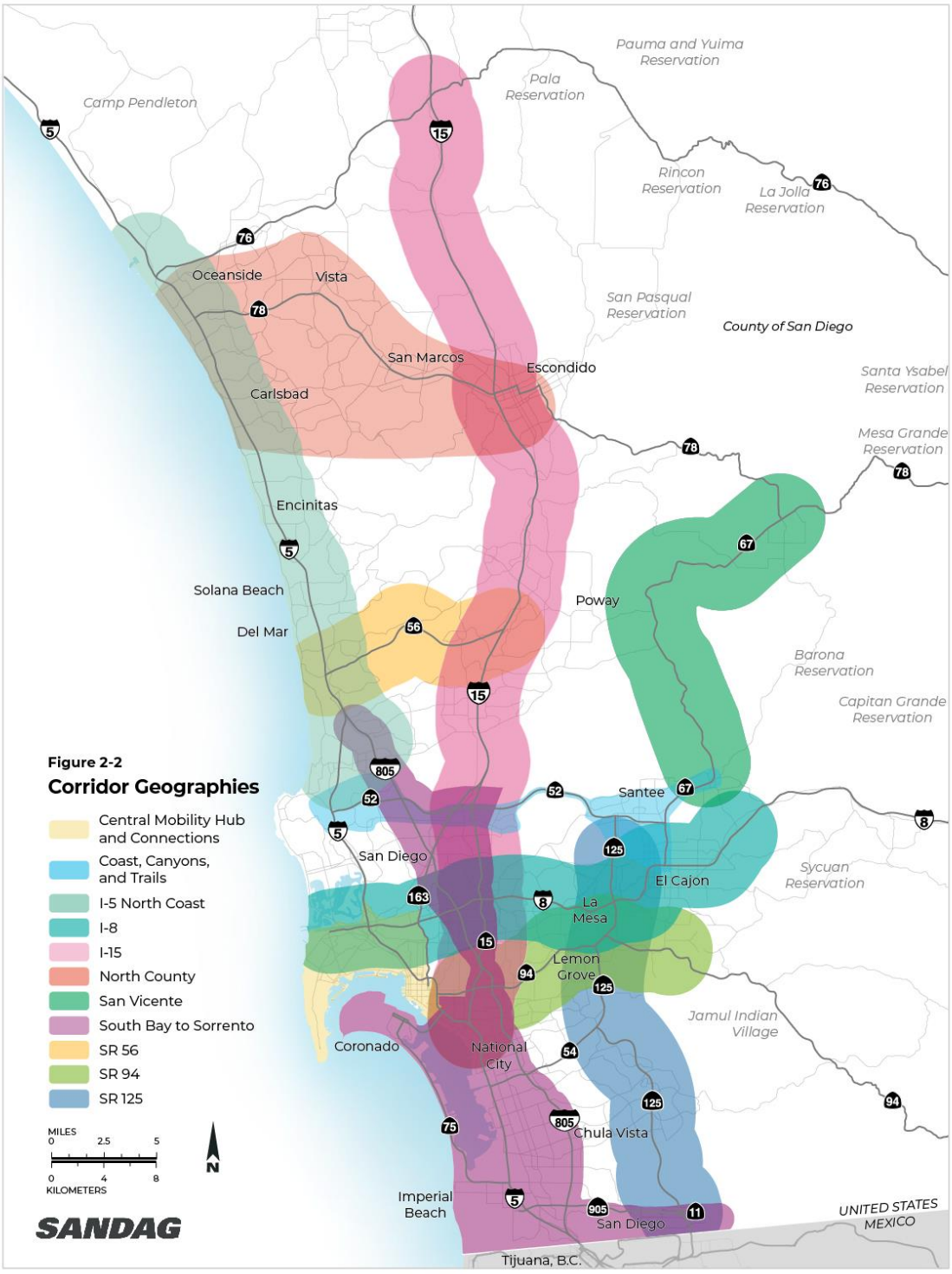
The general concept for the proposed Plan was informed significantly by early work on the 2019 Regional Plan, which led to the 2019 Federal RTP. This work included a four-phased approach: concept development, network development, network refinement, and transportation system validation. Additional information about the four phases can be found in Appendix T of the proposed Plan.

Based on regional travel data, SANDAG identified critical regional nodes for travel connections for trips taken to and from the top 15 employment centers in San Diego County. These nodes and connections, along with data gathered from public outreach efforts, were used to develop the proposed Plan's 5 Big Moves: Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets, and Next OS. Each of these elements is discussed in greater detail in Section 2.5.1, *The 5 Big Moves*.

The proposed Plan deploys the 5 Big Moves across the region's Rural and 11 Major Travel Corridors. Figure 2-2 depicts these Major Travel Corridor geographies, which are:

- ~~San Vicente~~
- South Bay to Sorrento
- Central Mobility Hub
- State Route 125 (SR 125)
- Interstate 15 (I-15)
- Interstate 5 (I-5) North Coast Corridor
- State Route 94 (SR 94)
- Interstate 8 (I-8)
- Coast, Canyons, and Trails
- State Route 56 (SR 56)
- San Vicente
- North County

Figures 2-2.1 through 2-2.11 depict each corridor in more detail.


Pauma and Yuima Reservation
Pala Reservation
Camp Pendleton
Rincon Reservation
La Jolla Reservation
Oceanside
Vista
San Pasqual Reservation
County of San Diego
San Marcos
Escondido
Carlsbad
Santa Ysabel Reservation
Mesa Grande Reservation
Encinitas
Solana Beach
Poway
Del Mar
Barona Reservation
Capitan Grande Reservation
Santee
San Diego
El Cajon
Sycuan Reservation
La Mesa
Lemon Grove
Jamul Indian Village
Coronado
National City
Chula Vista
Imperial Beach
San Diego
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 2-2
Corridor Geographies
Central Mobility Hub and Connections
Coast, Canyons, and Trails
I-5 North Coast
I-8
I-15
North County
San Vicente
South Bay to Sorrento
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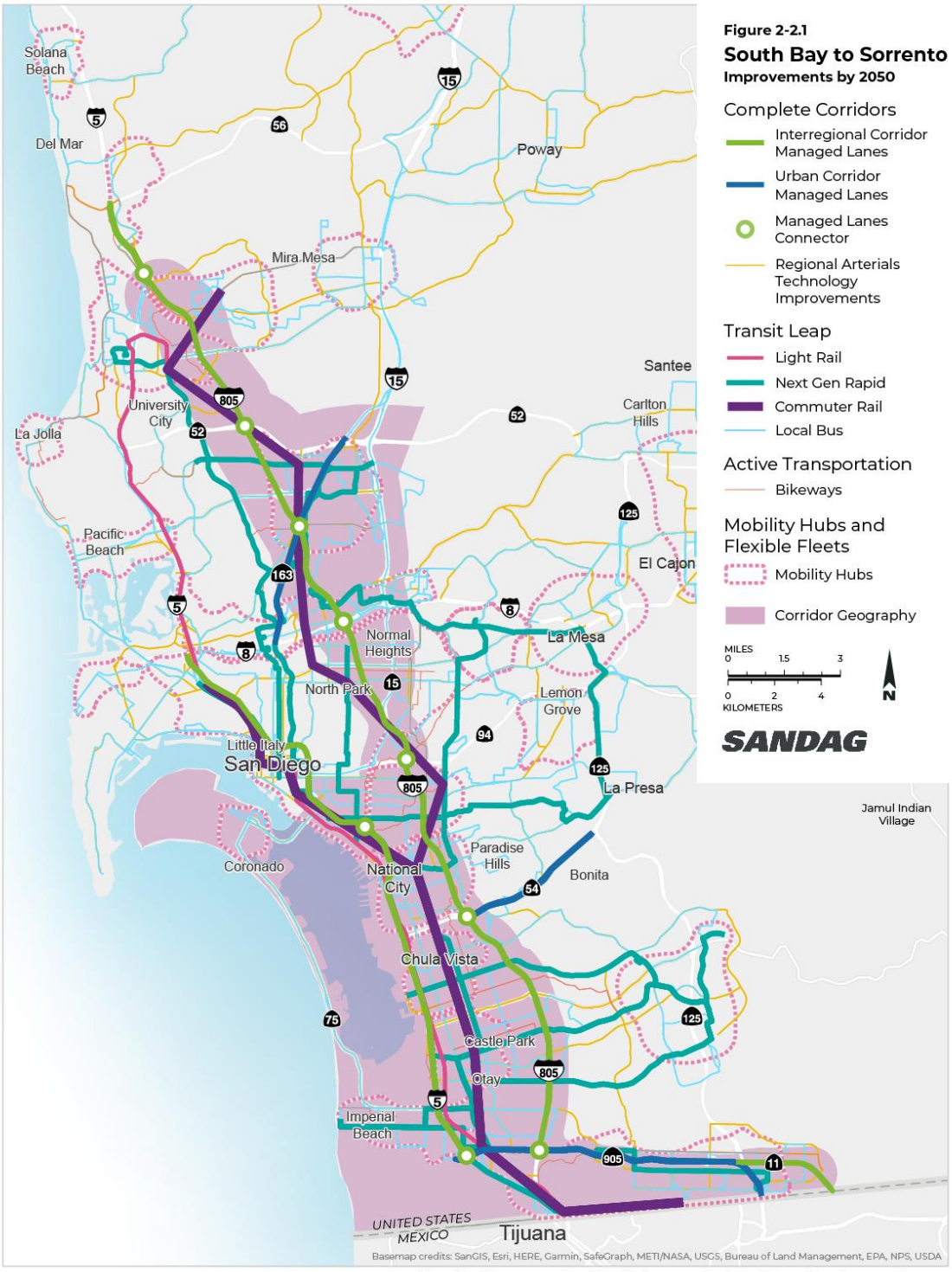

Figure shows improvements along this corridor. Investments in other corridors are shown in corresponding maps.

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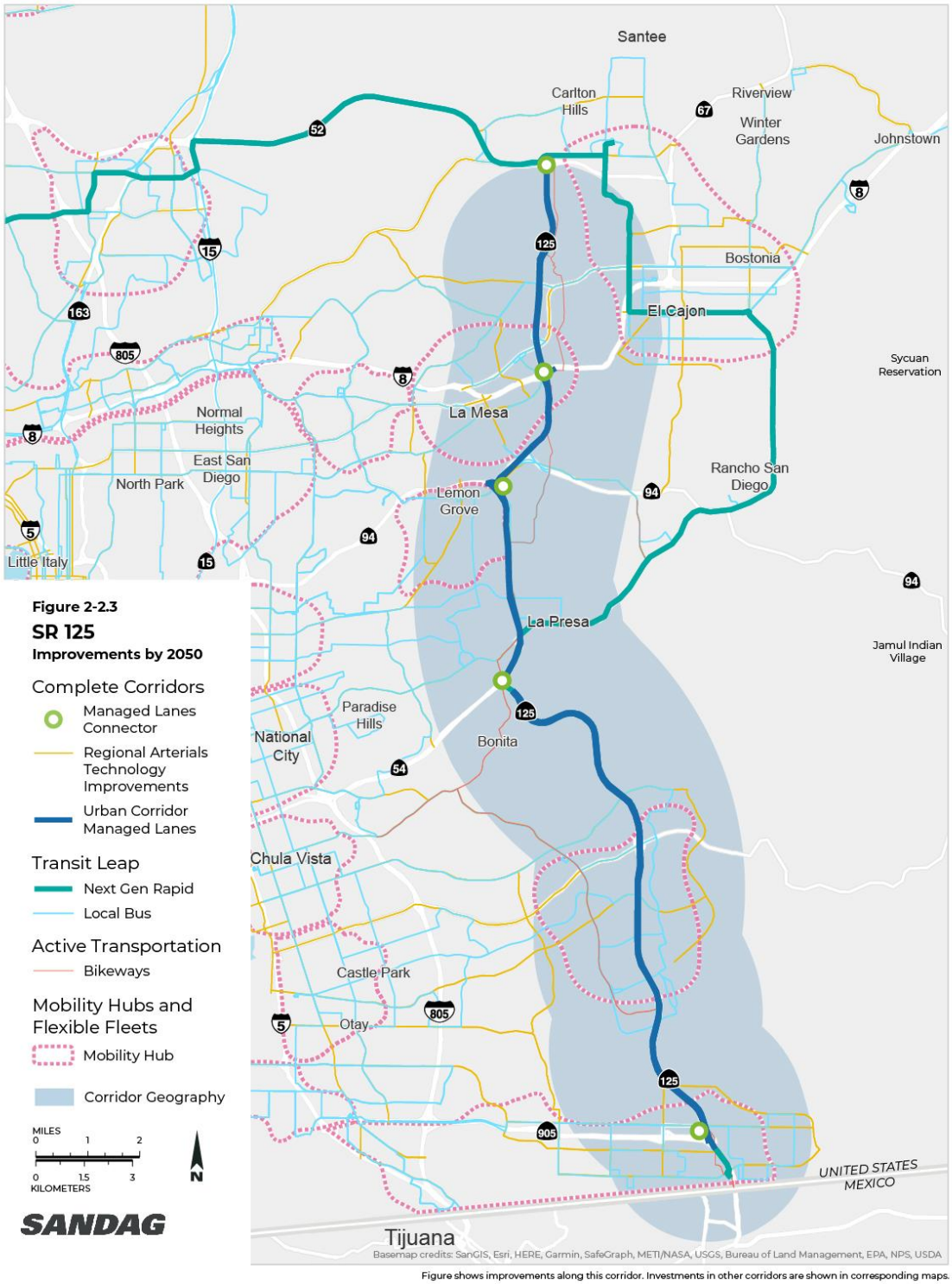

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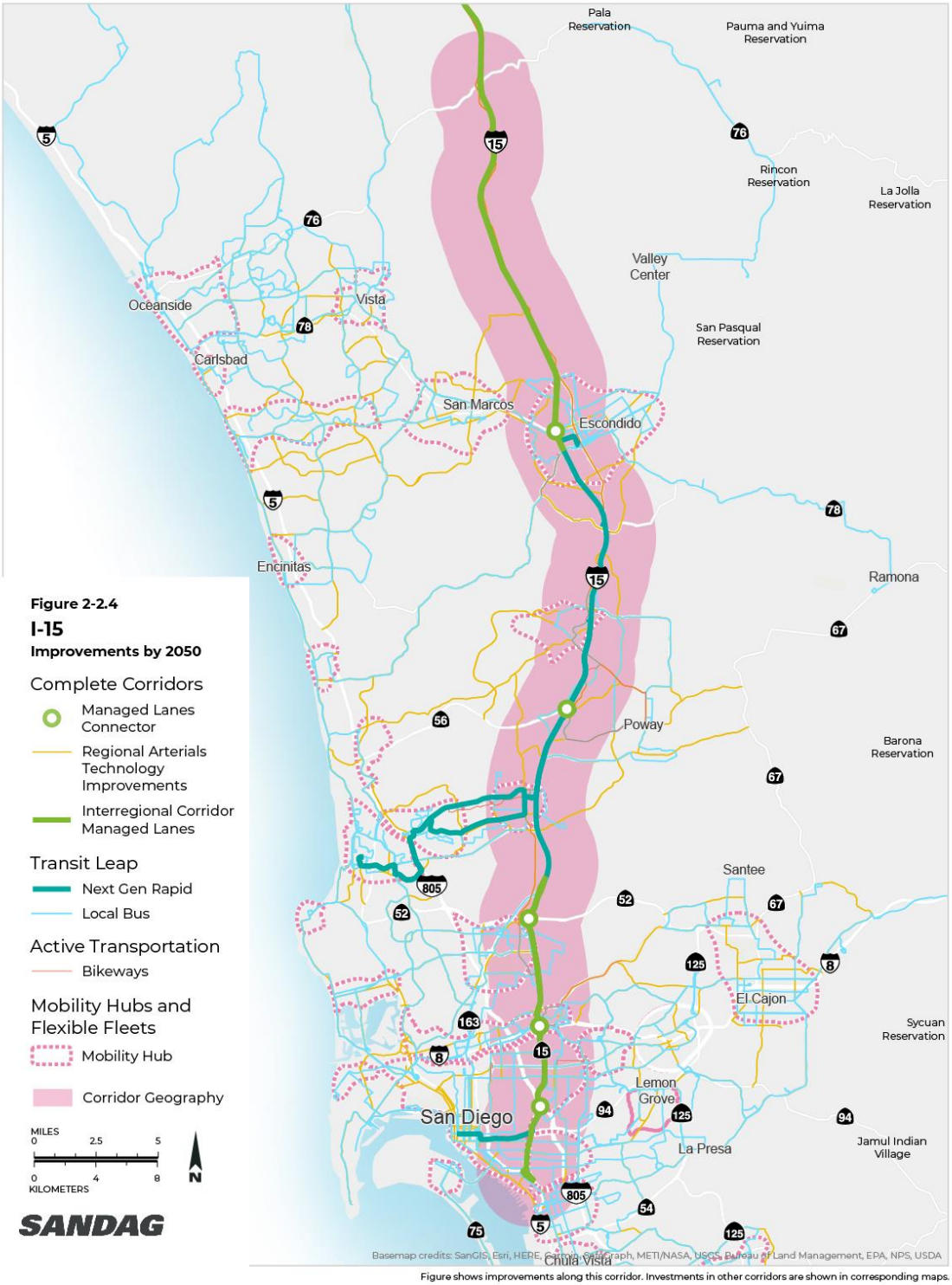
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La Jolla Reservation
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San Pasqual Reservation
Oceanside
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Encinitas
Ramona
Poway
Barona Reservation
Santee
El Cajon
Sycuan Reservation
Lemon Grove
San Diego
La Presa
Jamul Indian Village
Chula Vista
Basemap credits: SanGIS, Esri, HERE, Garmin, OpenStreetMap, METI/NASA, USGS, Bureau of Land Management, EPA, NPS, USDA
Figure 2-2.4
I-15
Improvements by 2050
Complete Corridors
Managed Lanes Connector
Regional Arterials Technology Improvements
Interregional Corridor Managed Lanes
Transit Leap
Next Gen Rapid
Local Bus
Active Transportation
Bikeways
Mobility Hubs and Flexible Fleets
Mobility Hub
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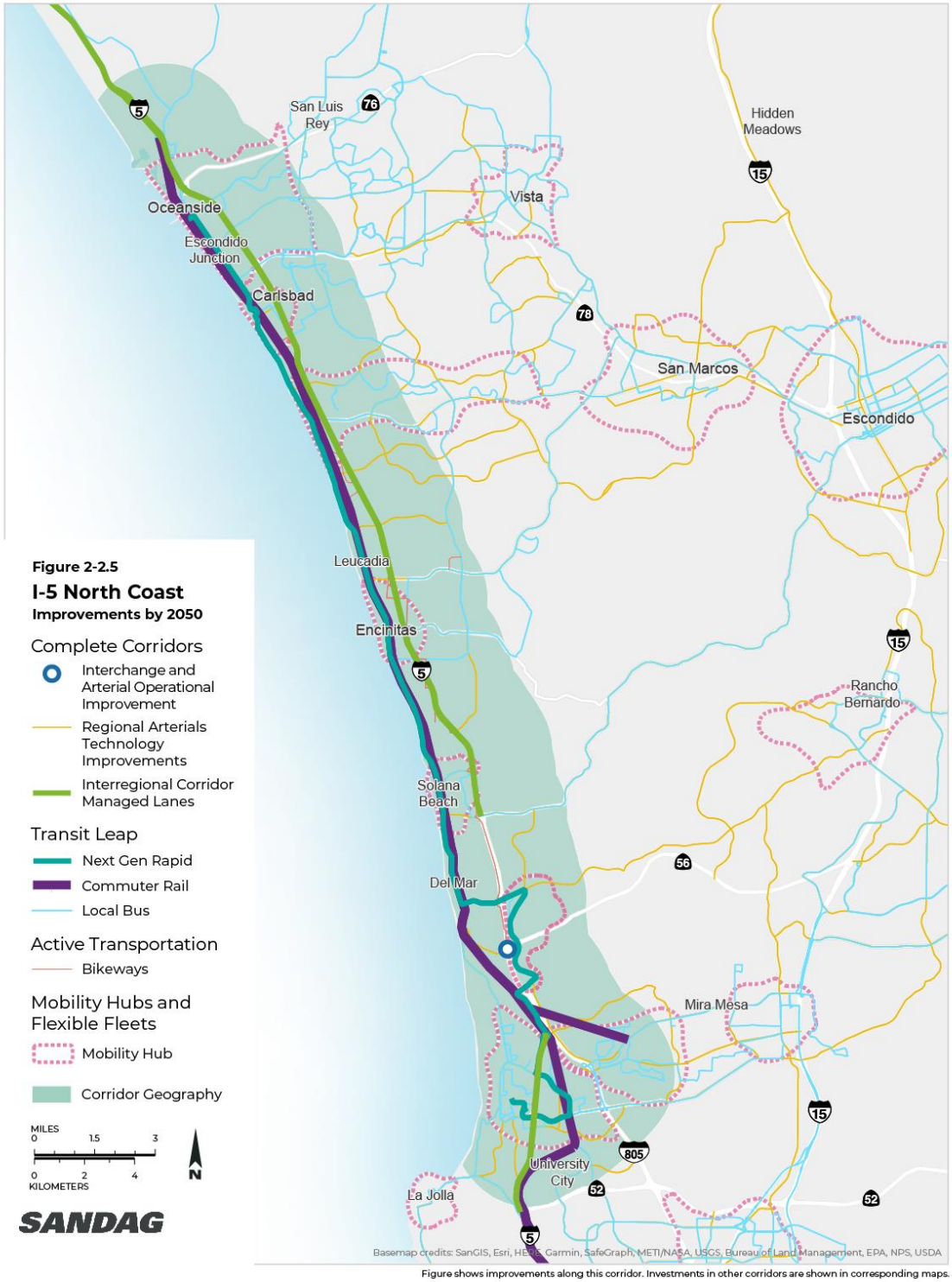
Figure shows improvements along this corridor. Investments in other corridors are shown in corresponding maps.



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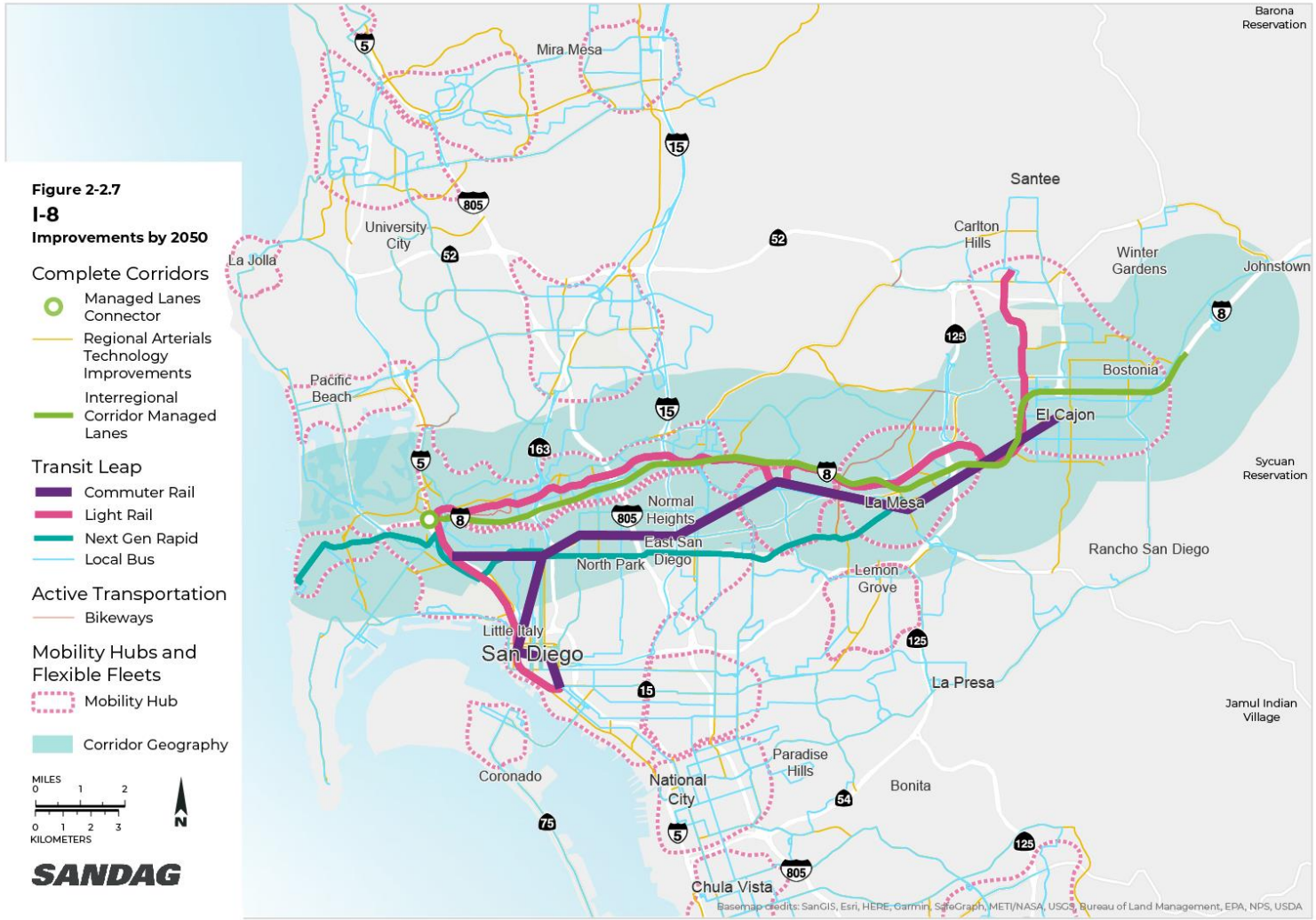

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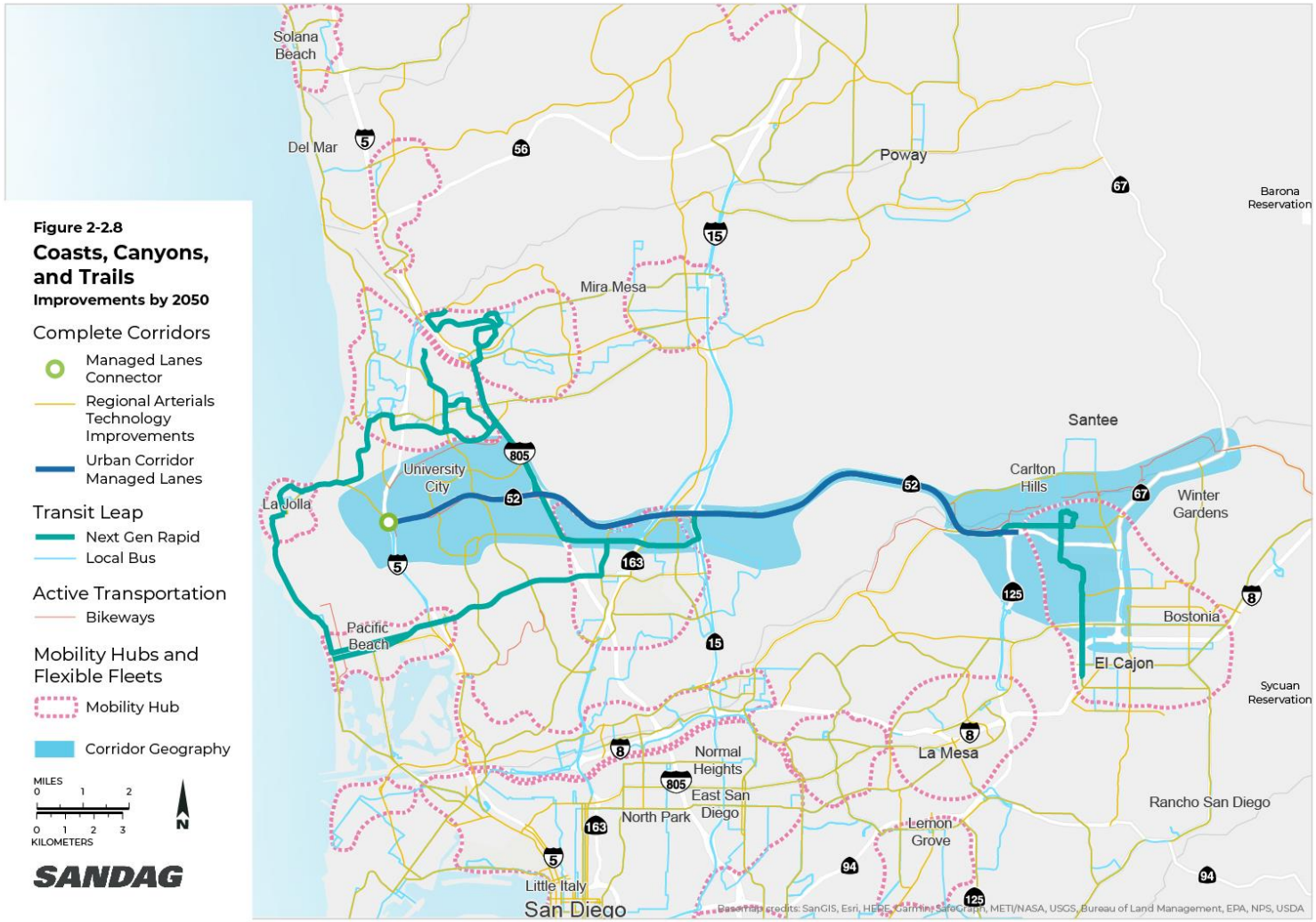

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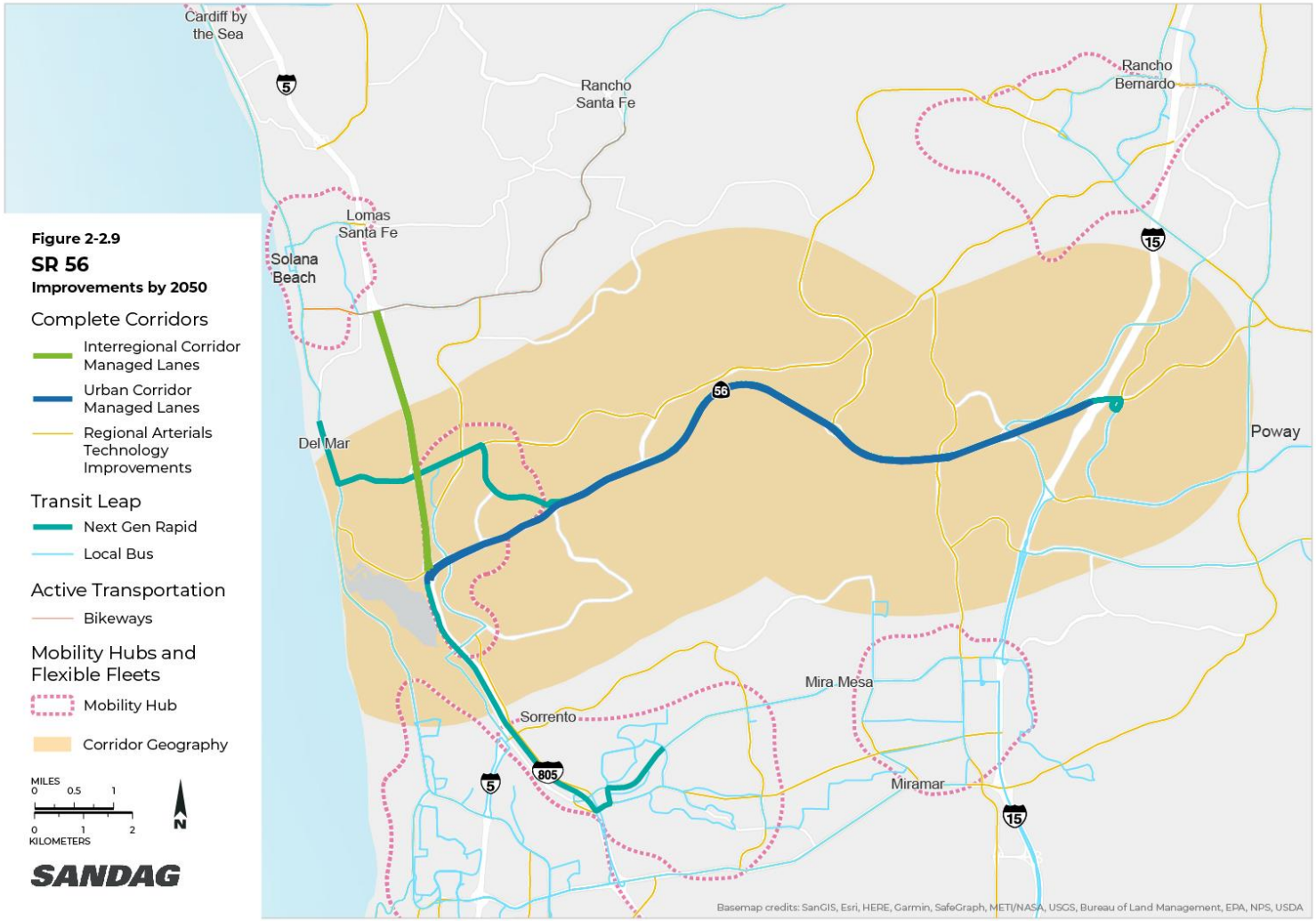

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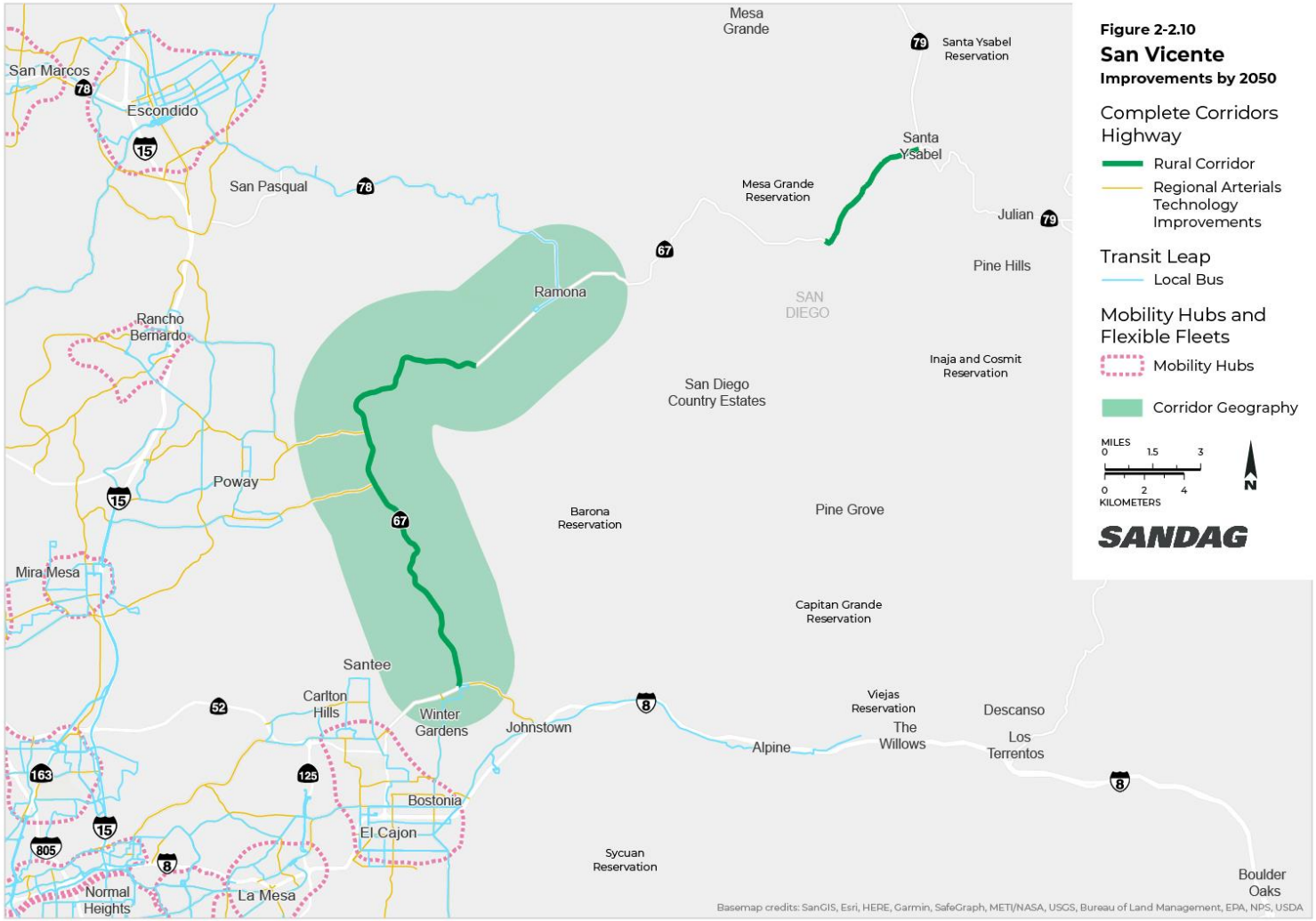

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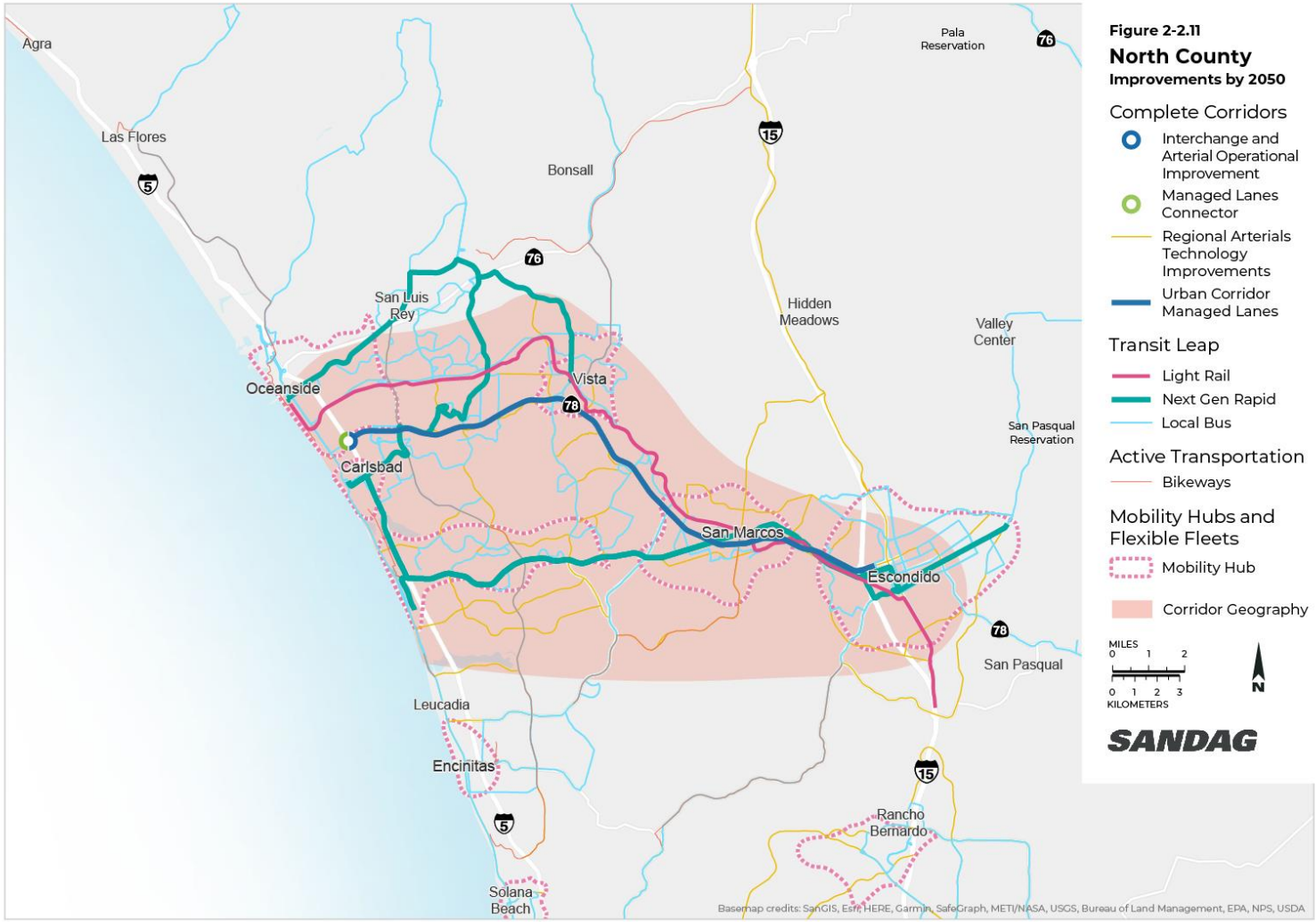


Figure shows improvements along this corridor. Investments in other corridors are shown in corresponding maps.

2.2.2 SAN DIEGO REGIONAL GROWTH FORECAST

DEVELOPMENT OF THE REGIONAL GROWTH FORECAST

Since 1972, every 3–4 years SANDAG produces a long-range forecast of population, housing, and employment that is used as a resource by public agencies, elected officials, planners, academics, and the general public. Among other applications (including general plans and infrastructure planning), the Series 14 Regional Growth Forecast (Series 14) aligns with the regional forecast from the California Department of Finance (DOF) and is the basis for the proposed Plan.

The forecast process includes two main phases. First, a forecast for the region is produced based on population projections from DOF and rates developed by SANDAG that are based on historic economic and demographic trends (SANDAG 2017). Future job growth is based on projected employment by industry from California Economic Development Department (EDD) data.

The second phase allocates the forecasted growth down to the jurisdictions and smaller geographic areas. SANDAG staff works with the region's 18 cities, the County of San Diego, and other agencies that manage land use (e.g., the Department of Defense, tribal governments) to understand local land use plans and policies, including general plans, community plans, or specific plans, as well as constraints to development (e.g., floodplains, steep slopes, habitat preserves, historic districts, etc.), and permitted projects in the development pipeline. That detailed land use information along with information on proximity to existing job centers, and historical development patterns is incorporated into the future development and redevelopment projections that comprise the subregional projections.

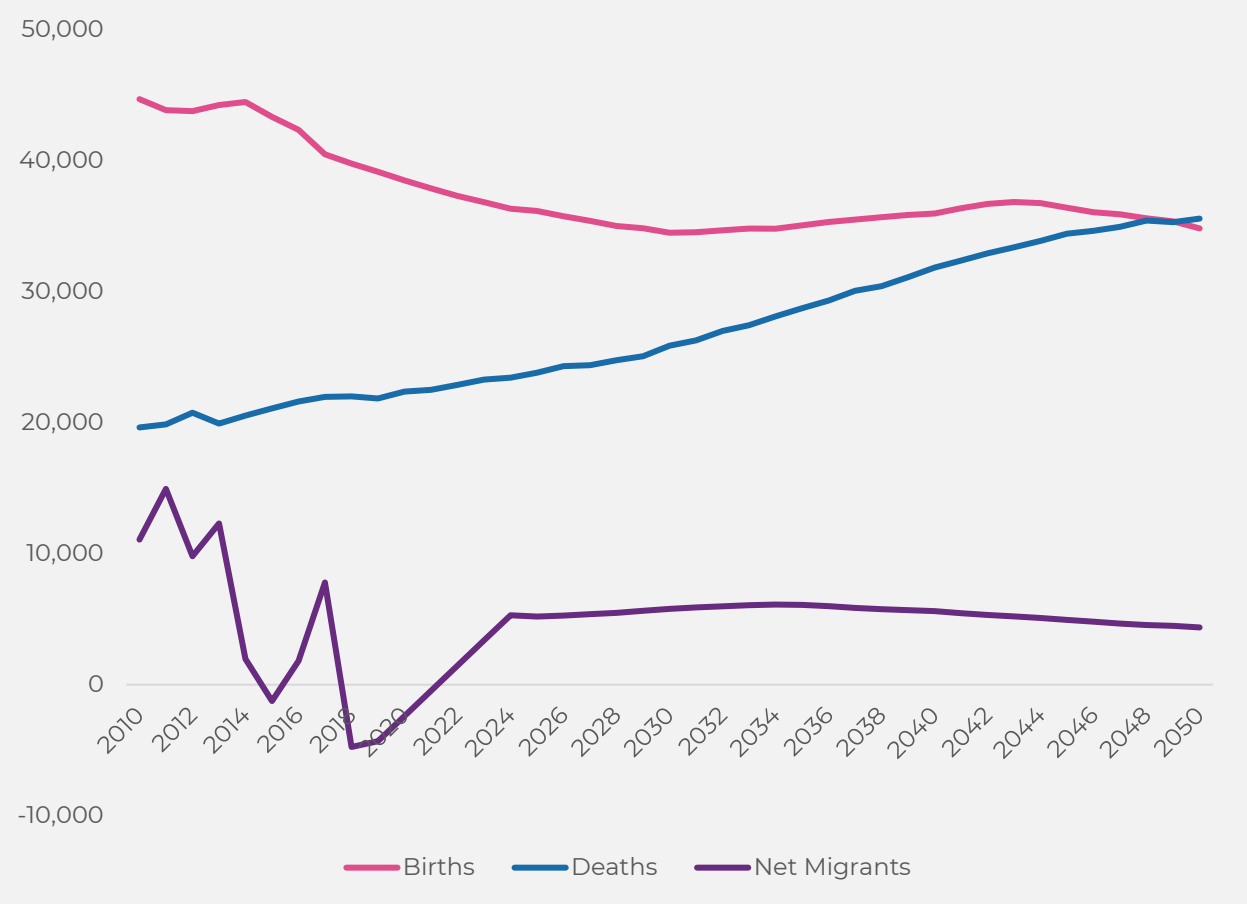
During the 34-year forecast period, the general trend for population growth is positive, but slowing considerably when compared with past forecasts. Currently, estimates from DOF show that between 2010 and 2020, growth rates for the San Diego region dropped from over 1 percent per year, to less than half a percent by 2020. At the beginning of the 2010s, San Diego grew by more than 30,000 persons per year. However, by the end of the decade the region grew by less than 20,000 persons. These projections show that by the 2030s growth will slow to about 0.4 percent per year and decrease after 2040 to 0.3 percent per year, or less than 10,000 persons entering the region yearly. (DOF 2021, SANDAG 2021b.)

Figure 2-3 shows the components of population change for the region. Populations grow or shrink by only three mechanisms: births, deaths, and migration. Figure 2-3 shows the count of births, deaths, and net migrants (in-migrants minus out-migrants) from 2010 to 2050. By the end of the 2040s births and deaths actually cross, meaning that for the first time in the history of the region, there will be population decline due to more deaths in the region than births. Foreign immigration is controlled by the federal government and the number of approved foreign immigrant petitions has remained largely consistent over the past decade. No major change in immigration levels is expected in the foreseeable future. Domestic migration—people moving to and from other parts of the state or nation—has been slowing in the country, with the lowest observed rates since the 1940s (Frey 2020).

This slowing population growth is attributed to declines in in-migration to the region by both migrants from other states and from other countries, as well as to the slowing birth rates by the resident population. Both these trends compound in the future to predict very slow growth in the San Diego region in the coming decades. This coupled with improvements to life expectancy will contribute to a substantial proportion of the population

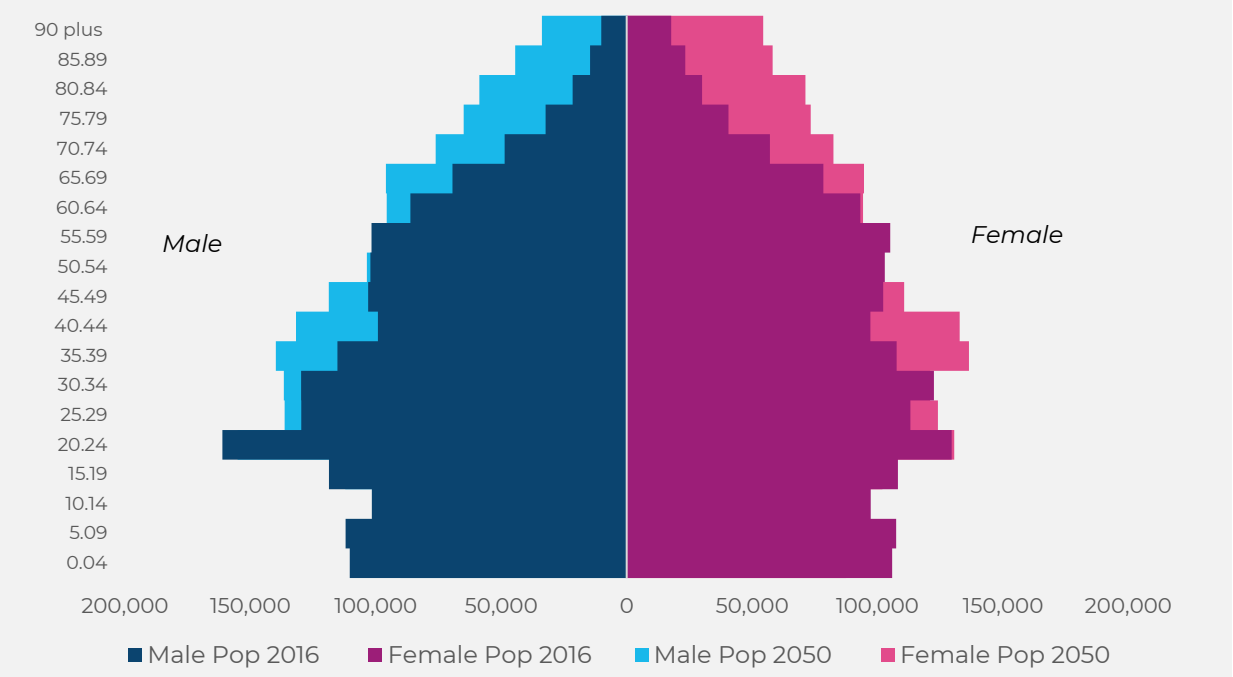
in the region being over age 65. Of course, this trend is not unique to San Diego, with much of the U.S. experiencing fertility declines and improvements to life expectancy in the future. By 2030, when all baby boomers have reached age 65, one in every five residents will be retirement age in the United States (U.S. Census 2018). Figure 2-4 shows the age and sex composition of the population in 2016 and 2050. This shows the relative growth in older ages versus younger ages and the mortality gains projected for the coming decades. As shown in Figure 2-4, there is a projected increase in the population in the working ages by mid-century and improvements to life expectancy, which will result in better survival for both men and women at older ages.

Figure 2-3. Components of Population Change, San Diego Region 2010–2050



Source: California Department of Finance Population Projections, January 2020

Figure 2-4. Population by Age and Sex, San Diego Region 2016 and 2050



Source: SANDAG Series 14 Regional Growth Forecast

In terms of race and ethnic composition, the region will continue to be diverse with the non-Hispanic white population decreasing and almost all other racial and ethnic groups increasing over the forecast horizon.[1] In 2016 the largest race and ethnic groups in the region are non-Hispanic Whites and Hispanics, comprising 46 and 34 percent of the total regional population, respectively (SANDAG 2021a). By 2050, however, it is expected that Hispanics will account for almost 40 percent of the total population while the non-Hispanic White population will decline to approximately 31 percent (SANDAG 2021b). The Asian population is expected to increase to 19 percent; up from 11 percent in 2016 (SANDAG 2021a, 2021b). Non-Hispanic Blacks, two or more races, native Hawaiian or Pacific Islanders, and American Indian or Alaskan Natives each comprise less than 5 percent of the total population today and are expected to remain relatively unchanged out to 2050 (SANDAG 2021b). It is important to emphasize that while the region's rate of population growth is slowing, the region is still growing. These forecasts can help inform local and regional policies in planning for the future.

REGIONAL GROWTH AND LAND USE CHANGE, 2016–2050

Table 2-1 summarizes the existing and forecasted growth in the region through 2050. Additional detail by jurisdiction is provided in subsequent sections.

Table 2-1
Series 14 San Diego Regional Growth Forecast and SCS Land Use Pattern

Year	Population	Housing Units	Jobs
2016	3,309,510	1,190,555	1,646,419
2025	3,470,848	1,288,216	1,761,747
2035	3,620,348	1,409,866	1,921,475
2050	3,746,073	1,471,299	2,086,318
2016–2050	436,563	280,744	439,899
Percent change 2016–2050	13%	24%	27%

Source: SANDAG 2021b.

Population

From 2016 to 2050, regional population is forecasted to increase by 436,563 people from 3,309,510 to 3,746,073, an increase of 13 percent, as shown in Table 2-2. Table 2-2 and Figures 2-5 through 2-8 show existing population in 2016 and forecasted population growth for 2025, 2035, and 2050 by jurisdiction.

[1] Racial and ethnic groups in the SANDAG Regional Growth Forecast are mutually exclusive. All racial groups are non-Hispanic, and Hispanics can be of any race.

Table 2-2
Existing and Forecasted Population Growth by Jurisdiction

Jurisdictions	2016	2025	2035	2050	Increase (2016–2050)	
					Population	Percent
Carlsbad	113,179	116,163	119,681	122,302	9,123	8%
Chula Vista	265,357	284,835	288,141	323,469	58,112	22%
Coronado	24,512	24,896	25,669	25,901	1,389	6%
Del Mar	4,284	4,384	4,524	4,715	431	10%
El Cajon	105,276	106,425	109,207	110,841	5,565	5%
Encinitas	62,625	63,476	64,157	64,591	1,966	3%
Escondido	150,978	165,127	169,922	174,398	23,420	16%
Imperial Beach	28,041	28,902	30,499	31,271	3,230	12%
La Mesa	60,980	65,822	71,455	75,276	14,296	23%
Lemon Grove	26,710	27,367	29,238	29,784	3,074	12%
National City	61,350	69,072	79,986	82,487	21,137	34%
Oceanside	176,666	178,385	181,020	184,283	7,617	4%
Poway	49,986	50,664	51,744	52,124	2,138	4%
San Diego	1,399,925	1,493,403	1,599,353	1,646,129	246,204	18%
San Marcos	94,258	102,775	103,903	120,247	25,989	28%
Santee	56,434	57,501	57,773	58,268	1,834	3%
Solana Beach	13,860	14,171	15,089	15,262	1,402	10%
Vista	102,933	104,302	105,707	107,732	4,799	5%
Unincorporated	512,156	513,178	513,280	516,993	4,837	1%
Region	3,309,510	3,470,848	3,620,348	3,746,073	436,563	13%

Source: SANDAG 2021b.

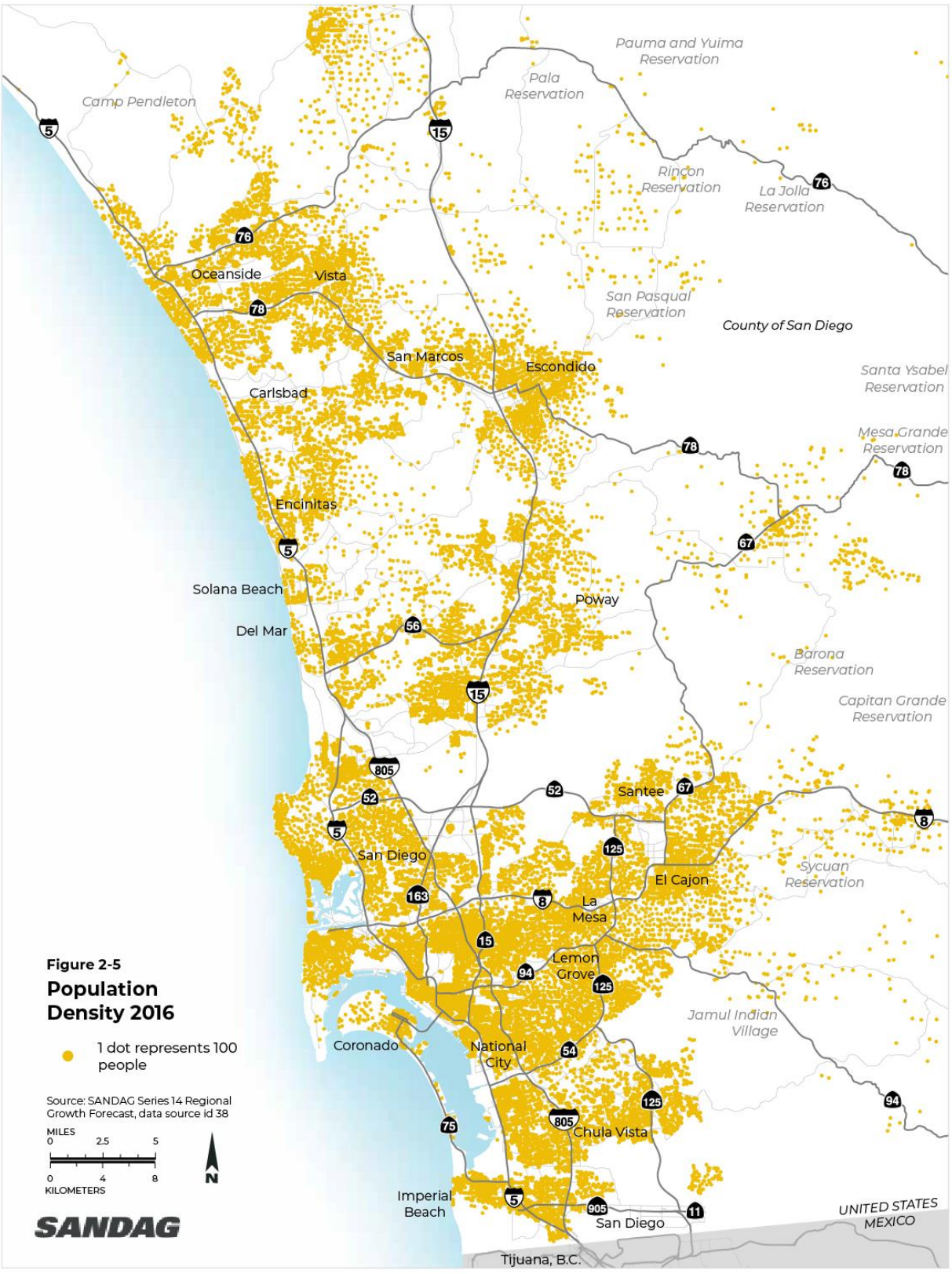

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Figure 2-5
Population Density 2016
1 dot represents 100 people
Source: SANDAG Series 14 Regional Growth Forecast, data source id 38
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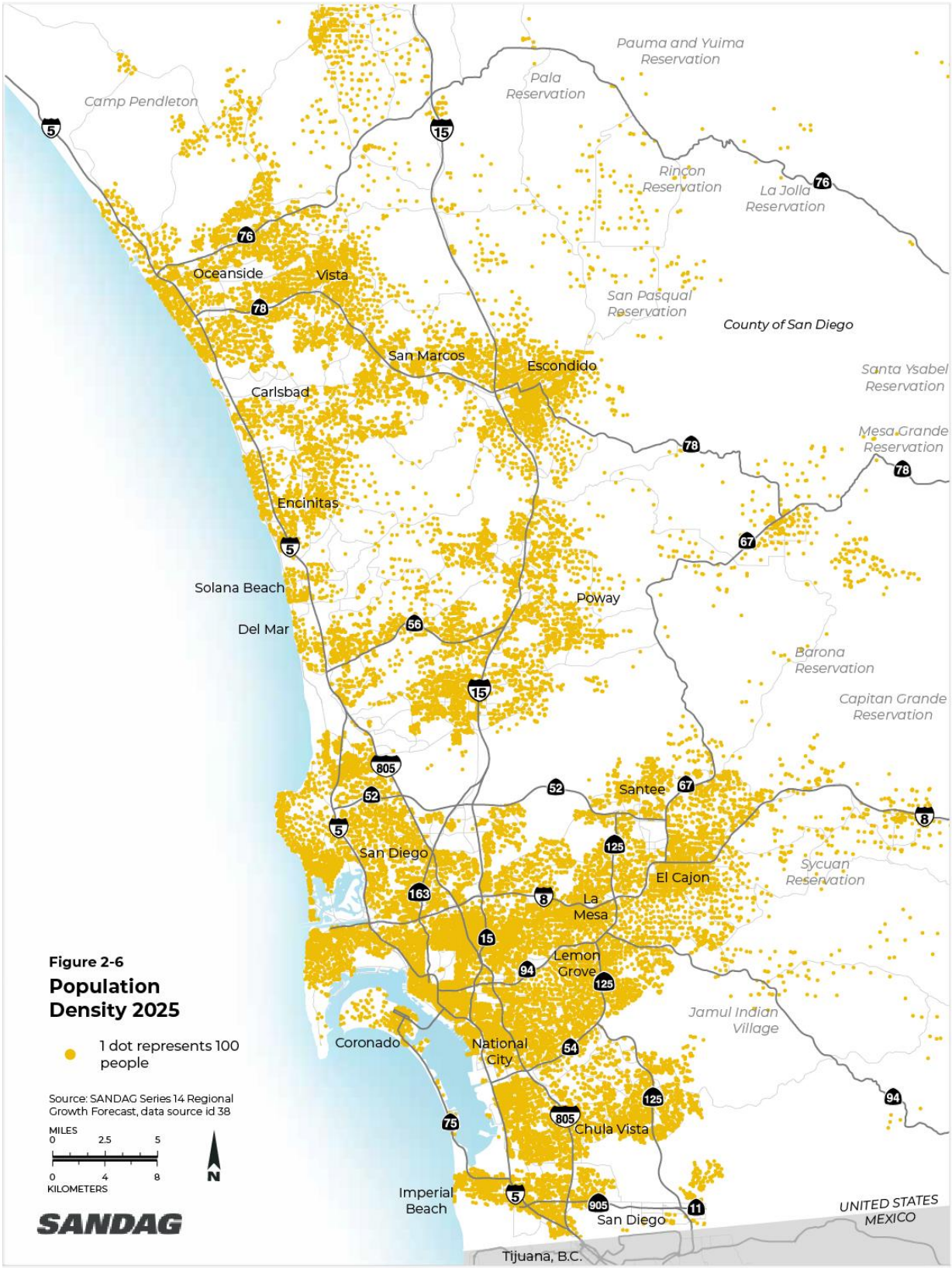
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Figure 2-6
Population Density 2025
1 dot represents 100 people
Source: SANDAG Series 14 Regional Growth Forecast, data source id 38
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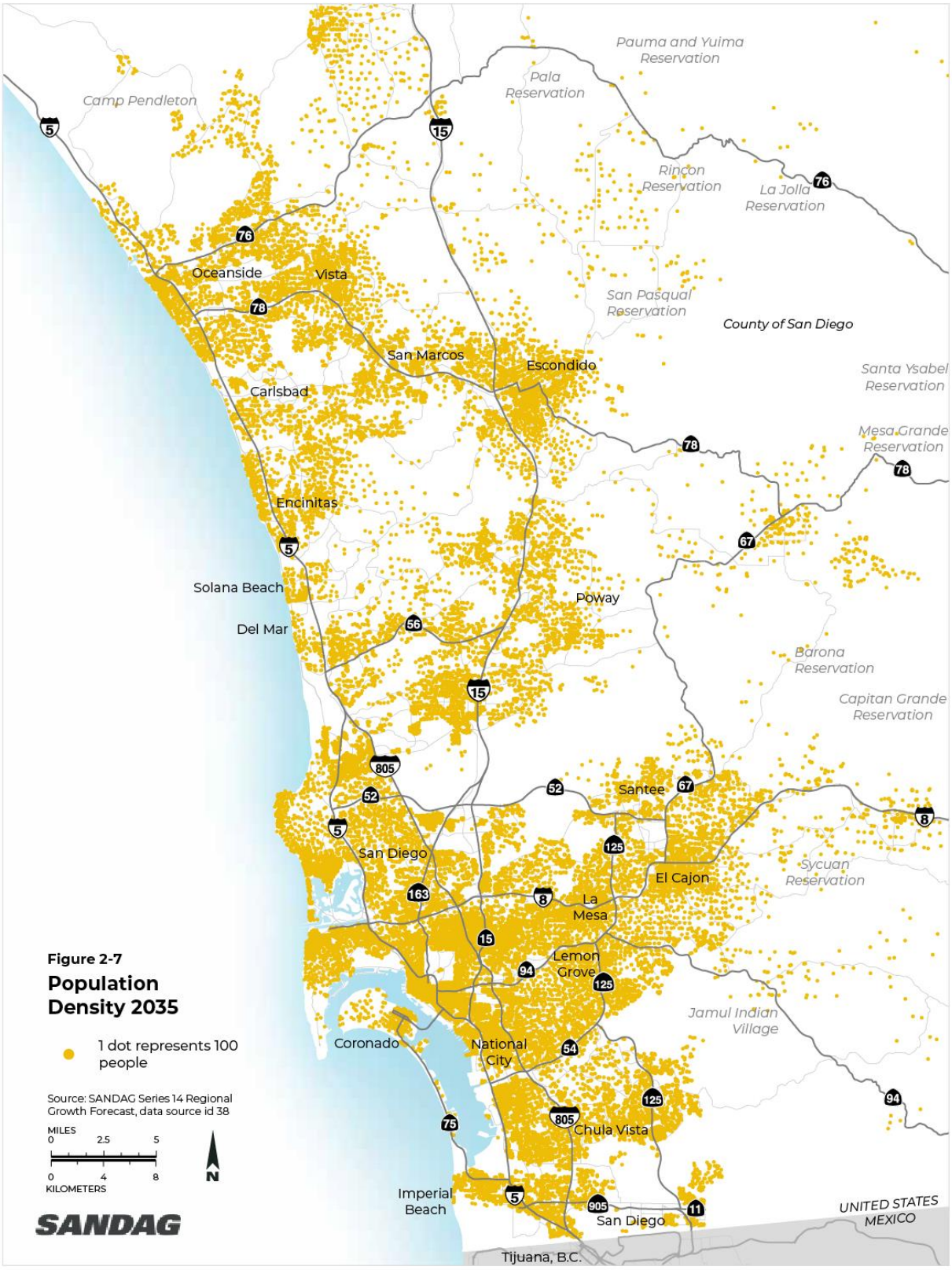
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Figure 2-7
Population Density 2035
1 dot represents 100 people
Source: SANDAG Series 14 Regional Growth Forecast, data source id 38
MILES
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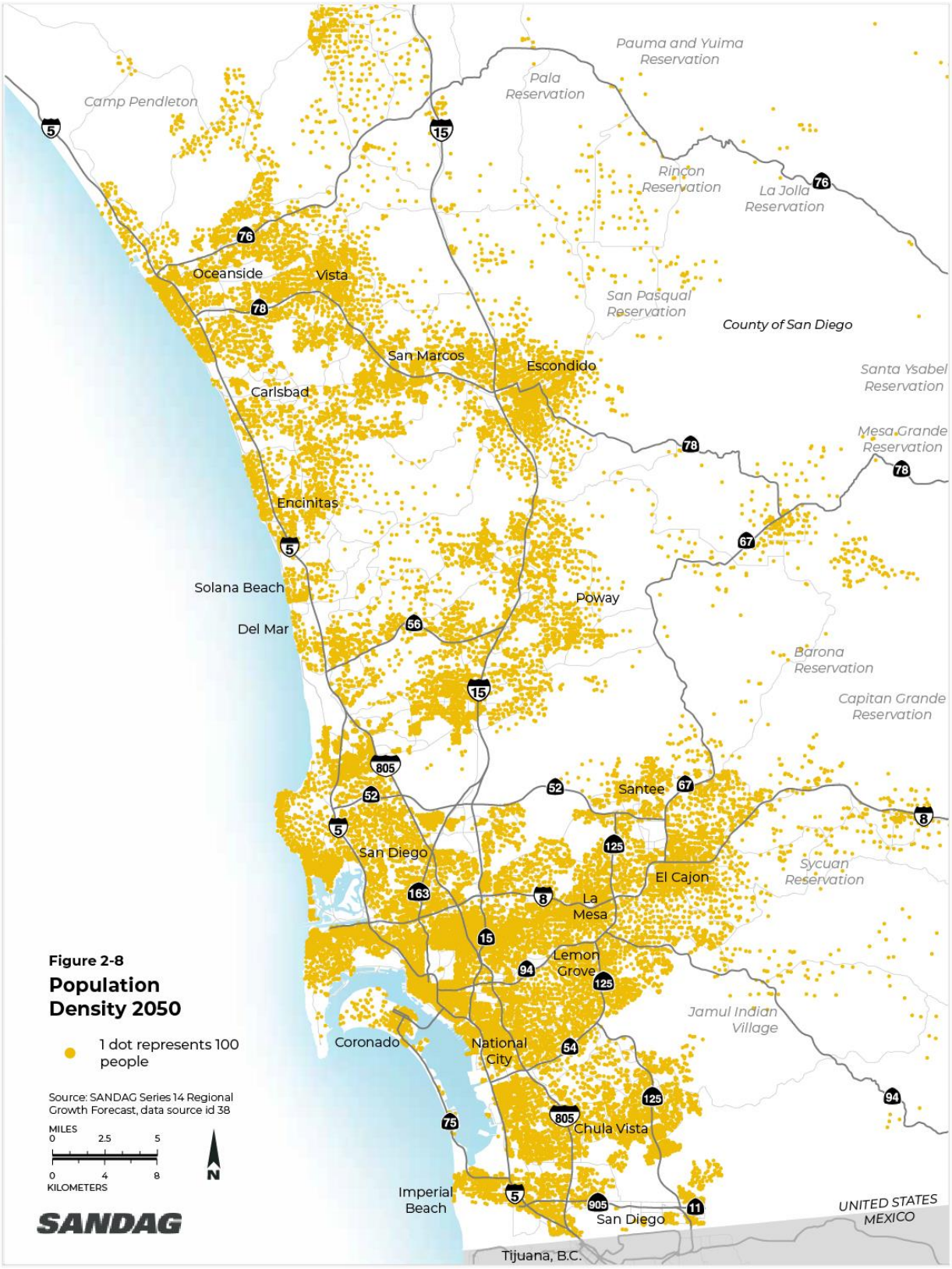
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Figure 2-8
Population Density 2050
1 dot represents 100 people
Source: SANDAG Series 14 Regional Growth Forecast, data source id 38
MILES
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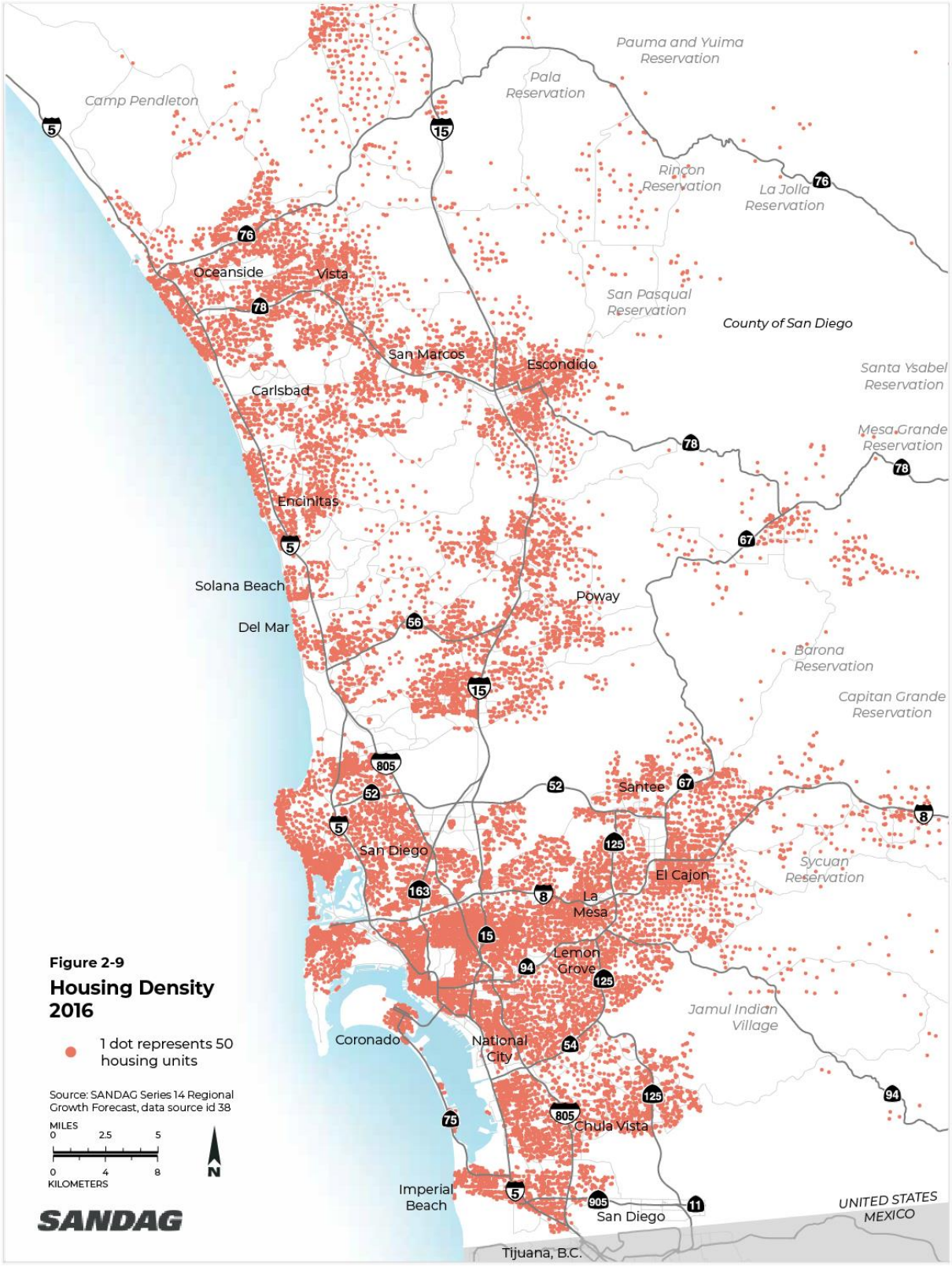
Housing

From 2016 to 2050, the number of housing units in the region is forecasted to increase by 280,744, from 1,190,555 to 1,471,299, an increase of 24 percent. Table 2-3 and Figures 2-9 through 2-12 show existing housing units in 2016 and forecasted housing units for 2025, 2035, and 2050 for the region and by jurisdiction (the depicted units do not include civilian [e.g., dormitories] or military [e.g., barracks] group quarters).

Table 2-3
Existing and Forecasted Housing Units by Jurisdiction

Jurisdictions	2016	2025	2035	2050	Increase (2016–2050)	
					Housing Units	Percent
Carlsbad	46,152	47,855	51,433	52,727	6,575	14%
Chula Vista	82,794	91,635	95,621	109,474	26,680	32%
Coronado	9,577	9,802	10,486	10,486	909	9%
Del Mar	2,611	2,674	2,778	2,778	167	6%
El Cajon	36,012	37,582	39,830	40,467	4,455	12%
Encinitas	26,040	26,750	27,690	27,690	1,650	6%
Escondido	48,462	54,910	58,990	60,618	12,156	25%
Imperial Beach	9,756	10,212	11,265	11,576	1,820	19%
La Mesa	25,760	28,404	32,282	34,398	8,638	34%
Lemon Grove	9,032	9,476	10,467	10,467	1,435	16%
National City	16,641	17,908	22,410	22,410	5,769	35%
Oceanside	65,851	67,816	71,359	71,359	5,508	8%
Poway	16,606	17,092	18,017	18,017	1,411	8%
San Diego	531,423	592,143	676,236	711,018	179,595	34%
San Marcos	30,539	34,681	34,931	41,016	10,477	34%
Santee	20,525	21,161	21,889	21,969	1,444	7%
Solana Beach	6,497	6,684	7,364	7,364	867	13%
Vista	32,195	33,404	35,317	35,964	3,769	12%
Unincorporated	174,082	178,027	181,501	181,501	7,419	4%
Region	1,190,555	1,288,216	1,409,866	1,471,299	280,744	24%

Source: SANDAG 2021b.


Pauma and Yuima Reservation
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National City
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Figure 2-9
Housing Density 2016
1 dot represents 50 housing units
Source: SANDAG Series 14 Regional Growth Forecast, data source id 38
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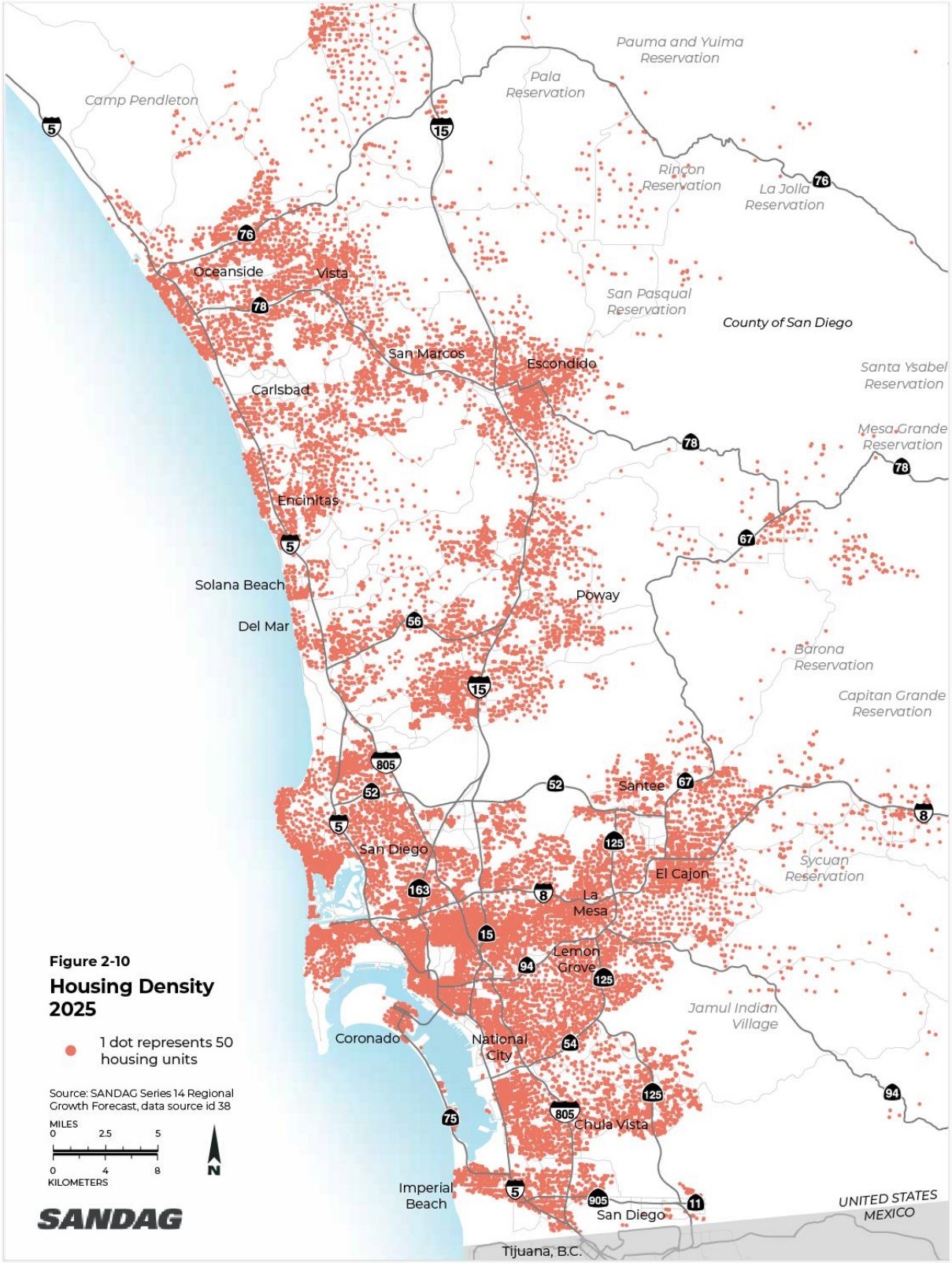
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Tijuana, B.C.
Figure 2-10
Housing Density 2025
1 dot represents 50 housing units
Source: SANDAG Series 14 Regional Growth Forecast, data source id 38
MILES
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KILOMETERS
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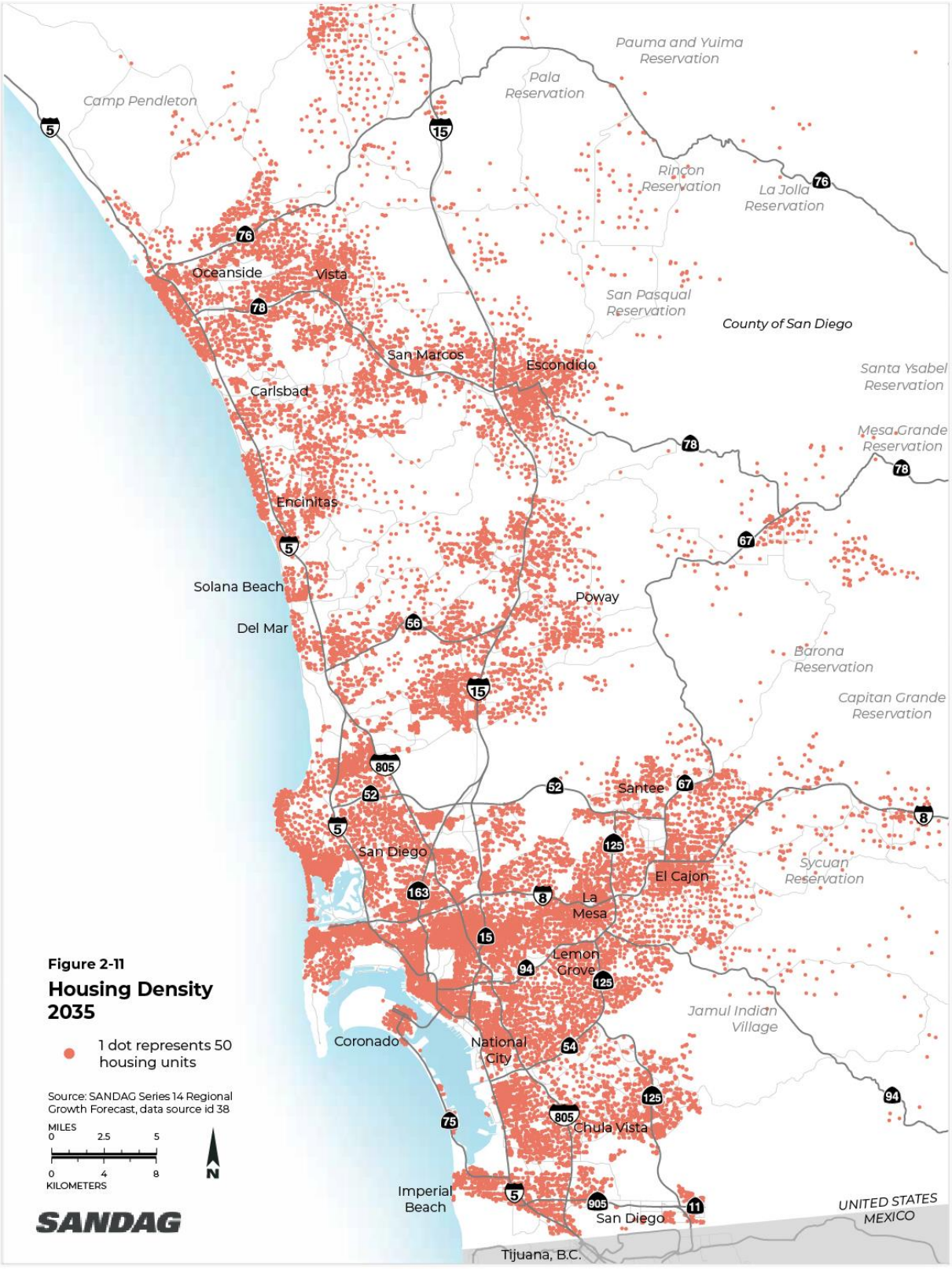
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Imperial Beach
San Diego
UNITED STATES
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Figure 2-11
Housing Density 2035
1 dot represents 50 housing units
Source: SANDAG Series 14 Regional Growth Forecast, data source id 38
MILES
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KILOMETERS
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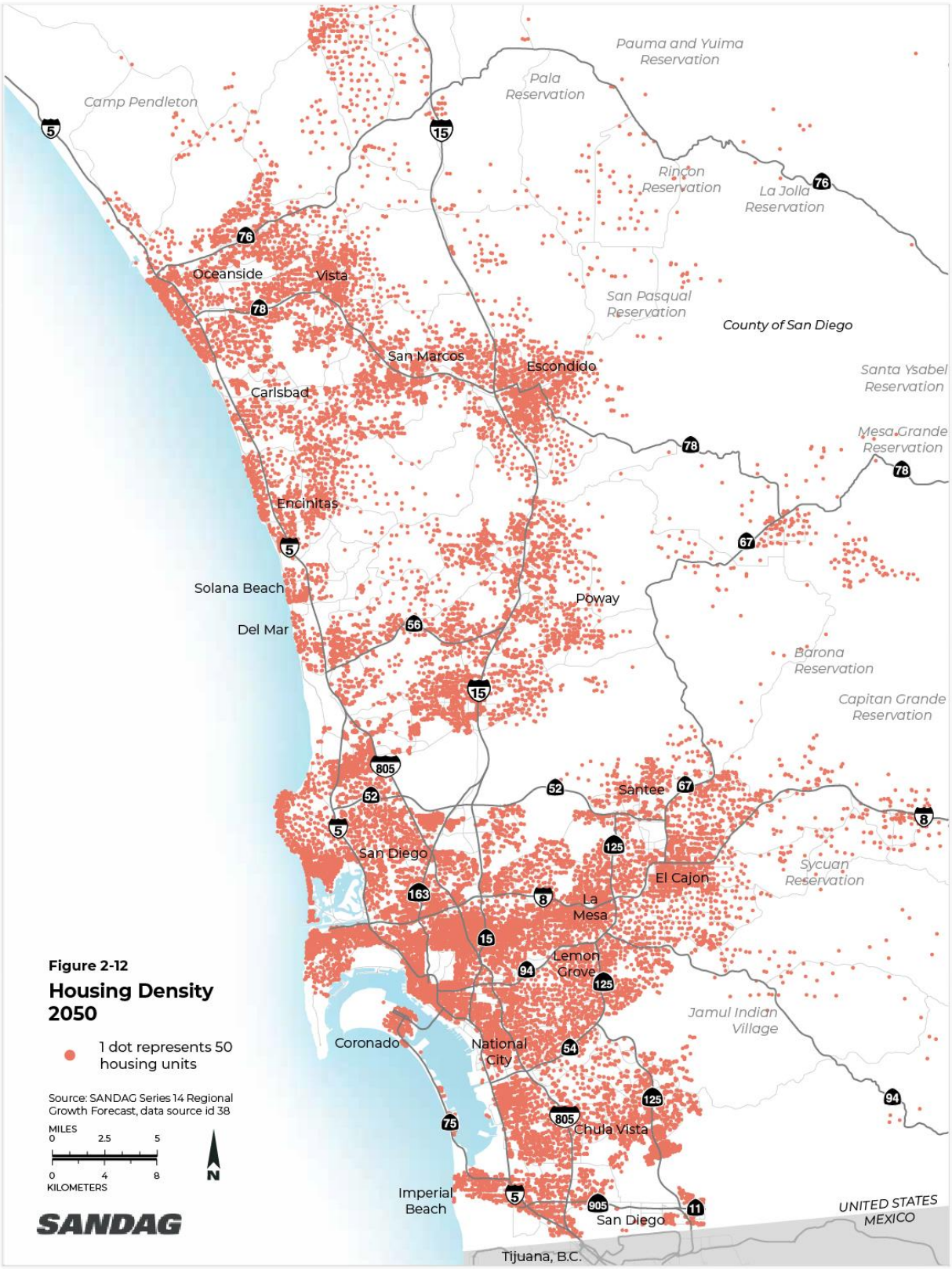
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Figure 2-12
Housing Density 2050
1 dot represents 50 housing units
Source: SANDAG Series 14 Regional Growth Forecast, data source id 38
MILES
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0 4 8
KILOMETERS
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Jobs

From 2016 to 2050, the number of jobs in the region is forecasted to increase by 439,899, from 1,646,419 to 2,086,318, an increase of 27 percent. Table 2-4 and Figures 2-13 through 2-16 show existing jobs in 2016 and forecasted jobs for 2025, 2035, and 2050 for the region and by jurisdiction.

Table 2-4
Existing and Forecasted Jobs Growth by Jurisdiction

Jurisdictions	2016	2025	2035	2050	Increase (2016–2050)	
					Jobs	Percent
Carlsbad	76,617	83,955	90,701	97,507	20,890	27%
Chula Vista	74,078	83,027	98,701	116,185	42,107	57%
Coronado	26,888	27,283	27,978	28,771	1,883	7%
Del Mar	4,476	4,494	4,536	4,586	110	2%
El Cajon	48,408	52,526	59,516	67,135	18,727	39%
Encinitas	28,812	29,264	29,950	30,753	1,941	7%
Escondido	58,323	60,758	64,686	68,924	10,601	18%
Imperial Beach	5,621	5,948	6,407	6,946	1,325	24%
La Mesa	30,188	31,647	34,145	36,729	6,541	22%
Lemon Grove	9,099	9,368	9,846	10,335	1,236	14%
National City	42,218	54,193	57,419	60,875	18,657	44%
Oceanside	47,256	48,317	49,909	50,756	3,500	7%
Poway	35,297	35,508	35,865	36,216	919	3%
San Diego	892,828	953,977	1,046,814	1,140,676	247,848	28%
San Marcos	41,527	47,021	54,548	62,306	20,779	50%
Santee	18,499	18,829	19,494	20,100	1,601	9%
Solana Beach	10,064	10,277	10,648	11,027	963	10%
Vista	44,105	45,253	47,133	49,115	5,010	11%
Unincorporated	152,115	160,102	173,179	187,376	35,261	23%
Region	1,646,419	1,761,747	1,921,475	2,086,318	439,899	27%

Source: SANDAG 2021b

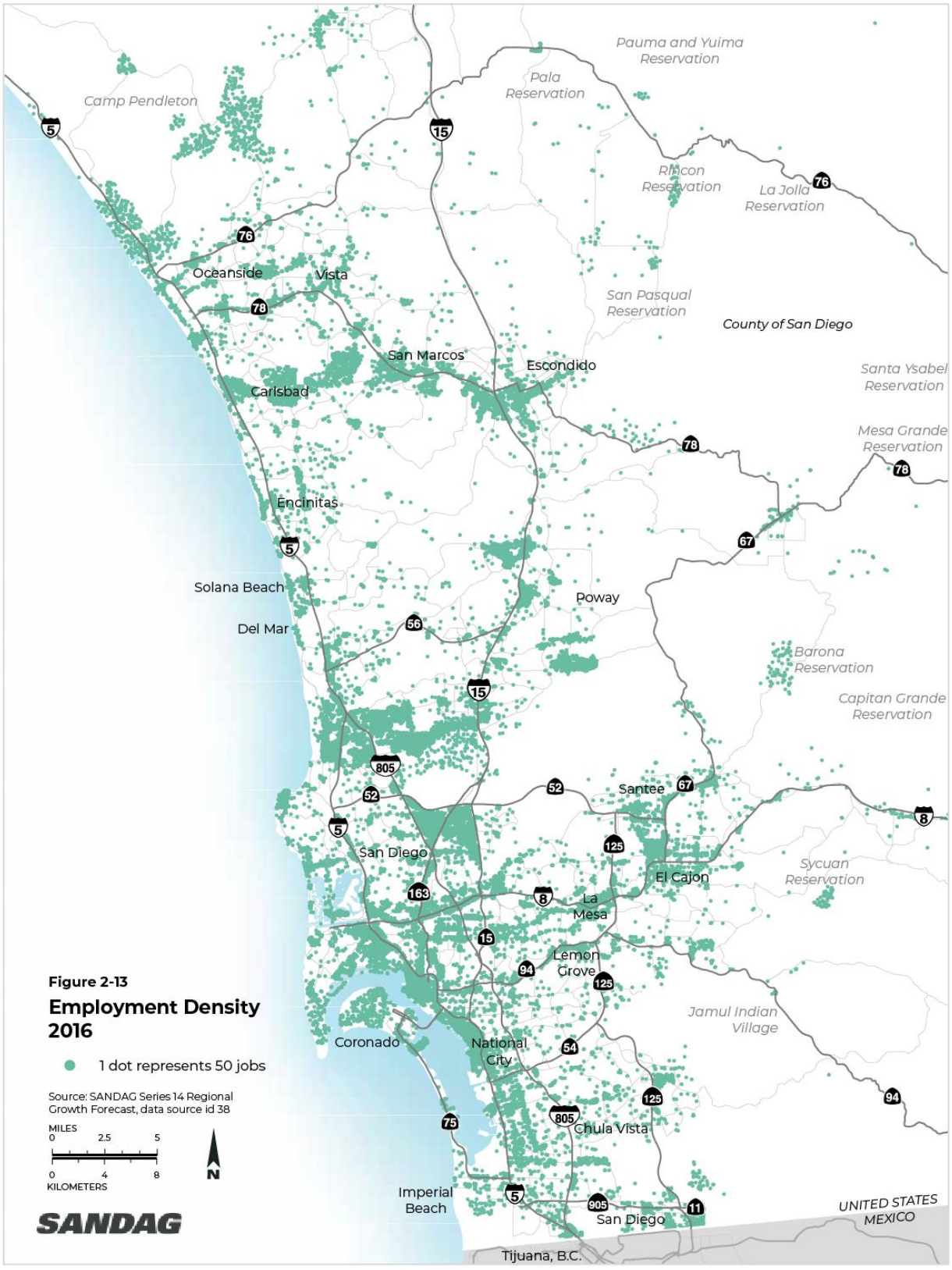
Pauma and Yuima Reservation
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Figure 2-13
Employment Density 2016
1 dot represents 50 jobs
Source: SANDAG Series 14 Regional Growth Forecast, data source id 38
MILES
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KILOMETERS
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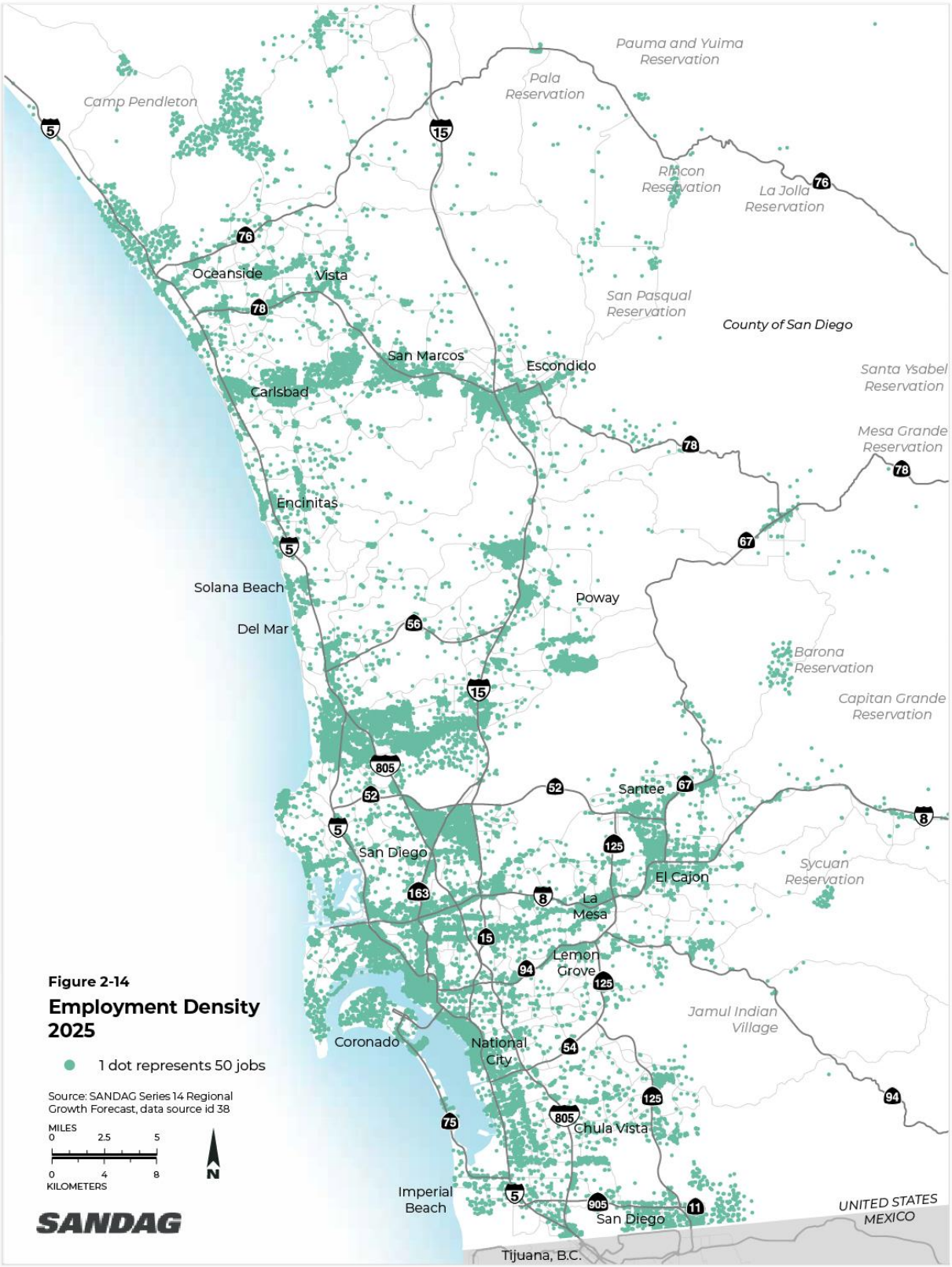
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Figure 2-14
Employment Density 2025
1 dot represents 50 jobs
Source: SANDAG Series 14 Regional Growth Forecast, data source id 38
MILES
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KILOMETERS
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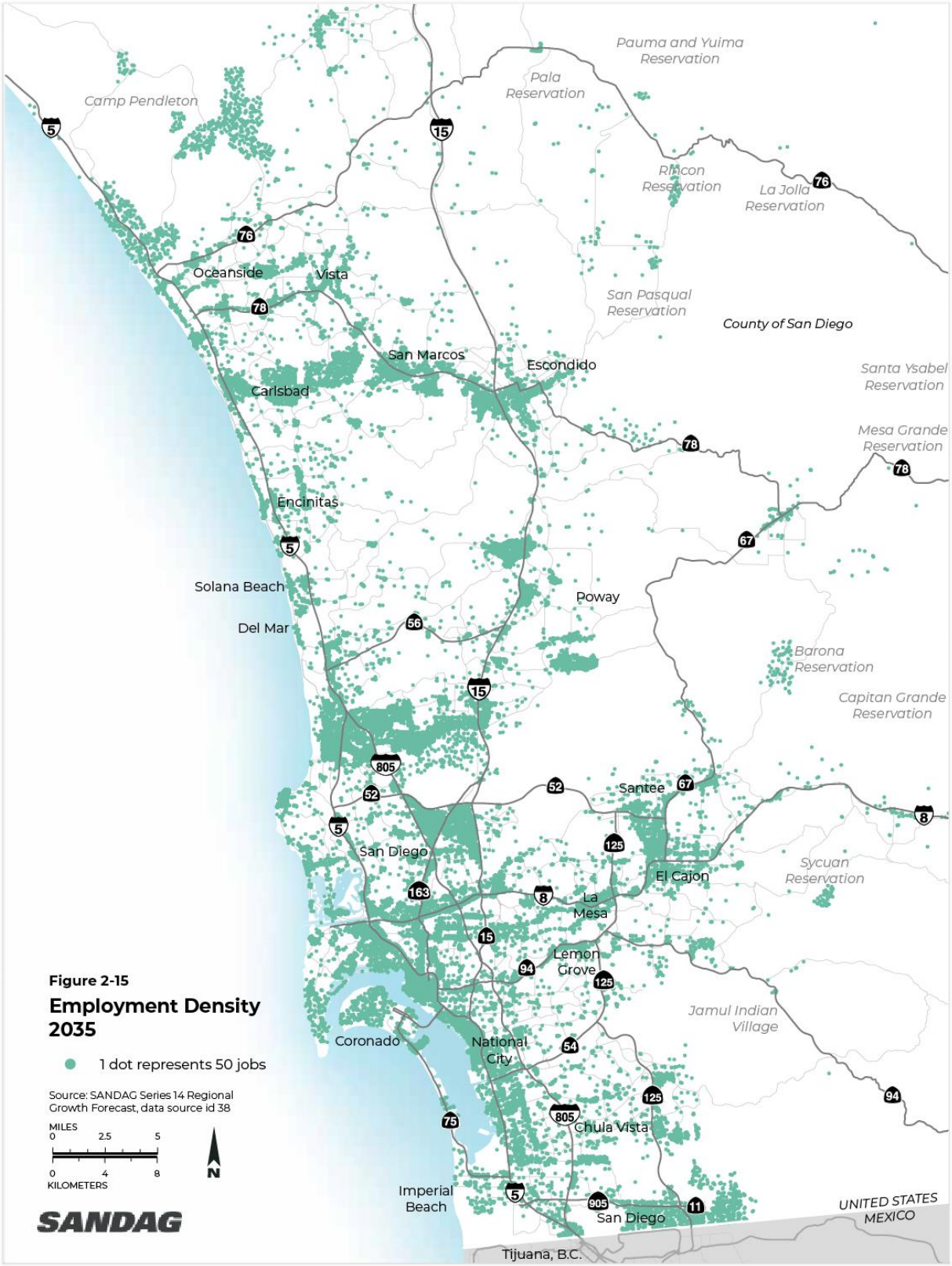
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Figure 2-15
Employment Density 2035
1 dot represents 50 jobs
Source: SANDAG Series 14 Regional Growth Forecast, data source id 38
MILES
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0 4 8
KILOMETERS
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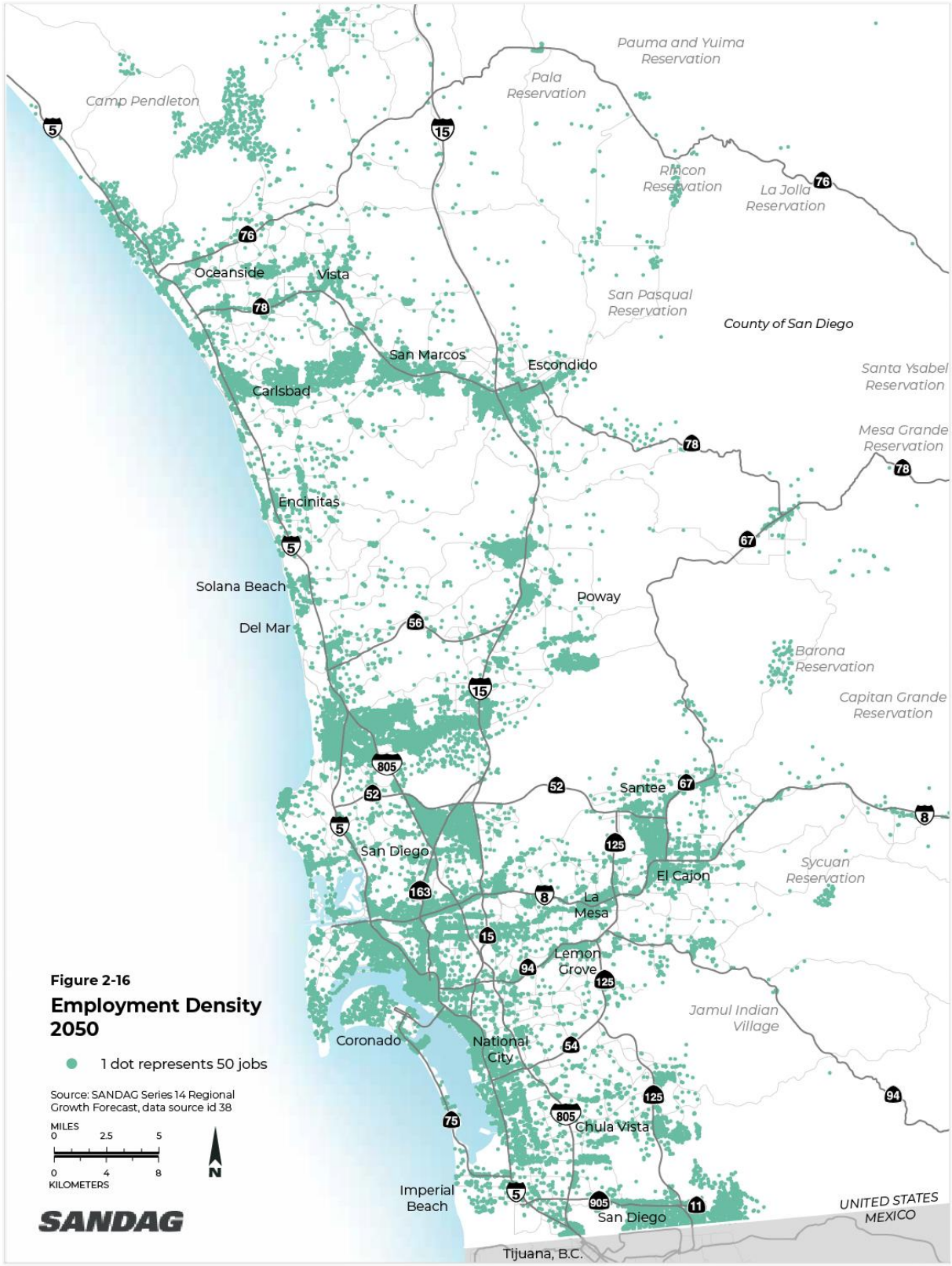
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Figure 2-16
Employment Density 2050
1 dot represents 50 jobs
Source: SANDAG Series 14 Regional Growth Forecast, data source id 38
MILES
0 2.5 5
0 4 8
KILOMETERS
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SANDAG

SUMMARY OF REGIONAL GROWTH AND LAND USE CHANGE BY PHASE

By 2025

From 2016 to 2025, regional population is forecasted to increase by 161,338 people (5 percent), adding 97,661 housing units (8 percent) and 115,328 jobs (7 percent). The 2025 regional land use pattern is shown on Figure 2-17. Approximately 79 percent of the forecasted regional population increase by 2025 is in the City of San Diego (58 percent), City of Chula Vista (12 percent), and City of Escondido (9 percent). Those same three jurisdictions accommodate approximately 78 percent of new housing units in the region by 2025, while the City of San Diego, National City, and the City of Chula Vista accommodate more than 70 percent of new jobs in the region by 2025.

In the City of San Diego, the communities with the highest proportion of the forecasted population and housing unit increases are Downtown, Mission Valley, Midway-Pacific Highway, and University Center. The highest proportions of forecasted job increases are in the communities of Downtown, University Center, Otay Mesa, and Kearny Mesa.

In the unincorporated County, the communities with the highest proportion of the forecasted population and housing unit increases are Otay and North County Metro. The only significant increases in jobs over that period are in Otay.

By 2035

From 2025 to 2035, regional population is forecasted to increase by 149,500 people (4 percent), adding 121,650 housing units (9 percent) and 159,728 jobs (9 percent). The 2035 regional land use pattern is shown on Figure 2-18.

Approximately 80 percent of the forecasted regional population increase between 2025 and 2035 is in the City of San Diego (71 percent), National City (7 percent), and City of Chula Vista (2 percent). Similarly, these three jurisdictions accommodate approximately 76 percent of new housing units and 70 percent of new jobs, respectively, between 2025 and 2035.

In the City of San Diego, the communities with the highest proportion of the forecasted population and housing unit increases are Downtown, Mission Valley, Kearny Mesa, and Midway Pacific Highway. The highest proportions of forecasted job increases are in the communities of Downtown, Kearny Mesa, University, and Otay Mesa.

In the unincorporated County, the communities with the highest proportion of the forecasted population and housing unit increases are Lakeside, North County Metro and Otay. The only significant increase in jobs over that period is in Otay.

By 2050

From 2035 to 2050, regional population is forecasted to increase by 125,725 people (3 percent), adding 61,433 housing units (4 percent) and 164,843 jobs (8 percent). The 2050 regional land use pattern is shown on Figure 2-19.

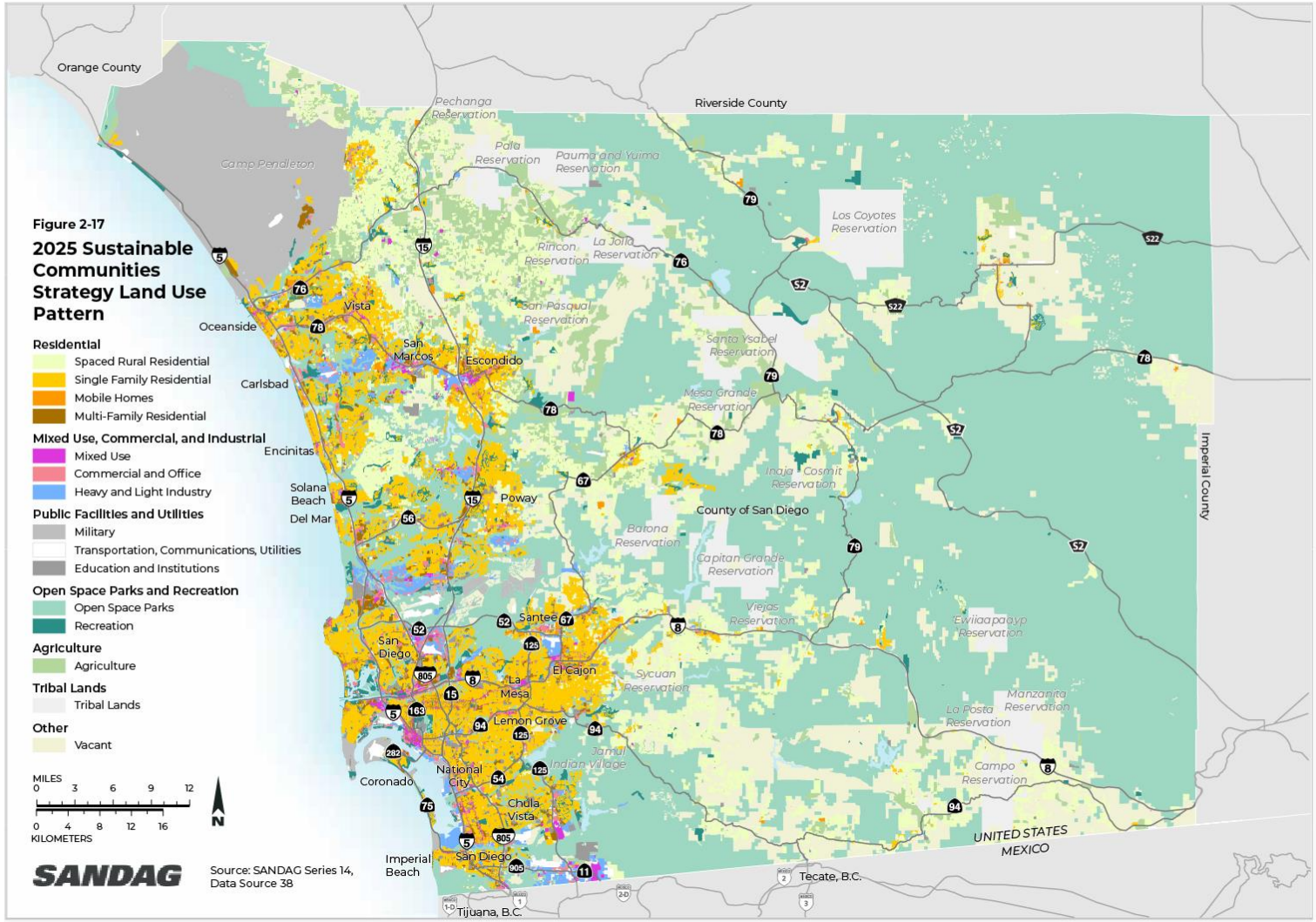
Figure 2-17
2025 Sustainable Communities Strategy Land Use Pattern
Residential
Spaced Rural Residential
Single Family Residential
Mobile Homes
Multi-Family Residential
Mixed Use, Commercial, and Industrial
Mixed Use
Commercial and Office
Heavy and Light Industry
Public Facilities and Utilities
Military
Transportation, Communications, Utilities
Education and Institutions
Open Space Parks and Recreation
Open Space Parks
Recreation
Agriculture
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Tribal Lands
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Source: SANDAG Series 14, Data Source 38
Orange County
Riverside County
Imperial County
County of San Diego
Camp Pendleton
Pechanga Reservation
Pala Reservation
Pauma and Yuima Reservation
Rincon Reservation
La Jolla Reservation
Los Coyotes Reservation
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Manzanita Reservation
La Posta Reservation
Campo Reservation
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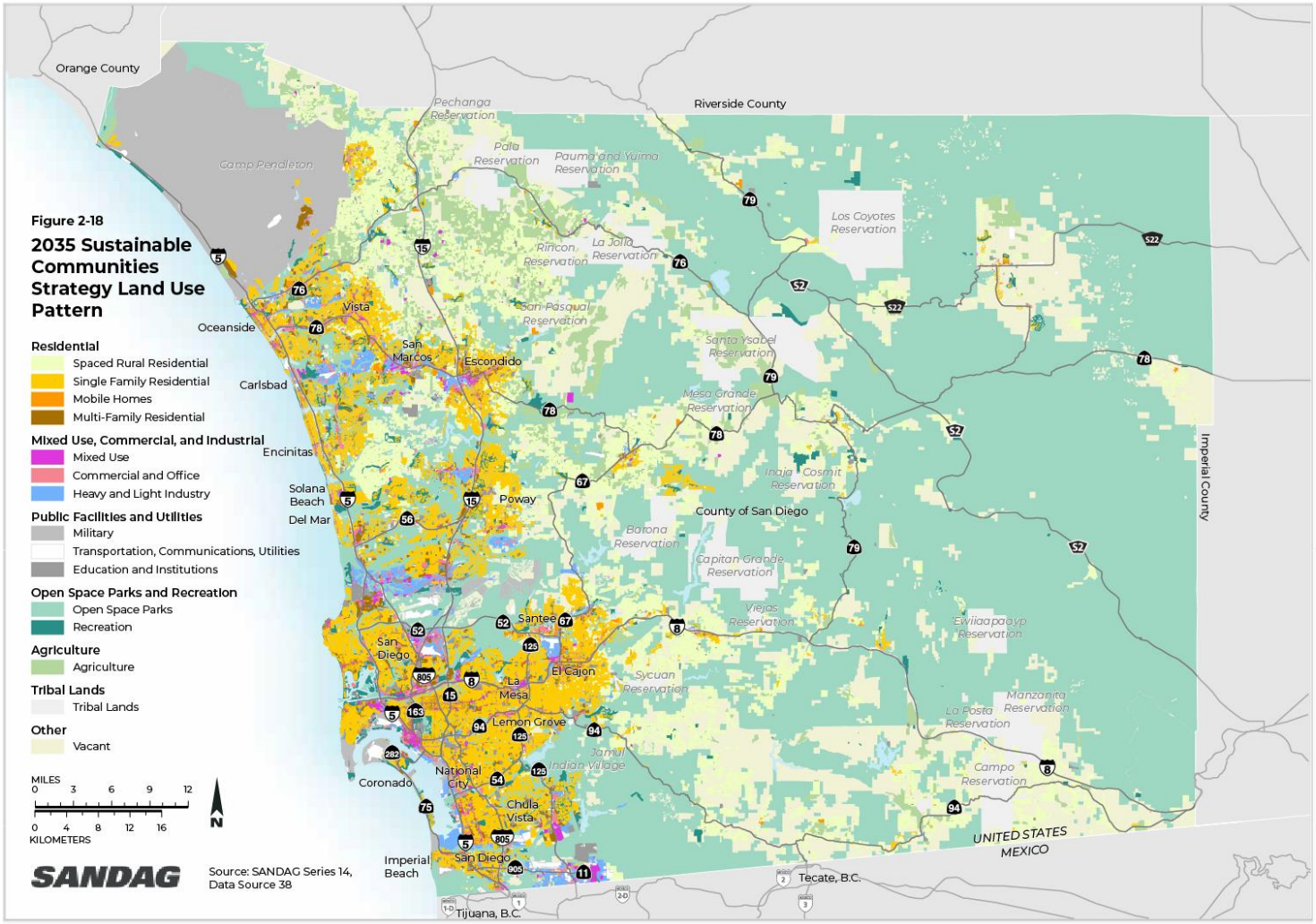
Figure 2-18
2035 Sustainable Communities Strategy Land Use Pattern
Residential
Spaced Rural Residential
Single Family Residential
Mobile Homes
Multi-Family Residential
Mixed Use, Commercial, and Industrial
Mixed Use
Commercial and Office
Heavy and Light Industry
Public Facilities and Utilities
Military
Transportation, Communications, Utilities
Education and Institutions
Open Space Parks and Recreation
Open Space Parks
Recreation
Agriculture
Agriculture
Tribal Lands
Tribal Lands
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Source: SANDAG Series 14, Data Source 38
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UNITED STATES
MEXICO

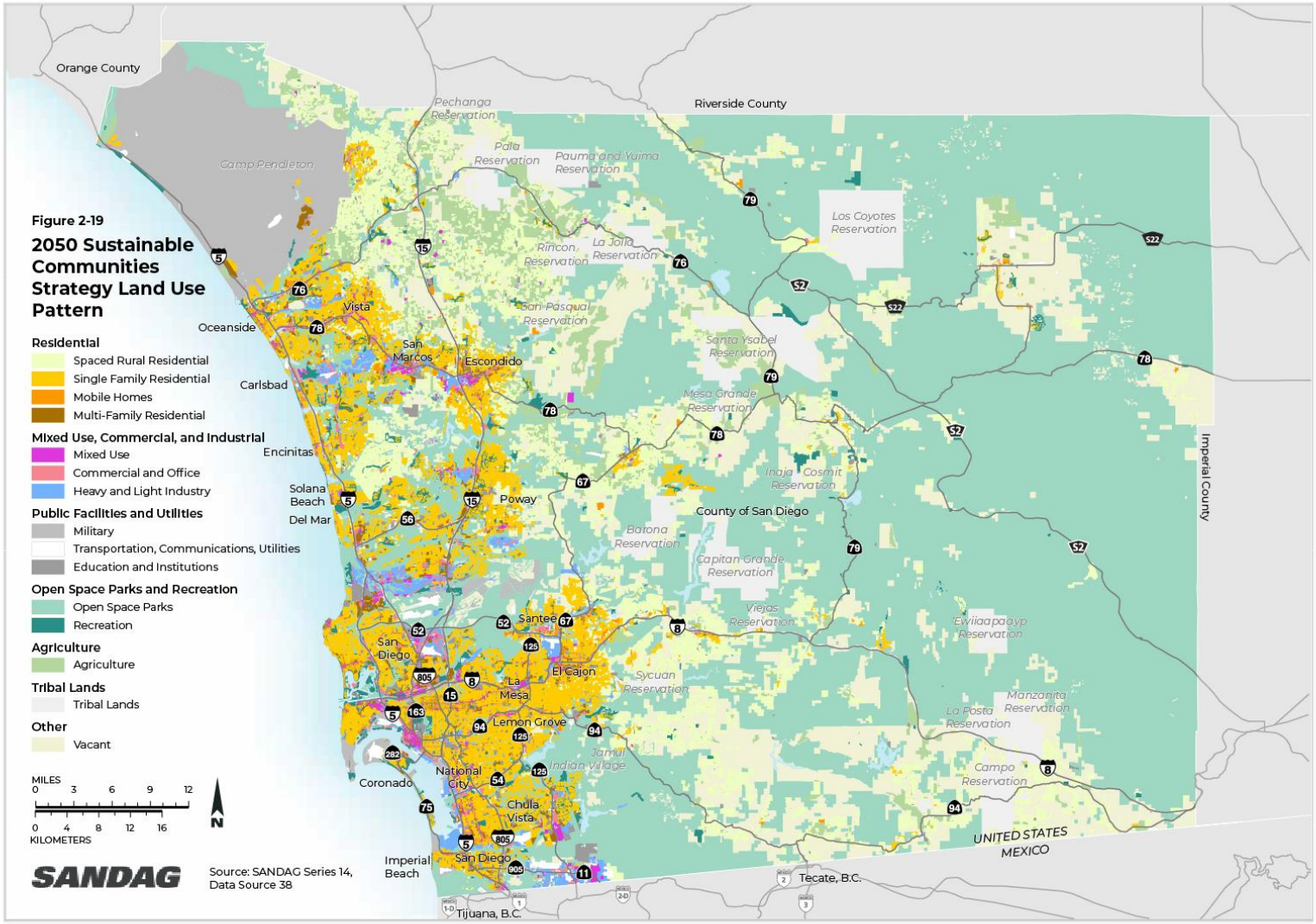


Figure 2-19
2050 Sustainable Communities Strategy Land Use Pattern
Residential
Spaced Rural Residential
Single Family Residential
Mobile Homes
Multi-Family Residential
Mixed Use, Commercial, and Industrial
Mixed Use
Commercial and Office
Heavy and Light Industry
Public Facilities and Utilities
Military
Transportation, Communications, Utilities
Education and Institutions
Open Space Parks and Recreation
Open Space Parks
Recreation
Agriculture
Agriculture
Tribal Lands
Tribal Lands
Other
Vacant
MILES
0 3 6 9 12
0 4 8 12 16
KILOMETERS
N
SANDAG
Source: SANDAG Series 14, Data Source 38
Orange County
Riverside County
Imperial County
County of San Diego
Camp Pendleton
Pechanga Reservation
Pala Reservation
Pauma and Yuima Reservation
Rincon Reservation
La Jolla Reservation
Los Coyotes Reservation
San Pasqual Reservation
Santa Ysabel Reservation
Mesa Grande Reservation
Inaja Cosmit Reservation
Barona Reservation
Capitan Grande Reservation
Viejas Reservation
Ewiiaapaayp Reservation
Sycuan Reservation
La Posta Reservation
Manzanita Reservation
Campo Reservation
Jamul Indian Village
Oceanside
Vista
San Marcos
Escondido
Carlsbad
Encinitas
Solana Beach
Del Mar
Poway
Santee
San Diego
El Cajon
La Mesa
Lemon Grove
National City
Coronado
Chula Vista
Imperial Beach
UNITED STATES
MEXICO
Tecate, B.C.
Tijuana, B.C.

Approximately 78 percent of the forecasted regional population increase between 2036 and 2050 is in the City of San Diego (37 percent), San Marcos (13 percent), and City of Chula Vista (28 percent). Similarly, these three jurisdictions accommodate approximately 89 percent of new housing units and 72 percent of new jobs, respectively, between 2036 and 2050.

In the City of San Diego, the communities with the highest proportion of the forecasted population and housing unit increases are the Downtown, Midway Pacific Highway, and Uptown. The highest proportions of forecasted job increases are in the communities of Downtown, Otay Mesa, Kearny Mesa, and University City.

In the unincorporated County, the communities with the highest proportion of the forecasted population increases are Lakeside, North County Metro, and Valle de Oro. There are no housing units built in the Unincorporated area after 2035. The only significant increase in jobs over that period is in Otay.

2.2.3 SB 375 SUSTAINABLE COMMUNITIES STRATEGY

SUSTAINABLE COMMUNITIES STRATEGY LAND USE PATTERN

SB 375 requires the SCS to include a pattern for forecasted growth and development that accomplishes the following:

- Achieves the regional GHG reduction targets when combined with the transportation network.
- Accommodates the RHNA Determination.
- Utilizes the most recent planning assumptions.

As such, the forecasted development pattern for the SCS is driven by regional goals for sustainability, mobility, housing affordability, and economic prosperity. The SCS land use pattern uses Mobility Hubs to concentrate future development. Mobility Hubs are incentivized land uses and transportation infrastructure that maximize the connectivity of the transportation system set out in the proposed Plan. Mobility Hubs are proposed for communities with a high concentration of people, destinations, and travel choices where densification is envisioned in the SCS, subject to approval of local jurisdictions. Mobility Hubs are unique to each community and reflect respective community transportation needs. They offer on-demand travel options and supporting infrastructure that enhance connections to high-quality Transit Leap services while helping people make short trips to local destinations around their community on Flexible Fleets. Mobility Hubs can span one, two, or a few miles based on community characteristics.

In the SCS land use pattern, forecasted housing unit and job growth are within these areas of the region, which overlap with areas identified by local jurisdictions for increased density such as Smart Growth Opportunity Areas and transit priority areas. Additionally, the SCS land use pattern identifies areas within the region sufficient to house the 6th Cycle RHNA Plan allocations. The adopted 6th cycle RHNA Plan[2] for the San Diego region, which is a component of the proposed Plan's SCS, covers the 8-year period from 2021 through 2029. The RHNA allocates housing need in four income categories for each of the cities and San Diego County to use in their housing elements. The cities and County are required to update their housing elements to include RHNA

[2] On July 21, 2020, HCD approved SANDAG's adopted 6th Cycle RHNA Plan, upon finding it consistent with HCD's July 5, 2018, RHNA Determination of 171,685 housing unit need.

allocations every 8 years; updates can be required every 4 years if updated housing elements are not adopted by certain timelines.

More information about the SCS land use pattern can be found in Chapter 2 of the proposed Plan as well as Appendices~~x~~ D and F to the proposed Plan.

GENERAL INTENSIFICATION OF LAND USES

The SCS land use pattern represents a continuing trend in the San Diego region to provide more housing and job opportunities in the existing urbanized areas of the region. In 2012, SANDAG projected 17 percent of future housing growth would occur in the unincorporated area of the county under local general plans at the time. Today, SANDAG expects 12 percent of growth to occur in the unincorporated areas, much of that focused in the Lakeside, Spring Valley, and North County Metro. Tables 2-2 through 2-4 above show the forecasted growth in population, jobs, and housing units for each jurisdiction from the SCS land use pattern.

In terms of growth in total jobs over the forecasted time period, SANDAG expects the majority of job growth to occur in the City of San Diego. The community planning areas in the City of San Diego that show the highest growth in jobs are Downtown, Kearny Mesa, and Otay Mesa. However, in terms of percent growth, Chula Vista and San Marcos are forecasted to grow by 50 percent or more. Tables 2-1 through 2-3 present base year and forecasted population, employment, and housing data for the 19 local jurisdictions, respectively.

As discussed above, the SCS land use pattern concentrates development into either Mobility Hub or Smart Growth Opportunity Areas.[3] Tables 2-5 through 2-7 show the growth in Mobility Hubs of population, jobs, and housing units over the forecasted timeline. Table 2-5 shows that in 2016, less than half of the region's population live in Mobility Hub areas, but by 2050 more than half do. The pattern is similar with housing units, as seen in Table 2-7. The concentration of jobs in Mobility Hubs can be seen in 2016, and this trend continues through the end of the forecast. Figures 2-20 through 2-22 show the 2025, 2035, and 2050 housing and employment density, respectively, with the Mobility Hubs.

Table 2-5
Total Population by Mobility Hub

Mobility Hub Name	2016	2025	2035	2050
Mobility Hub Total	1,453,913	1,657,130	1,875,367	1,988,009
Coastal	172,824	178,181	190,284	197,683
Gateway	318,246	353,777	390,145	395,748
Major Employment Center	253,054	315,300	396,722	430,929
Suburban	392,726	433,156	455,086	487,082
Urban	317,063	376,716	443,130	476,567
Outside of Mobility Hub Network	1,855,597	1,813,718	1,744,981	1,758,064
Regional Total	3,309,510	3,470,848	3,620,348	3,746,073

Source: SANDAG 2021b.

[3] In-progress scheduled development or "pipeline" projects were also included in the SCS land use pattern and may be outside of the Mobility Hub or Smart Growth Opportunity Area boundaries.

Table 2-6
Total Jobs by Mobility Hub

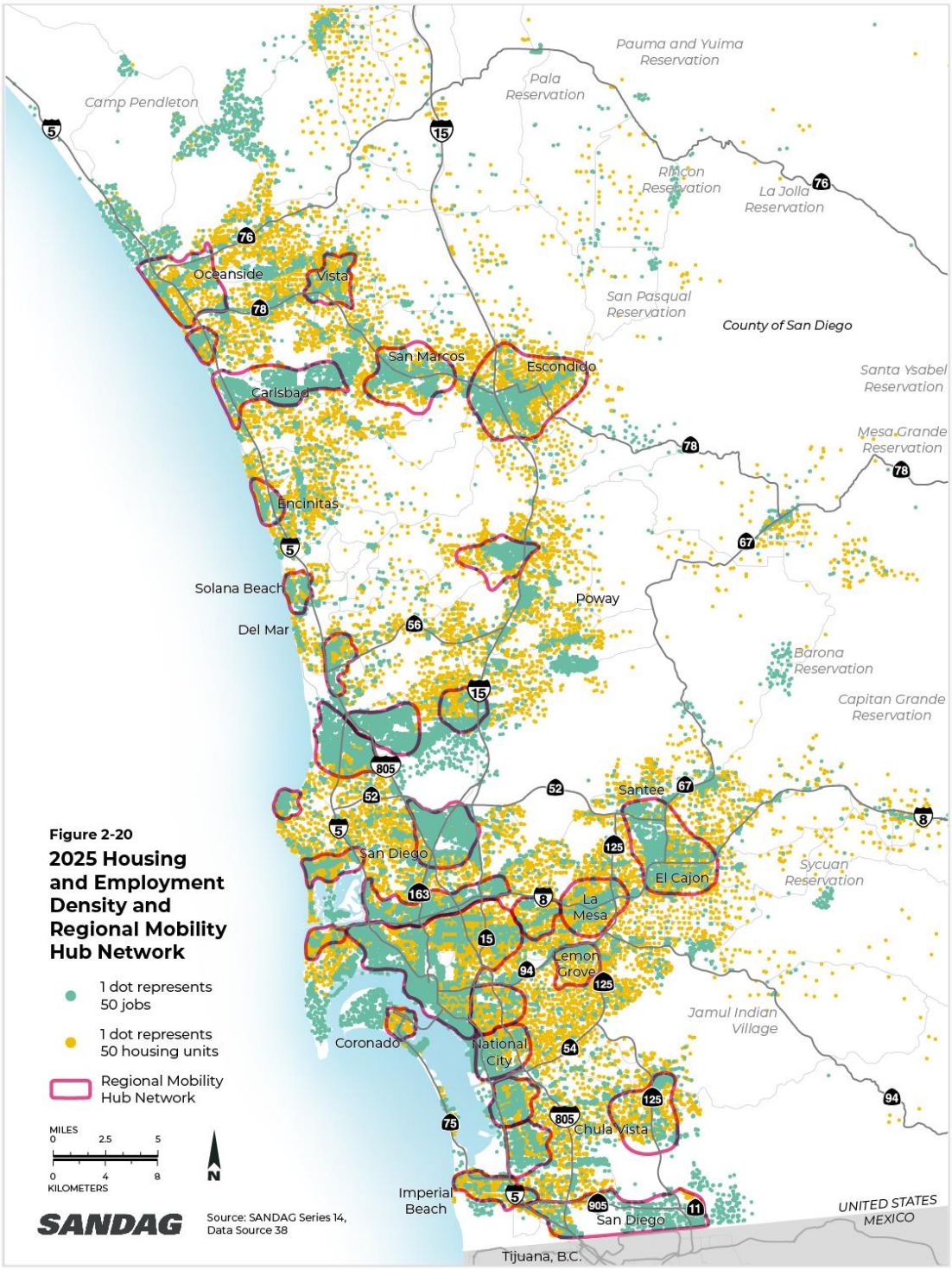
Mobility Hub Name	2016	2025	2035	2050
Mobility Hub Total	1,113,109	1,213,064	1,347,193	1,484,038
Coastal	78,247	79,873	82,603	85,544
Gateway	153,855	168,685	193,254	218,401
Major Employment Center	491,342	533,327	594,637	655,856
Suburban	164,146	175,202	192,714	211,651
Urban	225,519	255,977	283,985	312,586
Outside of Mobility Hub Network	533,310	548,683	574,282	602,280
Regional Total	1,646,419	1,761,747	1,921,475	2,086,318

Source: SANDAG 2021b.

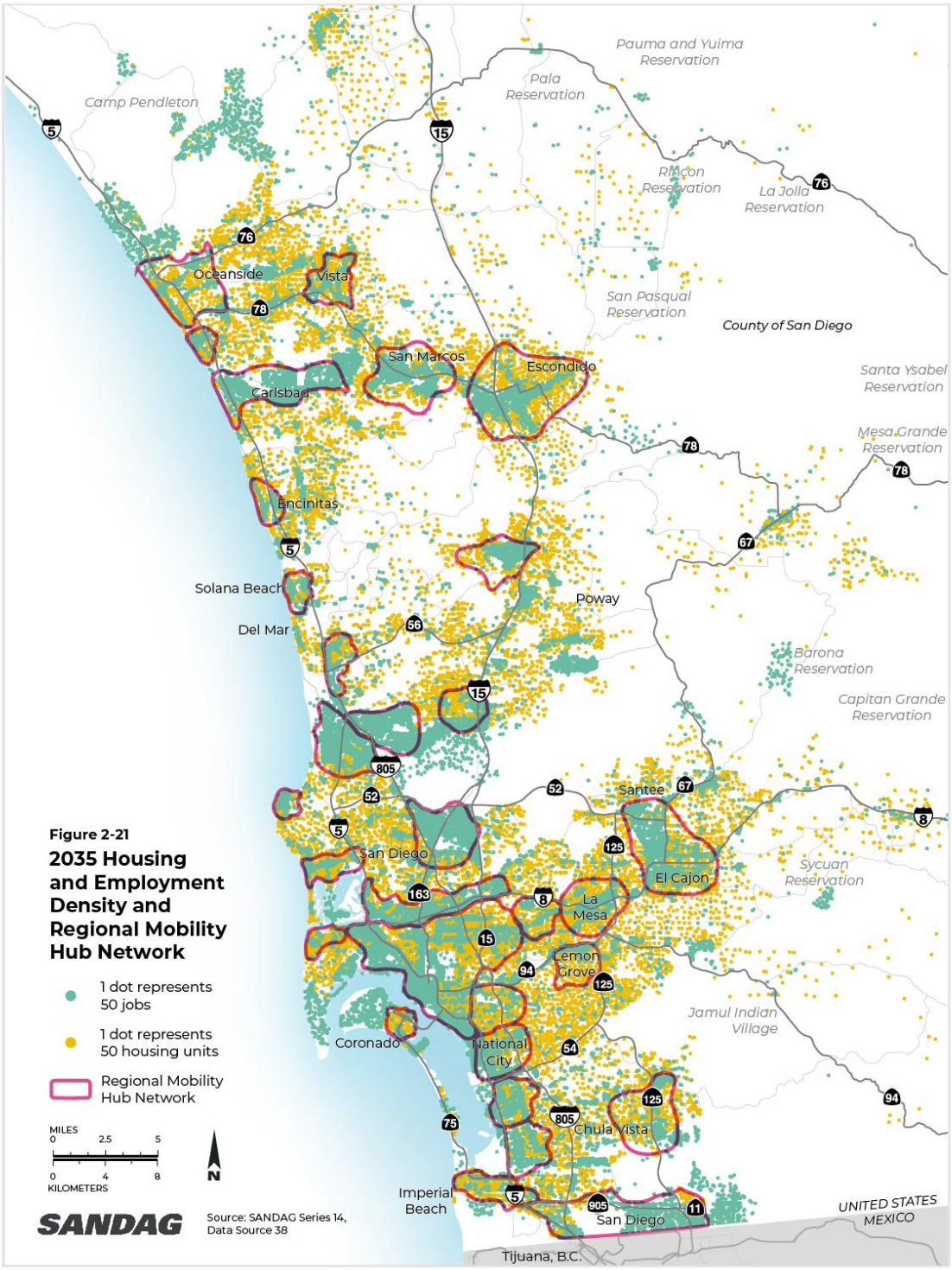
Table 2-7
Total Housing Units by Mobility Hub

Mobility Hub Name	2016	2025	2035	2050
Mobility Hub Total	533,521	624,884	743,711	801,537
Coastal	75,078	77,962	87,665	90,392
Gateway	106,569	121,999	138,813	142,289
Major Employment Center	89,685	114,623	153,360	170,879
Suburban	132,231	152,789	168,617	185,473
Urban	129,958	157,511	195,256	212,504
Outside of Mobility Hub Network	657,034	663,332	666,155	669,762
Regional Total	1,190,555	1,288,216	1,409,866	1,471,299

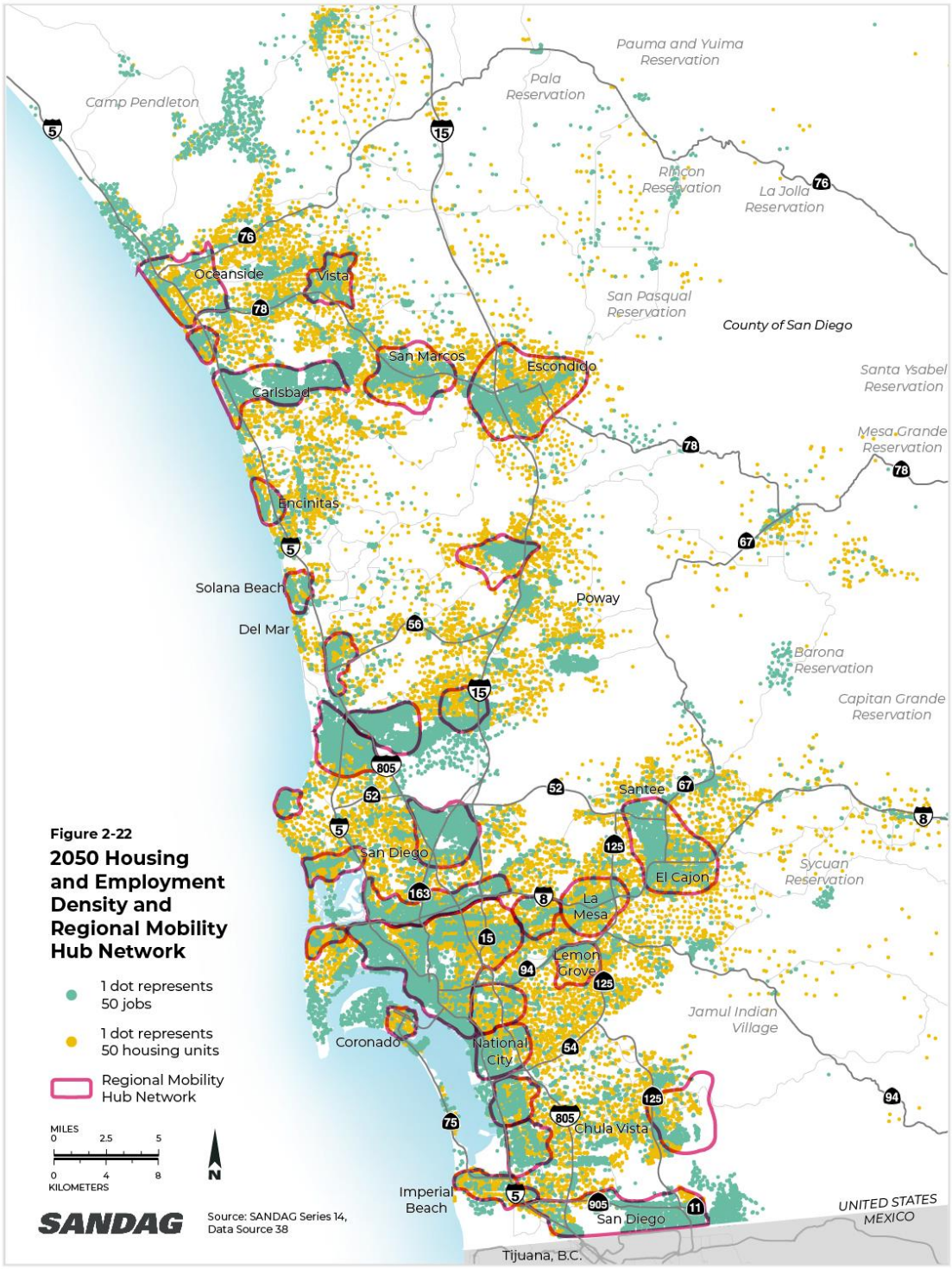
Source: SANDAG 2021b.



These maps show generalized regional Mobility Hub boundaries for planning purposes and are not intended to be binding or precise. Mobility Hub boundaries are subject to refinement in close coordination with the affected jurisdiction(s).



These maps show generalized regional Mobility Hub boundaries for planning purposes and are not intended to be binding or precise. Mobility Hub boundaries are subject to refinement in close coordination with the affected jurisdiction(s).



These maps show generalized regional Mobility Hub boundaries for planning purposes and are not intended to be binding or precise. Mobility Hub boundaries are subject to refinement in close coordination with the affected jurisdiction(s).

2.2.4 GHG REDUCTION TARGETS

In accordance with SB 375, the proposed Plan must include an SCS that demonstrates that the San Diego region will reduce GHG emissions (GHG emissions for SB 375 compliance are calculated using carbon dioxide [CO_2] emissions) from automobiles and light-duty trucks to achieve, if there is a feasible way to do so, the GHG emission reduction targets approved by CARB. Targets are expressed as percent change in per capita GHG emissions relative to 2005. Consistent with the targets established by CARB, the targets for the San Diego region are a 15 percent per capita reduction in passenger vehicle GHG emissions by 2020 and a 19 percent per capita reduction by 2035. The proposed Plan would exceed the GHG emission reduction targets for 2020 and 2035 established by CARB, as shown in Table 2-8. While CARB does not set targets beyond 2035, SANDAG has provided data in Section 4.8, *Greenhouse Gas Emissions*, of this EIR utilizing the same methodology to show continued GHG emission reductions beyond 2035.

Table 2-8
Proposed Plan Estimated SB 375 Greenhouse Gas Emissions Reductions for Cars and Light Trucks

Target Year	CARB Target	Proposed Plan
2020	15%	17%
2035	19%	20%

Source: Appendix D of the proposed Plan (SANDAG 2021c).

2.3 CONTENT AND ORGANIZATION OF THE PROPOSED PLAN

The proposed Plan consists of three chapters and a series of appendices with supporting information. The major contents of each chapter are summarized below.

- **Chapter 1: A Bold New Vision for the 2021 Regional Plan**

  Describes our region's challenges, discusses anticipated growth in the San Diego region, and outlines the proposed Plan's Vision and Goals.

- **Chapter 2: Sustainable Communities Strategy – A Framework for the Future**

  Describes the proposed Plan SCS—the package of projects, policies, land use strategies, and programs ~~and~~ that will achieve the Vision and Goals.

- **Chapter 3: Paying for the Regional Plan, Forming Partnerships and Taking Action, and Monitoring How the Proposed Plan Performs**

  Describes the planning, investments, actions, and partnerships needed to implement the ~~2021~~ proposed Plan, and the metrics that will be used to monitor implementation and performance over time.

2.4 EIR PROJECT OBJECTIVES

The underlying purpose of the project is to develop a Regional Plan that meets federal and State planning requirements, and to address the many regional transportation challenges that are deeply connected to larger societal issues that impact everyone's quality of life, including economic and social inequities, climate change, public health, and safety. To address the many challenges that confront the region, for both the population of today and the population of the future, a new vision is needed for the transportation system that is built to increase individual opportunities and choices for getting around. This expanded system should integrate land

use planning and transportation improvements and use technology to offer more options for travel and increase safety. The outcome would be greater mobility and transportation connectivity, and a shift away from overloading our roadways with cars, even as our regional population continues to expand.

Given this purpose, SANDAG developed the following project objectives for this EIR:

1. Focus population and employment growth in mobility hubs and existing urban areas to protect sensitive habitat and natural resource areas.
2. Provide transportation investments that support compact land development patterns and reduce sprawl.
3. Meet greenhouse gas emissions targets established for the San Diego region by the California Air Resources Board and the SANDAG Board of Directors.
4. Provide transportation investments and land use patterns that promote social equity.
5. Provide transportation investments and land use patterns that reduce vehicle miles traveled and improve air quality.
6. Provide multi-modal access to employment centers and key destinations for all communities.
7. Enhance the efficiency of the transportation network for moving people and goods through the deployment of new technologies.

2.5 PROJECT CHARACTERISTICS

The proposed Plan includes the SCS described in Section 2.2.3, *SB 375 Sustainable Communities Strategy,* as well as the 5 Big Moves, transportation network improvements, and supporting policies and programs described in this section.

The proposed Plan creates an integrated transportation system throughout the 11 Major Travel Corridors and the Rural Corridors of the San Diego region. The system components in each Major Travel Corridor consist of transportation improvements under each of the 5 Big Moves, enhanced Airport Connectivity, improved Border/Ports of Entry, and Supporting Policies and Programs. Each of these components is described in greater detail below.

2.5.1 THE 5 BIG MOVES

COMPLETE CORRIDORS

Complete Corridors provide dedicated, safe spaces for everyone, including freight vehicles as well as people who walk, bike, drive, ride transit, and use Flexible Fleets. Key features and benefits of Complete Corridors include Managed Lanes (ML) that offer priority access to transit, carpool, and vanpool users, and access to single-occupant drivers for a fee; Active Transportation and Demand Management (ATDM) technology that enables transportation operators to modify how infrastructure and services are used based on changing traffic conditions; high-speed communication networks that allow connected vehicles, smartphones, and smart roads to share data to reduce collisions, increase network capacity, and improve travel times; priority access to roadways for public transit, active transportation, and shared mobility services; managed curb space that accommodates different uses based on levels of traffic at varying times of the day; and electric vehicle (EV) infrastructure, including public charging and hydrogen fueling stations.

As shown in Table 2-9, each Complete Corridor type is composed of specific multimodal elements designed to serve four distinct trip needs and interface with Transit Leap, Mobility Hubs, and Flexible Fleets. Modal maps of the Complete Corridors in the proposed Plan for years 2025, 2035, and 2050 are shown on Figures 2-23 through 2-25. Managed Lanes (MLs) and Freeway (F) lanes are included in the figures to indicate the number of those lanes included in the total configuration of that phase. For example, a freeway segment labeled "8F+2ML" would represent eight Freeway lanes plus two Managed Lanes on that segment.

Table 2-9
Complete Corridors

Type	Travel Shed/Trip Purpose/Characteristics	Functionality/ Multimodal Elements	Key Performance Characteristics
Regional and Interregional	Regional and Interregional commuting Serves long distance commute trips (>20 miles), regional employment and industrial centers and primary regional freight backbone	High-speed transit, regional freight, active transportation	About 65–70% of freeway vehicle miles traveled (VMT) (total for all type A) 60% of trips >20 miles 66% of total regional freeway Delay
Urban Connectivity	Regional urban commuting Serves long and medium distance commute trips (>5 miles), part of primary regional freight backbone	Transit, regional freight, and active transportation	25–30 % of total freeway VMT 80–90% of trips >5 miles 35% of regional freeway delay
Rural Access and Connectivity	Provide rural access and connectivity: non commuting long stretches of rural roadway connecting nearby rural towns and lands to the interstate system Serves long and medium distance trips (>5 miles) with mountainous terrain and limited transit option	Transit: Rural bus, commuter bus, local bus International/Cross Border/subregional freight Active Transportation	About 5% of regional freeway VMT 80% of trips lengths 5–20 miles About 1% of regional freeway delay
CC Regional Arterial Network	Local commuting: primary arterial network connecting employment and industrial centers to residential neighborhoods Trip distance 5–20 miles with bus and light rail providing transit backbone	Transit: Light Rail Transit (LRT)/Bus Rapid Transit (BRT)/*Rapid* bus/Express bus Short haul trips (local delivery) Active transportation: urban network, first and last mile to Mobility Hubs	Generally represents 65% of trips <5 miles

Complete Corridors integrates multiple transportation components: Managed Lanes, Connectors and Managed Lane Connector, ATDM and Smart Intersection Systems (SIS), Active Transportation, Rural Corridors, Arterial Projects, and Goods Movement. Each of these components is discussed in greater detail below.


Pauma and Yuima Reservation
Pala Reservation
Camp Pendleton
Rincon Reservation
La Jolla Reservation
Oceanside
Vista
San Pasqual Reservation
County of San Diego
San Marcos
Escondido
Santa Ysabel Reservation
Carlsbad
8F+HOV/HOT
Mesa Grande Reservation
Encinitas
Solana Beach
Poway
Del Mar
Barona Reservation
Capitan Grande Reservation
Santee
San Diego
El Cajon
Sycuan Reservation
La Mesa
Lemon Grove
Jamul Indian Village
Coronado
National City
Chula Vista
Imperial Beach
4T + POE
San Diego
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 2-23
2025
Complete Corridors
Interchange and Arterial Operational Improvement
Managed Lanes Connector
Interregional Corridor Managed Lanes
New Port of Entry
MILES
0 2.5 5
0 4 8
KILOMETERS
N
SANDAG


2C + Ops
Pauma and Yuima Reservation
Pala Reservation
Camp Pendleton
Rincon Reservation
La Jolla Reservation
Oceanside
Vista
San Pasqual Reservation
4F+4ML
County of San Diego
San Marcos
Escondido
Santa Ysabel Reservation
Carlsbad
8F+HOV/HOT
Mesa Grande Reservation
Encinitas
Solana Beach
Poway
Del Mar
2C + Ops
Barona Reservation
6F/12F+4ML
Capitan Grande Reservation
Figure 2-24
2035
Complete Corridors
6F+4ML
4F+3ML
Santee
4F+ 3ML
Interchange and Arterial Operational Improvement (IAOI)
San Diego
6F+ 4ML
6F+ 2ML
Managed Lanes Connector (MLC)
IAOI & MLC
El Cajon
Sycuan Reservation
La Mesa
6F+2TL
6F+2ML
Interregional Corridor Managed Lanes
6F+3ML
Lemon Grove
4F/6F+2ML
Urban Corridor Managed Lanes
6F+2ML
Jamul Indian Village
Rural Corridors Technology and Operational Improvements
Coronado
National City
New Port of Entry
Chula Vista
6F 2ML
MILES
KILOMETERS
Imperial Beach
4T + POE
UNITED STATES
MEXICO
San Diego
Tijuana, B.C.
SANDAG


Figure 2-25
2050
Complete Corridors
Interchange and Arterial Operational Improvement (IAOI)
Managed Lanes Connector (MLC)
IAOI & MLC
Interregional Corridor Managed Lanes
Urban Corridor Managed Lanes
Rural Corridors Technology and Operational Improvements
New Port of Entry
MILES
KILOMETERS
N
SANDAG
2C + Ops
Pauma and Yuima Reservation
Pala Reservation
Camp Pendleton
6F+2ML
6F+3ML
Rincon Reservation
La Jolla Reservation
Oceanside
Vista
6F+4ML
4F+4ML
San Pasqual Reservation
County of San Diego
San Marcos
Escondido
Carlsbad
Santa Ysabel Reservation
Mesa Grande Reservation
Encinitas
Solana Beach
Del Mar
6F/8F +4ML
4F+3ML
Poway
Barona Reservation
6F/12F+4ML
Capitan Grande Reservation
6F+4ML
4F+ 3ML
Santee
4F+ 2ML
El Cajon
Sycuan Reservation
San Diego
6F+ 4ML
6F+ 2ML
La Mesa
6F+2TL
6F+3ML
Lemon Grove
4F/6F+2ML
6F+2ML
Jamul Indian Village
Coronado
National City
4F+2ML
Chula Vista
6F 2ML
Imperial Beach
4T + POE
UNITED STATES
MEXICO
Tijuana, B.C.

Managed Lanes

Managed Lanes offer priority access to people using transit, carpooling, or vanpooling, along with emergency vehicles and low-emission vehicles with appropriate decals. Under the proposed Plan, Managed Lanes are expanded to all urban and interregional highway corridors in the San Diego region. Existing shoulders, high-occupancy vehicle travel lanes, and general-purpose travel lanes are repurposed to create Managed Lanes and maximize existing infrastructure. ~~Connectors~~ Interchange and Arterial Operation Improvements are improvements to facilities and adjacent roadways that connect two intersecting facilities~~freeways or highways~~. Managed Lane Connectors specifically connect Managed Lanes, and direct access ramps allow buses, carpools, vanpools, and motorcycles, along with emergency vehicles and low emission vehicles with appropriate decals, to access the Managed Lanes in the center of the freeway. Managed Lanes, Interchange and Arterial Operational Improvements~~Connectors~~, and Managed Lane Connectors by phase year are shown on Figures 2-23 through 2-25.

Active Transportation and Demand Management and Smart Intersection Systems

ATDM enables transportation operators to modify how infrastructure and services are utilized to better respond to changing traffic conditions. Technology also provides people with real-time travel information to help them decide how, when, and where to travel.

SIS use sensors, connected vehicle technology, and mobility applications to facilitate communication among roadway users in order to improve traffic flow, situational awareness, signal operations, and intersection safety.

Active Transportation

The Active Transportation Network in the proposed Plan represents critical connections needed to get people around and is more than just bike facilities. As is the case with current SANDAG Active Transportation projects, each of these facilities also includes safety and connectivity enhancements for people walking, riding micromobility or transit, and driving. For example, past projects have included bus islands, improvements for people with disabilities, signal improvements, sidewalk improvements, landscaping, lighting, mid-block and intersection crossing improvements, stormwater facilities, and a number of other associated treatments. In the future, these projects could also be combined with other technology improvements as they become available.

The SANDAG Active Transportation program initially focused on the development of key high-priority regional Class 1 bikeway corridors, the Bayshore Bikeway, San Diego River Trail, Inland Rail Trail, and Coastal Rail Trail. In 2010, a comprehensive regional bike network was developed in Riding to 2050, the San Diego Regional Bike Plan (SANDAG 2010)). The network includes a regionwide, connected system of bikeways intended to be safe and comfortable for people of all ages and abilities.

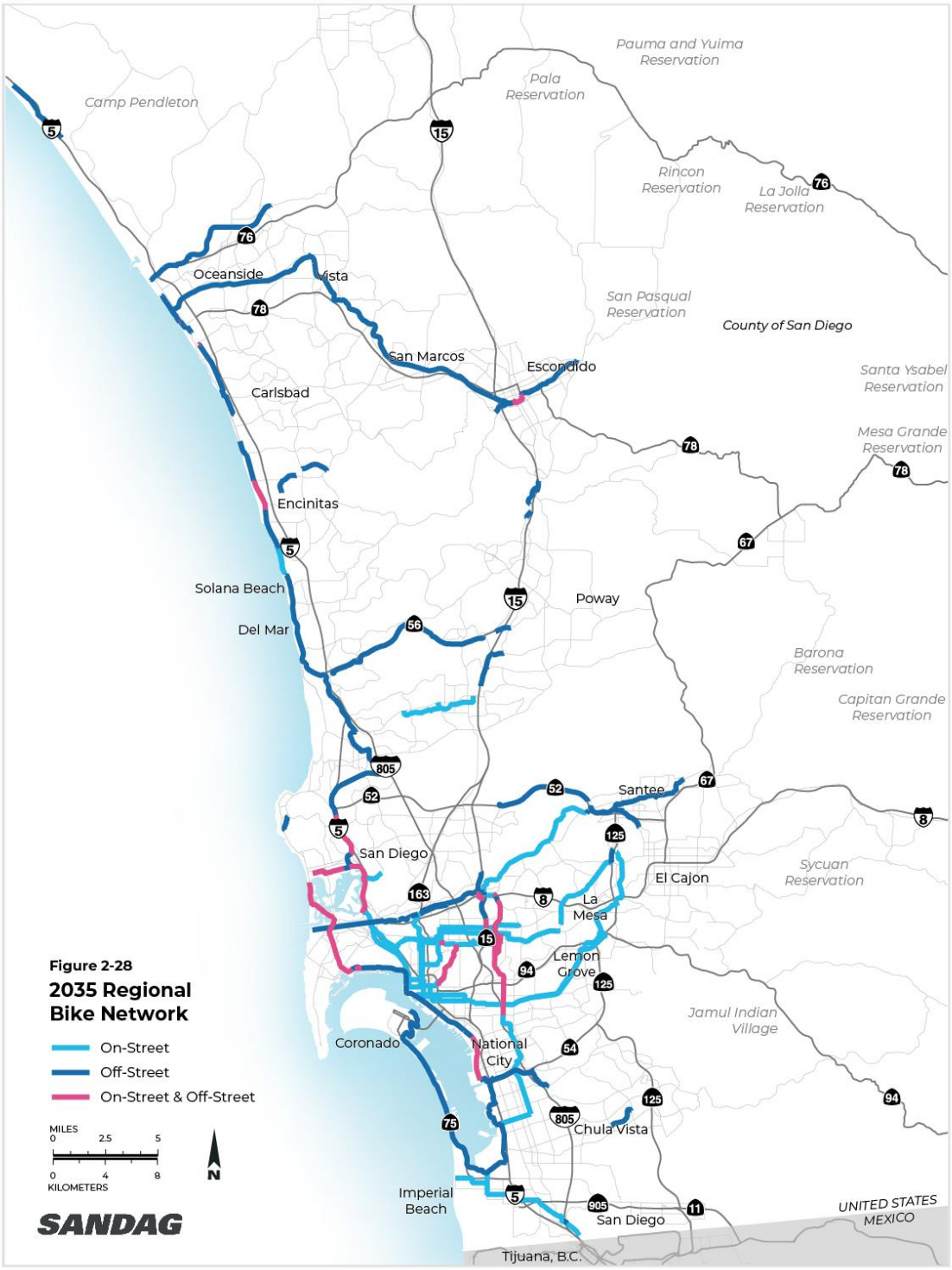
In October 2011, SANDAG adopted the 2050 Regional Transportation Plan/Sustainable Communities Strategy (2050 RTP/SCS), which made an unprecedented commitment to active transportation. In September 2013, the SANDAG Board of Directors approved $200 million in local transportation funding, intended to be leveraged for and supplemented with grant funding, to implement the Regional Bike Plan Early Action Plan (EAP). The EAP is a network of 38 high-priority projects, totaling roughly 77 miles of new bikeways from Riding to 2050 that will make it much easier for people to ride their bikes to school, work, transit stations, and other major destinations. Since that time, SANDAG has been working on public outreach, environmental review, design, and

construction to complete the EAP. The proposed Plan maintains the construction of the Adopted Regional Bike Network as defined in Riding to 2050, prioritizing the funded EAP projects first.

Figure 2-26 shows the Adopted Regional Bike Network and on- or off-street designation (i.e., whether or not the bicycle facility is on a roadway utilized by motor vehicle traffic). Figures 2-27 through 2-29 show the Regional Bike Network by phase.


Pauma and Yuima Reservation
Pala Reservation
Camp Pendleton
Rincon Reservation
La Jolla Reservation
Oceanside
Vista
San Pasqual Reservation
County of San Diego
San Marcos
Escondido
Santa Ysabel Reservation
Carlsbad
Mesa Grande Reservation
Encinitas
Solana Beach
Poway
Del Mar
Barona Reservation
Capitan Grande Reservation
Santee
San Diego
Sycuan Reservation
El Cajon
La Mesa
Lemon Grove
Jamul Indian Village
Coronado
National City
Chula Vista
Imperial Beach
San Diego
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 2-26
Adopted Regional Bike Network
Facility Type
Off Street Bikeway
On Street Bikeway
MILES
KILOMETERS
N
SANDAG


Pauma and Yuima Reservation
Pala Reservation
Camp Pendleton
Rincon Reservation
La Jolla Reservation
Oceanside
Vista
San Pasqual Reservation
County of San Diego
San Marcos
Escondido
Santa Ysabel Reservation
Carlsbad
Mesa Grande Reservation
Encinitas
Solana Beach
Poway
Del Mar
Barona Reservation
Capitan Grande Reservation
Santee
San Diego
El Cajon
Sycuan Reservation
La Mesa
Lemon Grove
Jamul Indian Village
Coronado
National City
Chula Vista
Imperial Beach
San Diego
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 2-27
2025 Regional Bike Network
On-Street
Off-Street
On-Street & Off-Street
MILES
0 2.5 5
0 4 8
KILOMETERS
N
SANDAG


Pauma and Yuima Reservation
Pala Reservation
Camp Pendleton
Rincon Reservation
La Jolla Reservation
Oceanside
Vista
San Pasqual Reservation
County of San Diego
San Marcos
Escondido
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Solana Beach
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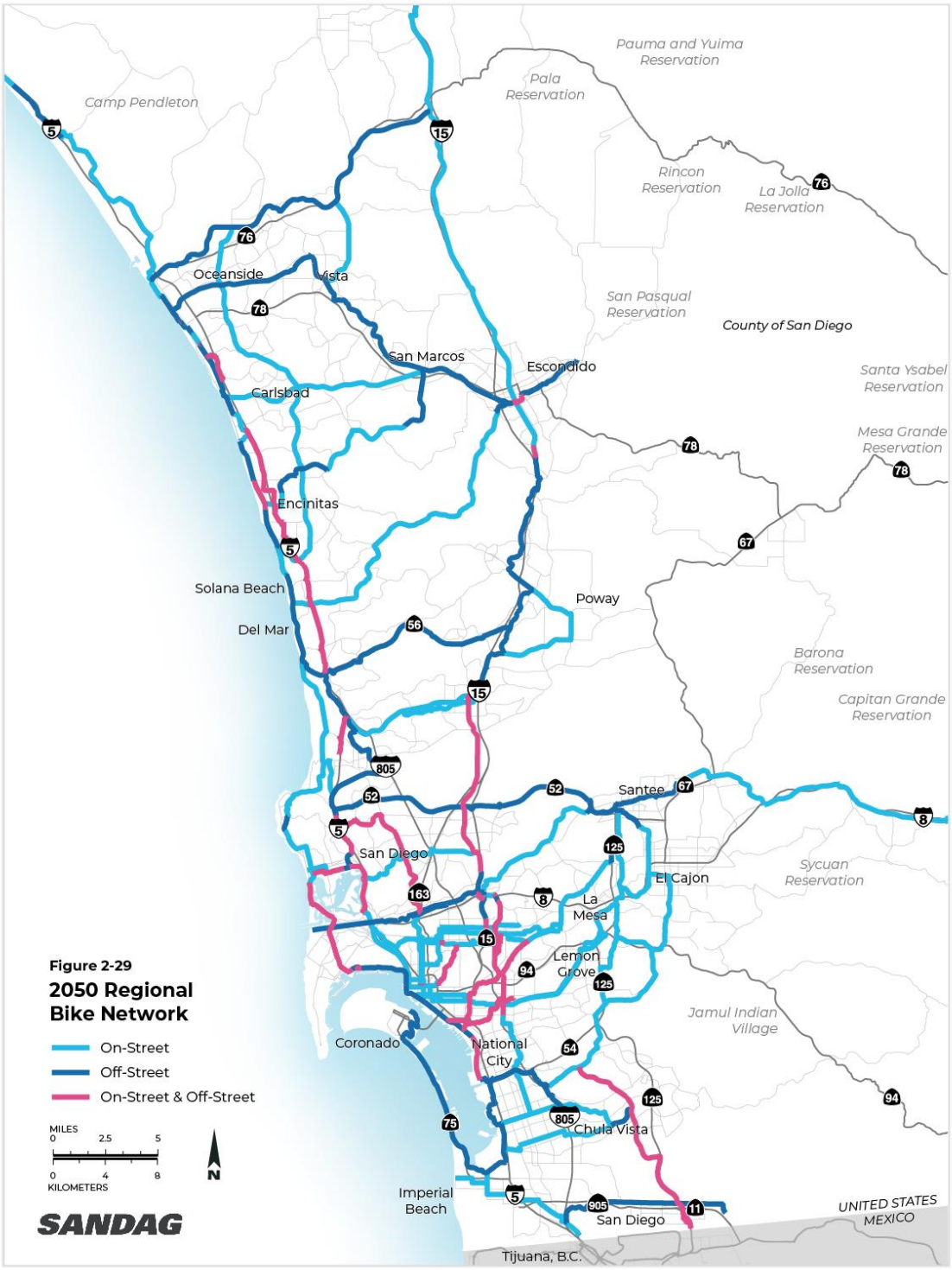
Del Mar
Barona Reservation
Capitan Grande Reservation
Santee
San Diego
El Cajon
Sycuan Reservation
La Mesa
Lemon Grove
Jamul Indian Village
Coronado
National City
Chula Vista
Imperial Beach
San Diego
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 2-28
2035 Regional Bike Network
On-Street
Off-Street
On-Street & Off-Street
MILES
KILOMETERS
N
SANDAG


Pauma and Yuima Reservation
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National City
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San Diego
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 2-29
2050 Regional Bike Network
On-Street
Off-Street
On-Street & Off-Street
MILES
0 2.5 5
0 4 8
KILOMETERS
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SANDAG

Rural Corridors

In addition to the 11 Major Travel Corridors in the San Diego region, there are several Rural Corridors located primarily in the eastern two-thirds of the region. Figure 2-30 depicts the Rural Corridors. Rural Corridors provide rural towns and lands access and connectivity to the interstate system. Under the proposed Plan, Rural Corridors are improved with a focus on safety through shoulder widening, curve straightening, and integration of ATDM and SIS features. Most of these Rural Corridor projects are derived from the Intraregional Tribal Transportation Study (SANDAG 2018) and are shown in Table B-1 of Appendix B. Improvements to SR 67 are incorporated into the San Vicente Major Travel Corridor and are shown in Table B-2 of Appendix B.

Arterial Projects

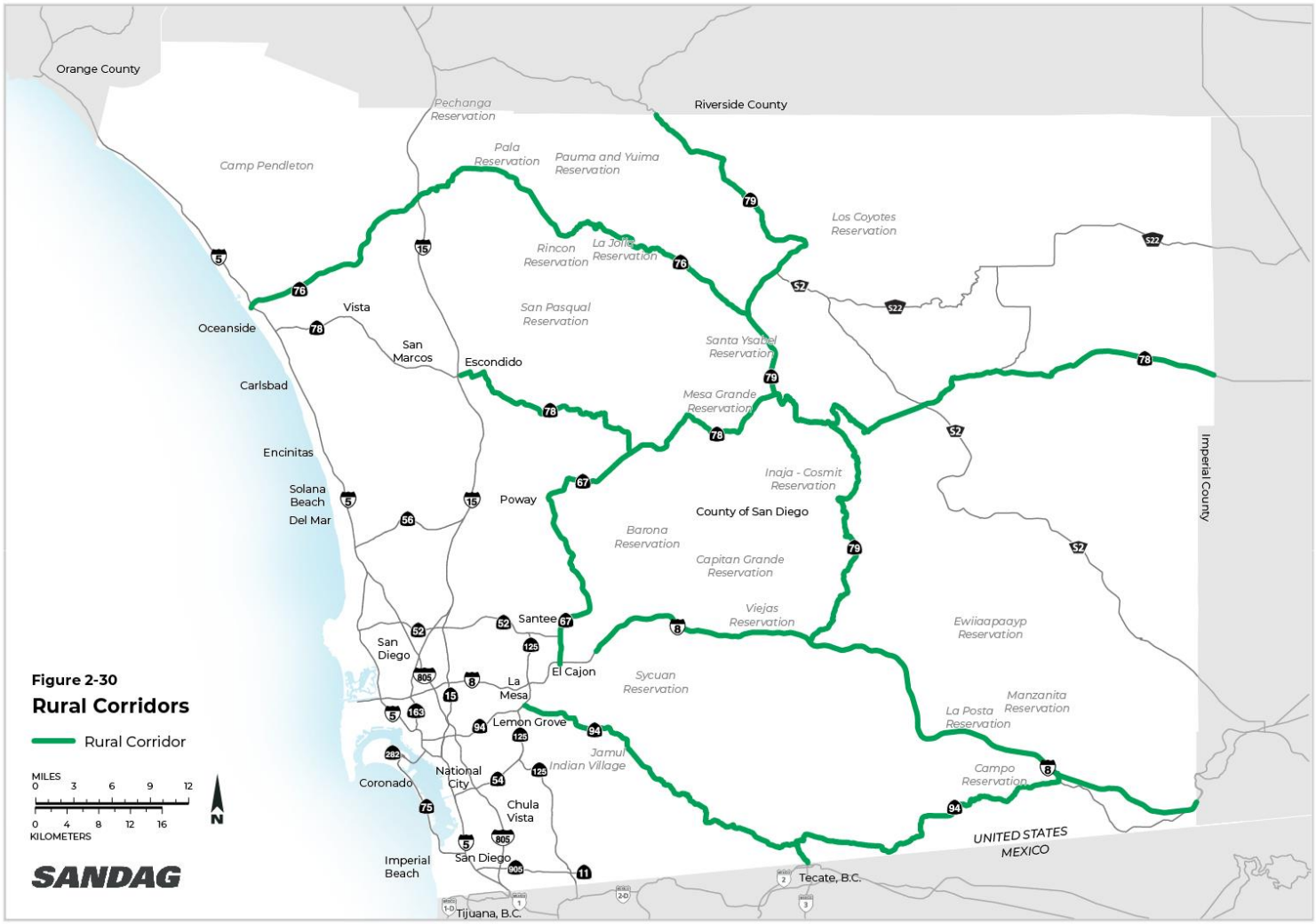
Regional arterials are longer contiguous routes that provide accessibility between communities within the region and that may also allow subregional trips to avoid freeway travel. The Regional Arterial System (RAS) constitutes part of the local street and road network that, in conjunction with the system of highways and transit services, provides for a significant amount of mobility throughout the region. The RAS includes roads eligible for the Regional Transportation Congestion Improvement Program included in the TransNet Ordinance and other funding. The RAS was last updated through an extensive process as part of the 2030 RTP (November 2007). Minor adjustments were requested and incorporated in subsequent Regional Plans and in the proposed Plan. An RAS has been included as part of the RTP since 1989 and includes over 1,000 miles of roads. Figure 2-31 depicts the RAS.

The proposed Plan includes near-term Arterial Projects that are included in the Air Quality Conformity Analysis found in Appendix C of the proposed Plan. Arterial projects are shown in Table B-3 of Appendix B of this EIR, and projects that are part of the RAS are so indicated.

Goods Movement

San Diego has a diverse and expansive goods movement network. The region serves nearly every mode of freight between its interstate highways and arterials, rail corridors, land ports of entry, maritime port, and international airport. San Diego also enjoys a distinct competitive advantage from its proximity to the U.S.–Mexico border. The California–Baja California megaregion hosts one of the world's strongest cross-border supply chains, with over 2 million trucks crossing bidirectionally through San Diego's Otay Mesa and Tecate ports of entry in 2019 alone.

The proposed Plan includes no additional improvements related to goods movement beyond those identified in the phased improvements shown in Tables B-2 and B-4 through B-13 of Appendix B. Only self-financed projects and/or roadway and railway projects with dual passenger and freight benefits are included as those are funded through those specific sources (i.e., transit or highway capital dollars).


Orange County
Riverside County
Imperial County
Camp Pendleton
Pechanga Reservation
Pala Reservation
Pauma and Yuima Reservation
Rincon Reservation
La Jolla Reservation
Los Coyotes Reservation
San Pasqual Reservation
Santa Ysabel Reservation
Mesa Grande Reservation
Inaja - Cosmit Reservation
Barona Reservation
Capitan Grande Reservation
Viejas Reservation
Sycuan Reservation
Ewiiaapaayp Reservation
La Posta Reservation
Manzanita Reservation
Campo Reservation
Jamul Indian Village
Oceanside
Vista
San Marcos
Escondido
Carlsbad
Encinitas
Solana Beach
Del Mar
Poway
County of San Diego
Santee
El Cajon
La Mesa
Lemon Grove
National City
Chula Vista
Coronado
San Diego
Imperial Beach
Tijuana, B.C.
Tecate, B.C.
UNITED STATES
MEXICO
Figure 2-30
Rural Corridors
Rural Corridor
MILES
0 3 6 9 12
0 4 8 12 16
KILOMETERS
N
SANDAG


Pauma and Yuima Reservation
Pala Reservation
Camp Pendleton
Rincon Reservation
La Jolla Reservation
Oceanside
Vista
San Pasqual Reservation
County of San Diego
San Marcos
Escondido
Carlsbad
Santa Ysabel Reservation
Mesa Grande Reservation
Encinitas
Solana Beach
Poway
Del Mar
Barona Reservation
Capitan Grande Reservation
Santee
San Diego
El Cajon
Sycuan Reservation
La Mesa
Lemon Grove
Jamul Indian Village
Coronado
National City
Chula Vista
Imperial Beach
San Diego
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 2-31
Regional Arterial System
Freeways and Highways
Regional Arterials
MILES
0 2.5 5
0 4 8
KILOMETERS
N
SANDAG

Phased Complete Corridor Network Improvements

By 2025

Additional major transportation network improvements include new Managed Lanes on I-5 from Manchester Avenue to Vandegrift, new toll lanes on SR 11 to the Otay Mesa Port of Entry (POE), Interchange and Arterial Operational improvements at SR 94 and SR 125, Otay Mesa POE Commercial Vehicle Enforcement Facility (CVEG) modernization, pilot programs for streamlining commercial vehicle operations for reducing wait times at the Otay Mesa POE, improvements to the Otay Mesa POE southbound truck route, including Otay Truck Route and La Media Road, and tolling equipment and Regional Border Management System investments on SR 11. Funds for optional support such as ongoing maintenance and rehabilitation of the Complete Corridor system are included in the 2025 phase as well.

By 2025, SIS technology investments would be made on the following corridors: I-5, I-15, SR 15, I-805, I-8, SR 78, SR 56, SR 52, SR 94, SR 54, SR 163, SR 125, SR 905, and SR 67. There also would be over 25 improvements to local arterial streets at locations throughout the region, including widenings and extensions of existing roadways, now or replaced bridges, and realignments. Approximately 10 additional regional active transportation projects would be constructed by 2025 in addition to funding support of local bike investments made by the jurisdictions. Several of the regional active transportation projects are in the City of San Diego, but also in other jurisdictions in coastal and inland north county and in coastal south county.

By 2035

Additional major transportation network improvements include new Managed Lanes and Managed Lane Connectors on SR 15, SR 52, SR 94, SR 78, SR 163, SR 125, I-5, I-8, I-15, and I-805. Direct Access Ramps (DARs) are assumed at: I-5/Clairemont Mesa Boulevard, I-5/Voigt Drive, and SR 125/Spring Street/SR 94; and an Interchange and Arterial Operational Improvement ~~Technology Connector~~ is assumed at I-5 and SR 78. ATDM improvements are assumed on I-5, I-805, I-15, and I-8; and SR 15, SR 52, SR 56, SR 78, SR 94, SR 54, SR 125, SR 67, SR 905, and SR 163. Also, shoulder widening and straightening improvements are included on SR 67 from Mapleview Street to Dye Road. Roadway improvements also include freight route designation and access to assist goods movement. Funds for optional support such as ongoing maintenance and rehabilitation of the Complete Corridor system is included in the 2025 to 2035 phase as well.

By 2035, there would be five additional improvements to local arterial streets and over 50 additional regional active transportation projects in locations throughout the region. Several of the regional active transportation projects are in the City of San Diego, but also in other jurisdictions.

By 2050

Additional major transportation network improvements include new Managed Lanes and Managed Lane Connectors on SR 52, SR 56, SR 54, SR 125, and SR 905, and on I-5, I-8, 1 I-5, and I-805. DARs are assumed at SR 125/Jamacha Boulevard, SR 905/Beyer Boulevard, and SR 905/Siempre Viva Road; and an Interchange and Arterial Operational Improvement is ~~Technology Connectors are~~ assumed at ~~I-5/I-8.~~ I-5/SR 56~~. I-5/SR 94. I-15/SR 56. and SR 94/SR 125~~. Rural corridor investments are assumed on SR 76, SR 78, SR 79, SR 94, and I-8. Roadway improvements also include goods movement support with Harbor Drive multimodal corridor improvements, and the Otay Mesa POE pedestrian bridge. Funds for optional support such as ongoing maintenance and rehabilitation of the Complete Corridor system are included in the 2050 phase as well.

By 2050, there are nearly 60 additional regional active transportation projects planned in locations throughout the region.

The phased Complete Corridor transportation network improvements in the proposed Plan, organized by each Major Travel Corridor and denoted by Active Transportation (AT), Complete Corridor (CC), and Goods Movement (GM), are shown in Tables B-2 and B-4 through B-13 of Appendix B. The phased Rural Corridor projects in the Proposed Plan are shown in Table B-1 of Appendix B. The phased Arterial Projects in the proposed Plan are shown in Table B-3 of Appendix B.

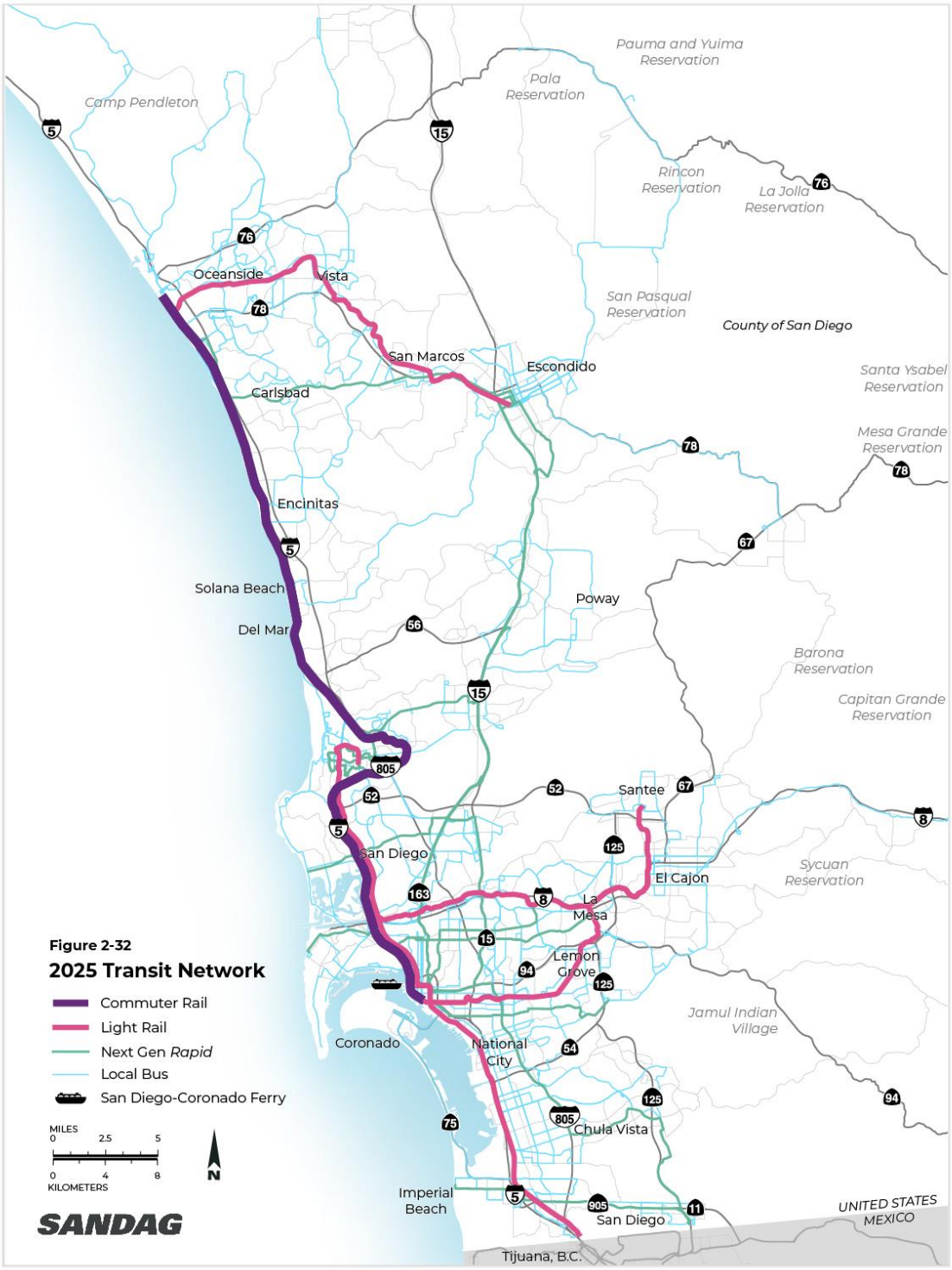
TRANSIT LEAP

Transit Leap will create a complete network of high-speed, high-capacity, and high-frequency transit services that connect major residential areas with employment centers and attractions throughout the San Diego region. Transit Leap services will connect to supporting Flexible Fleets in Mobility Hubs. New highspeed transit services—covering longer distances with limited stops—may be separated from vehicle traffic with bridges, tunnels, or dedicated lanes. Improvements to existing transit services—such as the Trolley, COASTER, SPRINTER, and Rapid—may include additional rail tracks, more frequent service, dedicated transit lanes, and traffic signal priority to keep transit moving quickly. Modal maps of Transit Leap services in the proposed Plan for years 2025, 2035, and 2050 are shown on Figures 2-32 through 2-34, respectively. The attributes and specific functionalities of Transit Leap services in the proposed Plan are shown below in Table 2-10.

Table 2-10
Transit Leap Services Included in the Proposed Plan

Type of Service	Purpose	Speed	Distance and Station Spacing	Infrastructure
Commuter Rail	Commuter Rail lends itself to longer trips and interregional travel.	Operates with speeds up to 110 mph.	Routes can exceed distances of over 100 miles, with spacing of 10 miles or more between stations.	Transit Leap Commuter Rail operates exclusively on fully grade separated guideways, similar to high-speed rail.
Light Rail	Facilitate shorter, more regional trips than Commuter Rail.	These services operate at average speeds of up to 30 mph, with a maximum speed of 55 mph.	LRT routes generally have station spacing of 1 mile at minimum.	LRT services are partially grade separated guideways, such as the current light rail service in the region (MTS Trolley and the SPRINTER).

Type of Service	Purpose	Speed	Distance and Station Spacing	Infrastructure
Next Generation *Rapid*	Next Generation *Rapid* services seek to improve existing premium or express bus services by leveraging technology and dedicated bus infrastructure to improve operating speeds.	Next Generation *Rapid* services operate at average speeds of up to 35 mph, with a maximum of 65 mph.	Route range from 10 to 40 miles in length with station spacing from 0.5 to 5 miles.	These services run in a fixed guideway or a dedicated lane during peak periods on major arterial corridors and freeway managed lanes, requiring vehicle priority to reduce or minimize conflicts.
Local Bus Routes and Flexible Fleets	These services better facilitate local, short distance trips. Future services may be supplied using on-demand Flexible Fleet vehicles (for more detail see Flexible Fleets section)	Local Bus and Flexible Fleet services operate at average speeds up to 25 mph, with a maximum speed of 65 mph.	These local routes can have route distances of various lengths, with stations spaced from 0.25 to over 1 mile in length.	Buses receive vehicle priority at critical spots along the route, as well as at major signalized intersections. Flexible Fleets services are similar to existing local bus services in that they run on major roadways and local streets


Pauma and Yuima Reservation
Pala Reservation
Camp Pendleton
Rincon Reservation
La Jolla Reservation
Oceanside
Vista
San Pasqual Reservation
County of San Diego
San Marcos
Escondido
Carlsbad
Santa Ysabel Reservation
Mesa Grande Reservation
Encinitas
Solana Beach
Poway
Del Mar
Barona Reservation
Capitan Grande Reservation
Santee
San Diego
El Cajon
Sycuan Reservation
La Mesa
Lemon Grove
Jamul Indian Village
Coronado
National City
Chula Vista
Imperial Beach
San Diego
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 2-32
2025 Transit Network
Commuter Rail
Light Rail
Next Gen Rapid
Local Bus
San Diego-Coronado Ferry
MILES
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KILOMETERS
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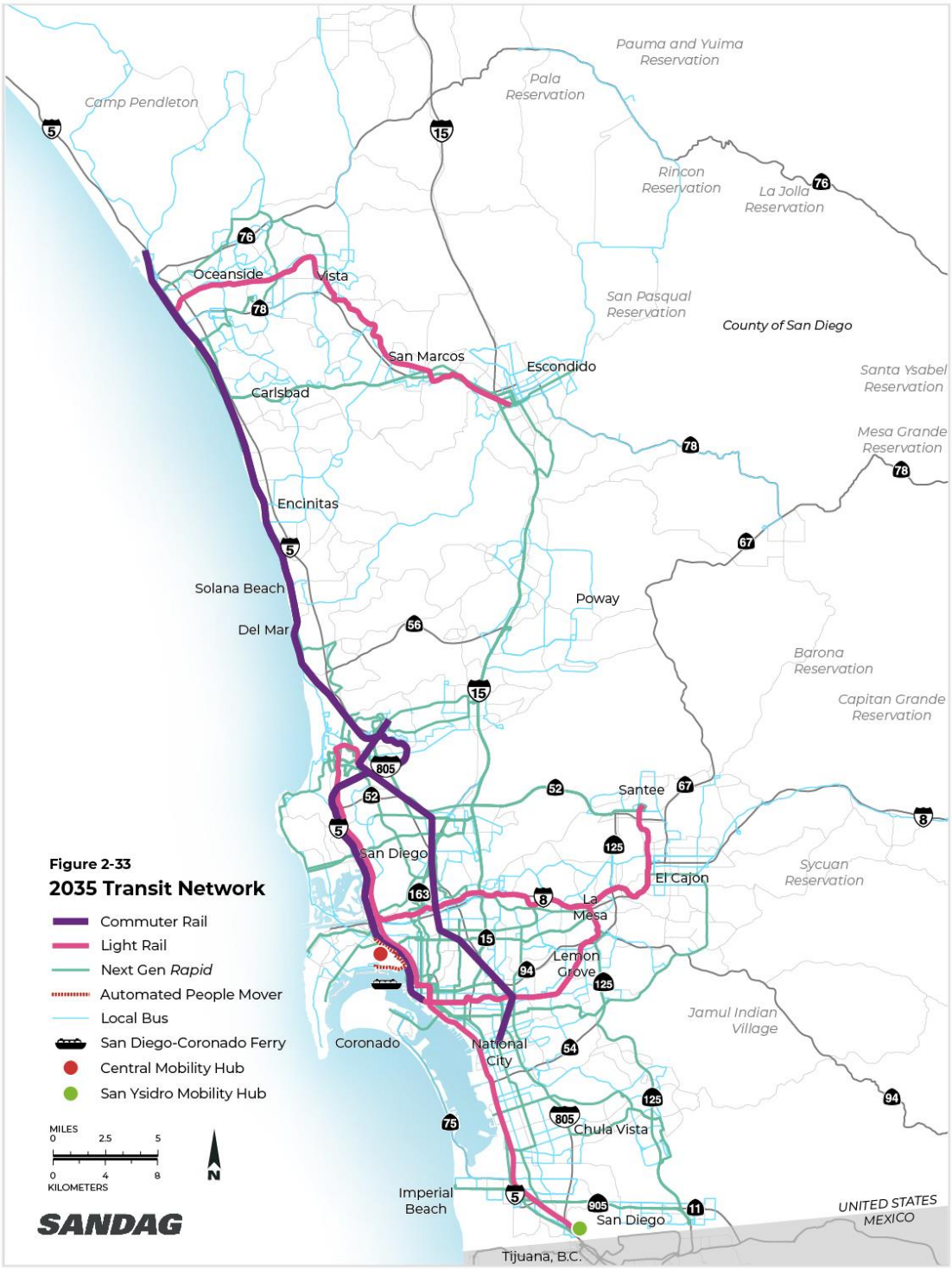
SANDAG


Pauma and Yuima Reservation
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Rincon Reservation
La Jolla Reservation
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Carlsbad
Santa Ysabel Reservation
Mesa Grande Reservation
Encinitas
Solana Beach
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Del Mar
Barona Reservation
Capitan Grande Reservation
Santee
San Diego
El Cajon
Sycuan Reservation
La Mesa
Lemon Grove
Jamul Indian Village
Coronado
National City
Chula Vista
Imperial Beach
San Diego
Tijuana, B.C.
UNITED STATES
MEXICO
Figure 2-33
2035 Transit Network
Commuter Rail
Light Rail
Next Gen Rapid
Automated People Mover
Local Bus
San Diego-Coronado Ferry
Central Mobility Hub
San Ysidro Mobility Hub
MILES
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KILOMETERS
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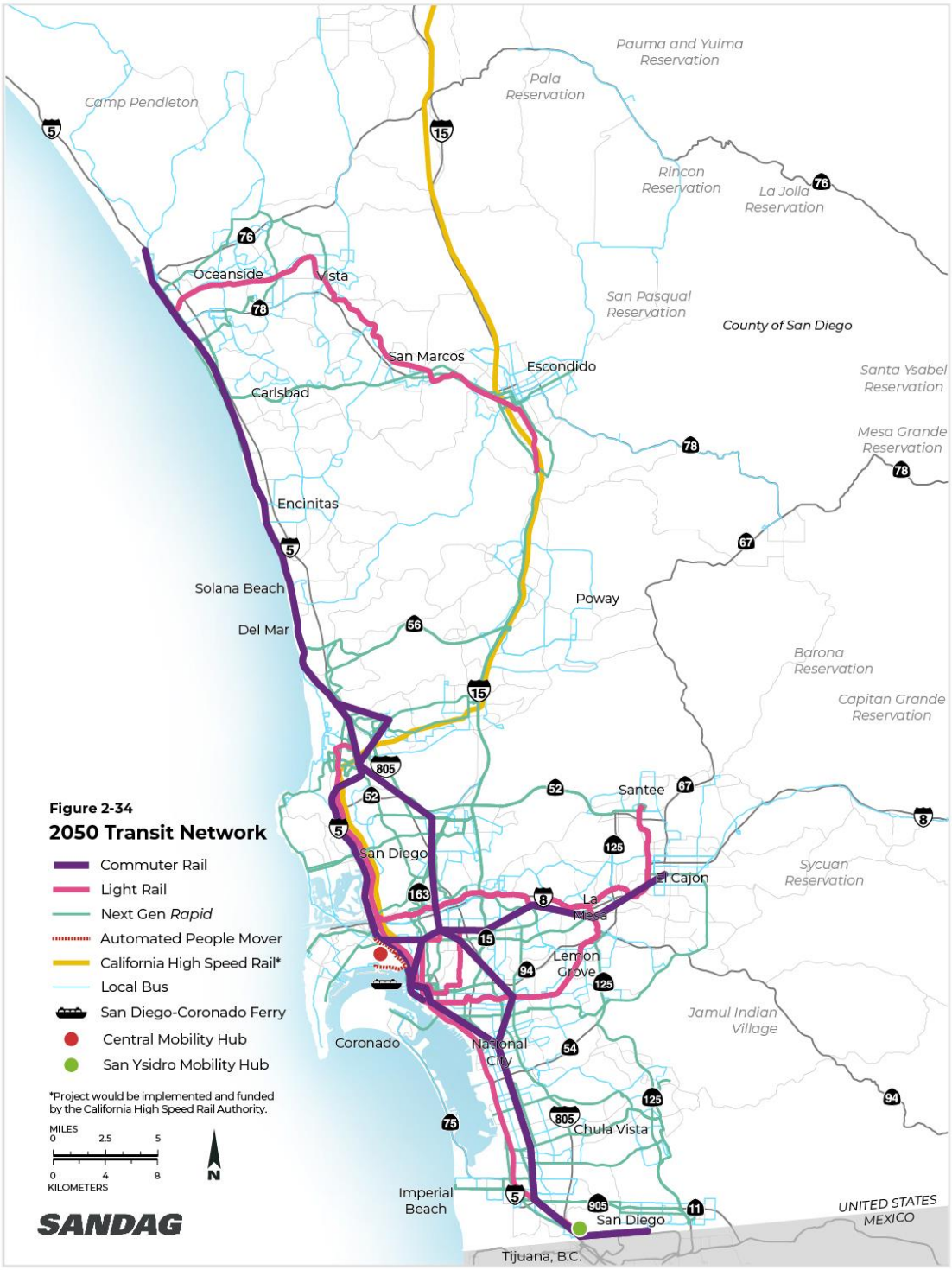
SANDAG


Pauma and Yuima Reservation
Pala Reservation
Camp Pendleton
Rincon Reservation
La Jolla Reservation
Oceanside
Vista
San Pasqual Reservation
County of San Diego
San Marcos
Escondido
Santa Ysabel Reservation
Carlsbad
Mesa Grande Reservation
Encinitas
Solana Beach
Poway
Del Mar
Barona Reservation
Capitan Grande Reservation
Santee
Sycuan Reservation
San Diego
El Cajon
La Mesa
Lemon Grove
Jamul Indian Village
Coronado
National City
Chula Vista
Imperial Beach
San Diego
Tijuana, B.C.
UNITED STATES
MEXICO
Figure 2-34
2050 Transit Network
Commuter Rail
Light Rail
Next Gen Rapid
Automated People Mover
California High Speed Rail*
Local Bus
San Diego-Coronado Ferry
Central Mobility Hub
San Ysidro Mobility Hub
*Project would be implemented and funded by the California High Speed Rail Authority.
MILES
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0 4 8
KILOMETERS
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SANDAG

Phased Transit Leap Network Improvements

By 2025

From 2021 to 2025, major transportation network improvements and programs would include double-tracking at certain locations on the Los Angeles–San Diego–San Luis Obispo (LOSSAN) rail corridor along with a station addition in the ~~Gaslamp Quarter,~~Downtown San Diego. The 2025 transit network also includes Rapid Route 10 from La Mesa to Ocean Beach, Rapid Route 12 from Spring Valley to Downtown San Diego, Rapid Route 292 from Pacific Beach to Kearny Mesa, and Rapid Route 450 from Oceanside to Escondido. Funds for operational support, maintenance facilities, and vehicle purchases are included in the 2025 phase, plus the inclusion of local bus route frequency enhancements.

By 2035

From 2026 to 2035, major transportation network improvements and programs would include continued double tracking at certain locations on the LOSSAN rail corridor, increases in COASTER frequencies, Del Mar Tunnel, new stations at Central Mobility Hub and at Camp Pendleton, and a Grade Separation at Leucadia Boulevard. The 2035 phase also includes a major new commuter rail line (Route 582) between National City and Sorrento Mesa in addition to light rail investments with SPRINTER, Blue Line, and Orange Line double tracking and grade separations. Double tracking on the Green Line also is included. A majority of the Rapid network is complete by 2035 and includes Rapid Routes 28, 30, 41, 120, 235, 237, 238, 295, 440, 471, 473, 474, 477, 625, 630, 637, 640, 709, 870, 890, 910, and 950, along with the Central Mobility Hub and station with connecting Automated People Mover. An additional Anchor Mobility Hub is assumed at the San Ysidro Transit Center. Funds for operational support, maintenance facilities, and vehicle purchases, along with increased local bus frequencies, are included in the 2035 phase as well.

By 2050

From 2026 to 2035, major transportation network improvements and programs would include continued double tracking at certain locations on the LOSSAN rail corridor, increases in COASTER frequencies, Sorrento Mesa and UTC tunnels, and a new station at Balboa Avenue. The 2050 phase also includes three major new commuter rail lines. These include routes between Downtown San Diego and El Cajon (Route 581); National City to the US Border (Route 582 [Extension]), and Central Mobility to the US Border (Route 583). It also includes light rail investments with SPRINTER, Green Line, and Orange Line double tracking. Double tracking and grade separations on the Blue Line also are included. The final components of the Rapid network are completed by 2050 including the following Rapid Routes: 555 (Tram), 103, 104, 293, 635, and 638. Funds for operational support, maintenance facilities, and vehicle purchases, along with increased local bus frequencies are included in the 2050 phase as well.

The phased Transit Leap transportation network improvements in the proposed Plan, organized by each Major Travel Corridor and denoted by TL, are shown in in Tables B-2 and B-4 through B-13 of Appendix B.

MOBILITY HUBS

The Mobility Hubs are based on the critical connection nodes discussed above under Section 2.2.1, *Development of the Proposed Plan: A Data Driven Process*. To develop the Mobility Hubs, SANDAG evaluated each employment center node and commute origin node in terms of their land use, population density (including communities of concern), employment density, activity centers of regional significance, and unique local characteristics.

SANDAG then used ArcGIS to evaluate a selection of initial Mobility Hub coverage areas—1, 2, or 4 miles from each node. The Mobility Hubs will offer on-demand travel options and supporting infrastructure that enhance connections to high-quality Transit Leap services while helping people make short trips around their communities on Flexible Fleets. Mobility Hubs are unique to each community based on community characteristics and travel needs, and the Mobility Hub land uses have been integrated into the regional transportation system in the proposed Plan.

Under the proposed Plan, a network of 31 Mobility Hubs supports various Transit Leap and Flexible Fleet services throughout the region. A map of the Mobility Hub Network in 2050 is shown on Figure 2-35. A map of the Mobility Hubs by type overlaid with Transit Priority Areas is shown on Figure 2-36. The Mobility Hubs are an integral element of the SCS land use pattern. The SCS envisions densification in the Mobility Hub areas due to incentivized transportation infrastructure; however, that densification will be dependent on the approval of local jurisdictions. A list of the Mobility Hubs in the proposed Plan, identified by jurisdiction and envisioned type and associated transit services, is provided in Table 2-11.

Table 2-11
Mobility Hubs Included in the Proposed Plan

Mobility Hub	Type	Transit Leap Services	Flexible Fleet
Carlsbad Palomar	Major Employment Center	Commuter Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, Neighborhood Electric Vehicle (NEV) Microtransit, Last-Mile Delivery
Carlsbad Village	Coastal	Commuter Rail, Next Gen Rapid	Micromobility, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Carmel Valley	Suburban	Commuter Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
College Area	Suburban	Commuter Rail, Light Rail, Next Gen Rapid	Micromobility, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Coronado	Coastal	Next Gen Rapid	Micromobility, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Downtown Chula Vista	Suburban	Commuter Rail, Light Rail, Next Gen Rapid	Micromobility, Rideshare, NEV Microtransit, Last-Mile Delivery
El Cajon	Gateway	Commuter Rail, Light Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Encinitas	Coastal	Commuter Rail, Next Gen Rapid	Micromobility, Rideshare, Microtransit, NEV Microtransit
Escondido	Gateway	Light Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Imperial Beach	Coastal	Commuter Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Kearny Mesa	Major Employment Center	Commuter Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery

Mobility Hub	Type	Transit Leap Services	Flexible Fleet
La Jolla	Coastal	Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
La Mesa	Major Employment Center Suburban	Commuter Rail, Light Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Lemon Grove	Suburban	Light Rail	Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Mira Mesa	Suburban	Next Gen Rapid	Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Mission Valley	Major Employment Center	Commuter Rail, Light Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
National City	Major Employment Center	Commuter Rail, Light Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Ocean Beach	Coastal	Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Oceanside	Gateway	Commuter Rail, Light Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Otay Ranch	Suburban	Next Gen Rapid	Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Pacific Beach	Coastal	Commuter Rail, Light Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
San Marcos	Major Employment Center	Light Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Solana Beach	Coastal	Commuter Rail, Next Gen Rapid	Micromobility, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Sorrento Valley	Major Employment Center	Commuter Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Southeast San Diego	Suburban	Commuter Rail, Light Rail, Next Gen Rapid	Micromobility, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Southwest Chula Vista	Suburban	Commuter Rail, Light Rail, Next Gen Rapid	Micromobility, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
U.S.–Mexico Border	Gateway	Commuter Rail, Light Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
University Community	Major Employment Center	Commuter Rail, Light Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery

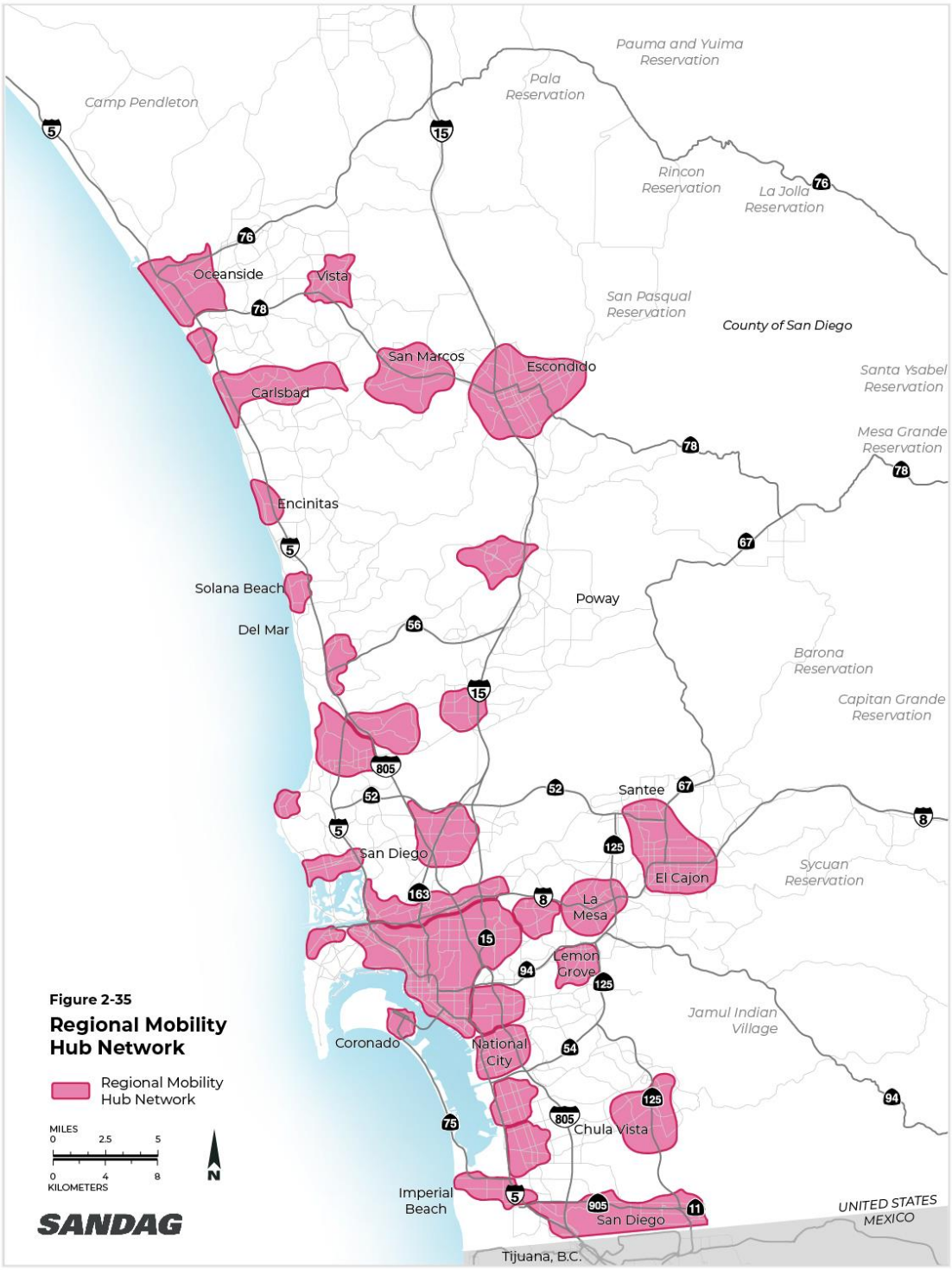
Mobility Hub	Type	Transit Leap Services	Flexible Fleet
Urban Core	Urban	Commuter Rail, Light Rail, Next Gen Rapid	Micromobility, Carshare, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
Vista	Suburban	Light Rail, Next Gen Rapid	Micromobility, Rideshare, Microtransit, NEV Microtransit, Last-Mile Delivery
West Bernardo	Major Employment Center	Next Gen Rapid	Carshare, Rideshare, Microtransit, Last-Mile Delivery

Phased Mobility Hub Network Improvements and Investments

The Mobility Hubs element of the proposed Plan includes both transportation investments and supporting land uses. The proposed Plan envisions making investments to promote transportation connections in 29 Mobility Hub areas throughout the region in collaboration with local jurisdictions. The proposed Plan also identifies expanded investments in two additional intermodal transit center Mobility Hub projects under the proposed Plan: the Central Mobility Hub (CMH) in downtown San Diego and the San Ysidro Mobility Hub (SYMH) at the U.S.–Mexico border. The CMH and SYMH are fully integrated in the transit services envisioned under Transit Leap beginning in 2035 and are depicted on Figures 2-33 and 2-34.

The proposed CMH would offer multimodal connectivity and be served by the San Diego Trolley light rail, Amtrak intercity rail, COASTER commuter rail, buses, taxis, and other mobility services.

The CMH would also include a high-speed, fixed-guideway transit connection between the CMH and San Diego International Airport (SDIA), with up to four high-frequency transit stations likely provided at CMH, the Airport Rental Car Center, Harbor Island East Basin, and SDIA, as well as supporting infrastructure. The proposed CMH would include modifications to I-5 to enhance CMH access; roadway modifications to improve SDIA access and/or accommodate transit connections; and pedestrian, bicycle, and other active transportation improvements promoting safety and connectivity in accordance with the Midway–Pacific Highway Community Plan and Regional Bike Plan, including new connection(s) across I-5 between the CMH and the Old Town community and the Coastal Rail Trail along Pacific Highway.


Pauma and Yuima Reservation
Pala Reservation
Camp Pendleton
Rincon Reservation
La Jolla Reservation
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Barona Reservation
Capitan Grande Reservation
Santee
San Diego
El Cajon
Sycuan Reservation
La Mesa
Lemon Grove
Jamul Indian Village
Coronado
National City
Chula Vista
Imperial Beach
San Diego
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 2-35
Regional Mobility Hub Network
Regional Mobility Hub Network
MILES
0 2.5 5
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KILOMETERS
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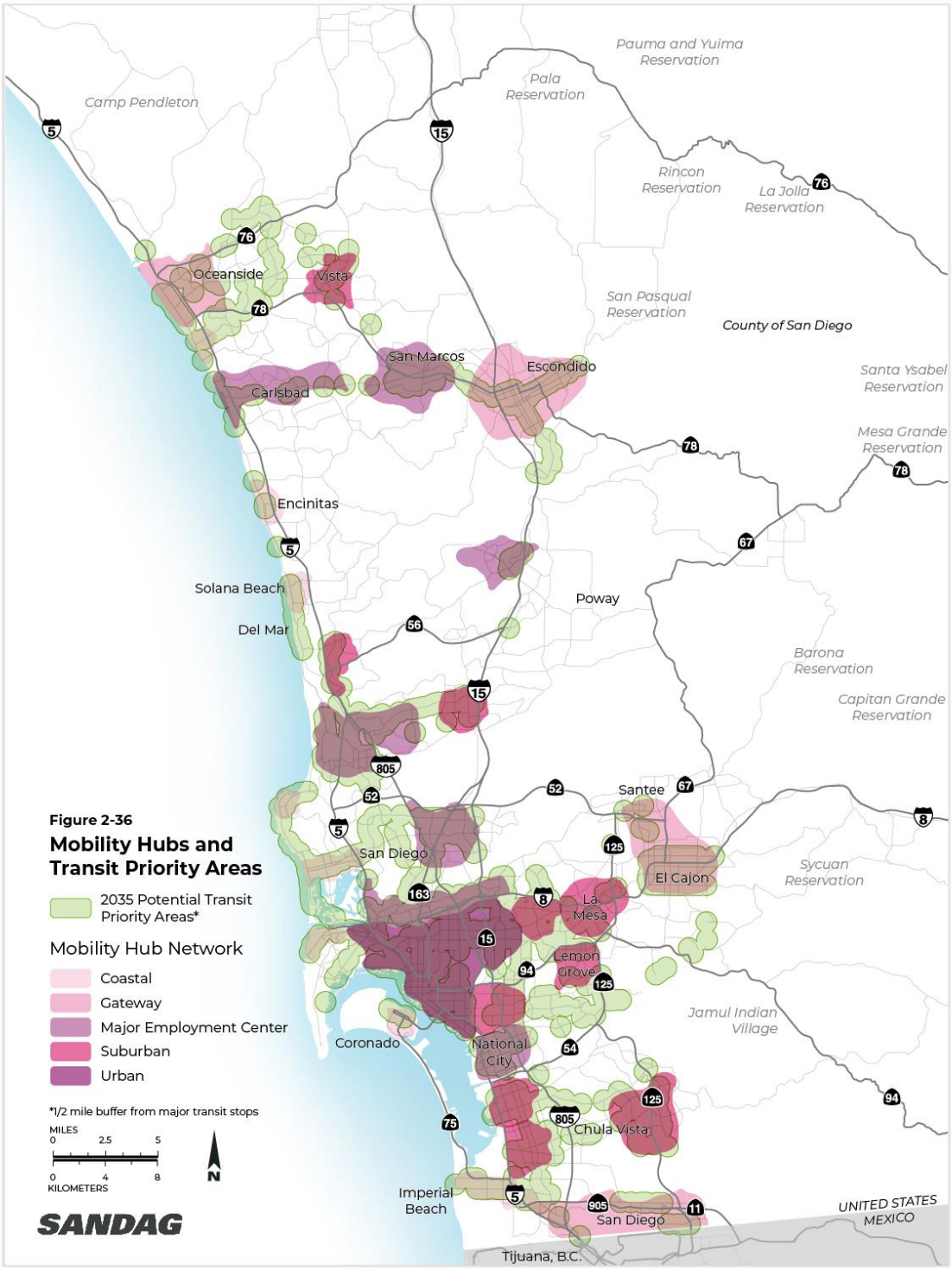
SANDAG
These maps show generalized regional Mobility Hub boundaries for planning purposes and are not intended to be binding or precise. Mobility Hub boundaries are subject to refinement in close coordination with the affected jurisdiction(s).


Pauma and Yuima Reservation
Pala Reservation
Camp Pendleton
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La Jolla Reservation
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Sycuan Reservation
La Mesa
Lemon Grove
Jamul Indian Village
Coronado
National City
Chula Vista
Imperial Beach
San Diego
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 2-36
Mobility Hubs and Transit Priority Areas
2035 Potential Transit Priority Areas*
Mobility Hub Network
Coastal
Gateway
Major Employment Center
Suburban
Urban
*1/2 mile buffer from major transit stops
MILES
0 2.5 5
0 4 8
KILOMETERS
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These maps show generalized regional Mobility Hub boundaries for planning purposes and are not intended to be binding or precise. Mobility Hub boundaries are subject to refinement in close coordination with the affected jurisdiction(s).

The proposed location of the CMH is the Navy Old Town Campus (OTC), a 70.5-acre site located west of I-5 and south of Old Town. The Navy initiated its Environmental Impact Study (EIS) process under the National Environmental Policy Act (NEPA) for the OTC site on January 24, 2020 (U.S. Navy 2020). The Navy's Draft EIS evaluates the potential environmental effects associated with modernization of OTC to support Naval Information Warfare Systems Command's (NAVWAR) current and future operational readiness. A CMH at OTC is included in two of the development scenarios evaluated in the Navy's Draft EIS. While evaluation of a CMH at OTC was outside of the scope of the Navy's Draft EIS, SANDAG initiated the EIR process under CEQA for the CMH on April 21, 2021 (SANDAG 2021d). SANDAG's EIR for the CMH will propose siting the CMH at OTC, but is also considering other alternatives. The proposed SYMH will identify and develop long-term Mobility Hub implementation strategies that integrate land use and multimodal travel options with "safe street" infrastructure and supporting amenities consistent with investments identified in the proposed Plan, the South Bay to Sorrento Comprehensive Multimodal Corridor Plan, and the 2021 California–Baja California Border Master Plan. The mobility strategies are expected to be focused within the area of the San Ysidro Mobility Hub spanning between the existing San Ysidro Transit Center, Virginia Avenue Transit Center, and the Iris Avenue Trolley Station.

The SYMB and CMH and improvements included in the proposed Plan are shown in Tables B-4 and B-5, respectively, in Appendix B.

SANDAG is also proposing funding to incentivize Mobility Hub investments for the remaining 29 hubs in the Mobility Hub Network. Phased investments in 2025, 2035, and 2050 include Mobility Hub amenities such as secure micromobility parking and e-charging, interactive travel kiosks, electric vehicle charging infrastructure, passenger loading zones, parcel delivery lockers, and carshare parking. Phased funding proposed for investments in Mobility Hubs is identified in Table B-14 of Appendix B.

FLEXIBLE FLEETS

Flexible Fleets are shared, on-demand transportation services that provide convenient and personalized travel options. While they build on the popularity of services such as rideshare, bikeshare, and scootershare, fleets can also include neighborhood shuttles and delivery services. These fleets provide services for all types of trips, 24/7, which can reduce the need to own a car. They also provide important connections between high-speed Transit Leap services and key destinations such as work or home, making it easier for commuters to choose transit. As described below, Flexible Fleets services are grouped into five categories: Micromobility, Ridehailing/Carsharing, Ridesharing, Microtransit, and Last-Mile Delivery.

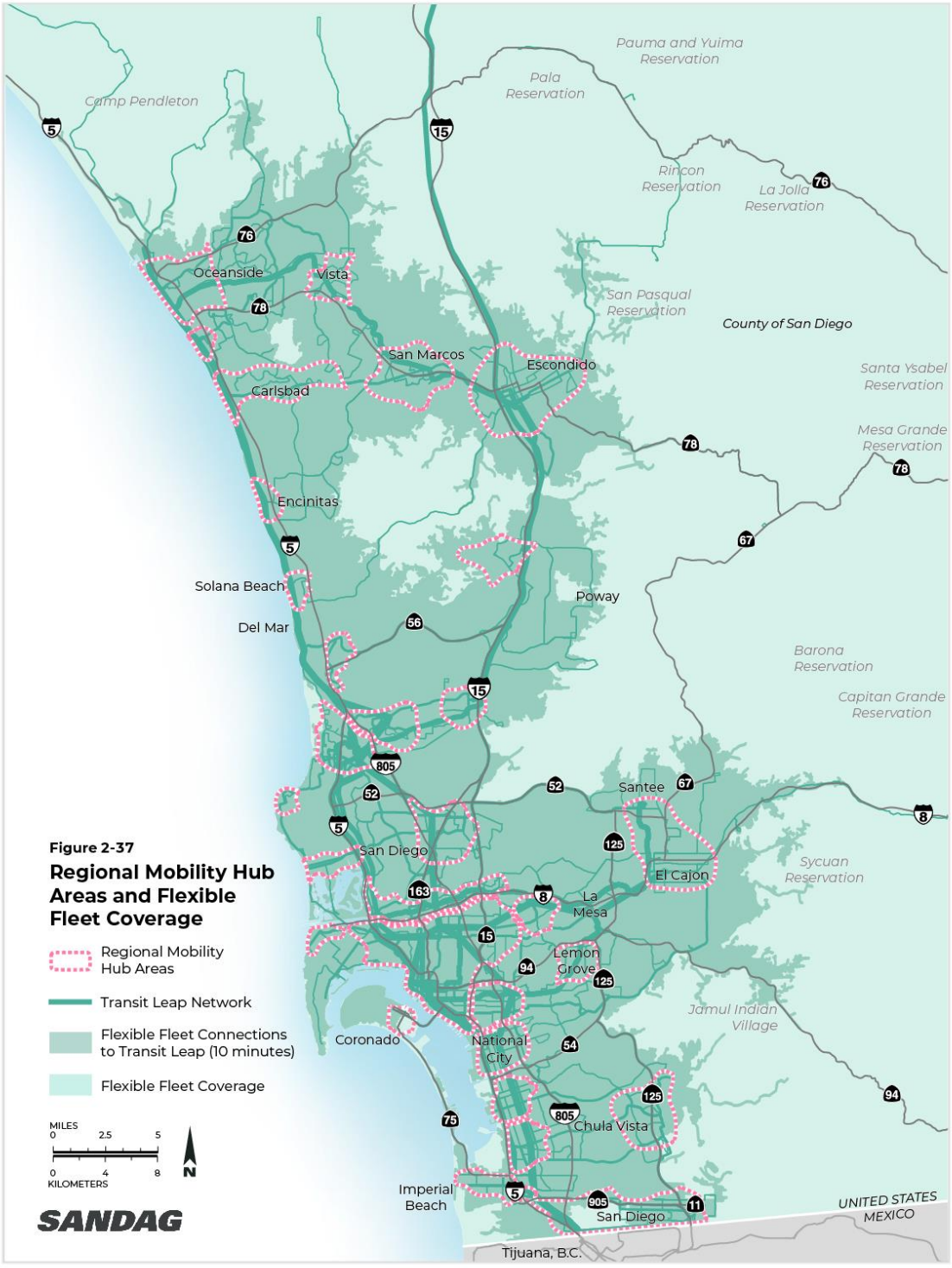
Table 2-12
Flexible Fleet Services Improvements Included in the Proposed Plan

	**Micromobility** Small, low-speed vehicles such as e-scooters, bikes, and other rideables support short trips around a community.
	**Ridehailing/Carsharing** On-demand ridehailing services allow someone to request a ride or vehicle in real time using a mobile app. Ridehailing services link the passenger with available drivers based on their trip length, number of passengers, origin, and destination. Carsharing service provides members with access to a shared vehicle. Ridehailing services will be automated in the future and operate as subscription-based services, allowing users to reserve a ride any type of vehicle for their trip.
	**Ridesharing** Drivers and passengers headed in a similar direction can share the ride in a vehicle. This includes carpool, vanpool, and pooled ride hailing services such as uberPOOL and Lyft Shared. Eventually these services will operate as automated and shared taxis that will be designed to meet passenger needs.
	**Microtransit** Multi-passenger shuttles can carry up to 15 passengers and provide rides within a defined service area. This technology-enabled transit service allows users to reserve a ride ahead of time or on demand, and it may be a more efficient option for suburban areas of the region. Smaller, all-electric shuttles, also known as neighborhood electric vehicles (NEV), also are a form of microtransit that provide a sustainable and convenient solution for short trips around communities.
	**Last-Mile Delivery** Driverless vehicles, e-bikes, drones, and bots will deliver a range of goods from a distribution hub to individual consumers, businesses, or smart lockers at Mobility Hubs. Some last mile delivery services can consolidate trips by carrying passengers and goods at the same time.

These five Flexible Fleets service types are integrated with the other 5 Big Moves, offering greater transportation connectivity throughout the region. Figure 2-37~~6~~ depicts Flexible Fleets coverage under the proposed Plan.

Phased Flexible Fleet Network Investments

Flexible Fleets are primarily accessible through mobile apps and can be operated by public and private agencies or through partnerships. SANDAG is not advancing specific Flexible Fleet projects under the proposed Plan but is proposing funding to incentivize Flexible Fleets investments. Phased investments in 2025, 2035, and 2050 are expected to cover operations for Flexible Fleet services, including micromobility, ridehail/carshare, rideshare microtransit, and last mile delivery. Phased funding proposed for investments in Flexible Fleets Networks is shown in Table B-14 in Appendix B..


Pauma and Yuima Reservation
Pala Reservation
Camp Pendleton
Rincon Reservation
La Jolla Reservation
Oceanside
Vista
San Pasqual Reservation
County of San Diego
San Marcos
Escondido
Carlsbad
Santa Ysabel Reservation
Mesa Grande Reservation
Encinitas
Solana Beach
Poway
Del Mar
Barona Reservation
Capitan Grande Reservation
Santee
San Diego
El Cajon
Sycuan Reservation
La Mesa
Lemon Grove
Jamul Indian Village
Coronado
National City
Chula Vista
Imperial Beach
San Diego
UNITED STATES
MEXICO
Tijuana, B.C.
Figure 2-37
Regional Mobility Hub Areas and Flexible Fleet Coverage
Regional Mobility Hub Areas
Transit Leap Network
Flexible Fleet Connections to Transit Leap (10 minutes)
Flexible Fleet Coverage
MILES
KILOMETERS
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SANDAG
These maps show generalized regional Mobility Hub boundaries for planning purposes and are not intended to be binding or precise. Mobility Hub boundaries are subject to refinement in close coordination with the affected jurisdiction(s).

NEXT OPERATING SYSTEM (NEXT OS)

Next OS is the "brain" of the entire transportation system. It is a digital platform that compiles information from sources such as passenger vehicles, buses, ridesharing vehicles, delivery trucks, bikes, and scooters into a centralized data hub. Analysis of this data will improve how transportation is planned, operated, and experienced. Transportation operators will be able to better manage supply and demand by modifying how infrastructure and services are used throughout the day. The result will be a modernized transportation system with roads and transit services that operate smoothly and serve people better. The proposed Plan discusses how SANDAG has planned for physical transportation networks—envisioning fully realized corridors of travel, next-generation public transit, Mobility Hubs where people and mobility options come together, and Flexible Fleets that serve people with innovative and tailor-made mobility options when and where they need them. But Next OS is the digital network that will analyze data in real time from these physical networks and make them all work better—more integrated, more efficient, and most of all, more responsive to people's immediate needs.

Phased Next OS Network Improvements and Investments

By 2025

Next OS improvements by 2025 include a Data Hub to provide high speed data analytics, data repository, and data performance management platform that will bring together public transportation data and develop a public–private information exchange with companies such as Transportation Network Companies (TNCs).

By 2035

Next OS improvements in the 2026–2035 phase include: dynamic curb management including access and pricing rules; dynamic transit routing, scheduling, and communications; applications to plan, book, and pay across public and private shared services; coordinated response and control for real time operations across freeway, arterials, and transit networks; and investments to enable regional transportation system operators to collect, analyze, and share data to improve transportation systems management and operations.

By 2050

Next OS improvements include ongoing maintenance of the system.

Phased Next OS improvements are shown in Table B-15 of Appendix B.

2.5.2 AIRPORT CONNECTIVITY

The San Diego County Airport System includes 12 public use airports in the San Diego region as well as four military airports/airfields. Tijuana International Airport (TIA) is located directly south of the U.S.-Mexico border. SDIA, McClellan-Palomar, and TIA accommodate commercial, general aviation, and corporate services. Brown Field Municipal, Gillespie Field, Montgomery Field, and Ramona accommodate general aviation and corporate services. The remaining airports accommodate general aviation only, and include Oceanside Airport, Fallbrook Community Airpark, Borrego Valley Airport, Ocotillo Airport, Agua Caliente Airport, and Jacumba Airport. Military airports include Marine Corps Base Camp Pendleton, Marine Corps Air Station Miramar, Naval Air Station North Island, and Naval Outlying Landing Field Imperial Beach.

2.5.3 BORDER/PORTS OF ENTRY

The California–Baja California megaregion experiences high levels of interregional and cross-border commuting and goods transport, and there are many industries that are linked across borders. This larger region is an increasingly important trade and travel corridor, and it has a distinct global competitiveness with unique advantages. There are four POEs between San Diego County and Baja California:

- **San Ysidro–Puerta México/Ped West–El Chaparral**: One of the world's busiest international land border crossings and the most traveled between the United States and Mexico. This facility serves pedestrians and personal vehicles.
- **Cross Border Xpress (CBX)**: A privately funded hybrid crossing facility open in 2015 serving as an access terminal for ticketed users of the TIA crossing as pedestrians. It is the world's only airport terminal access facility located directly on an international boundary.
- **Otay Mesa–Mesa de Otay**: The main commercial gateway for international trade between California and Mexico. This POE ranks second in terms of trade value among all U.S. southern border POEs. This facility also processes pedestrian and personal vehicle crossings.
- **Tecate–Tecate:** A POE facility in the rural eastern portion of San Diego County serving pedestrians, personal vehicles, and commercial trucks.

A priority project within the proposed Plan's vision for the border that advances the region's ability to provide efficient cross-border mobility is the State Route 11/Otay Mesa East POE project. This project is a joint effort between SANDAG and the California Department of Transportation (Caltrans) and leverages extensive collaboration with State and federal partners in the U.S. and Mexican governments to create a 21st century border crossing for the binational megaregion. The recently completed 2021 California–Baja California Border Master Plan (Caltrans et al. 2021), is being used by SANDAG and Caltrans to develop several Comprehensive Multimodal Corridor Plans (CMCPs) for key corridors throughout the region. The South Bay to Sorrento (SB2S) CMCP effort focuses on 28 miles of one of the most congested and heavily used corridors in the San Diego region, spanning from the U.S.–Mexico border to Sorrento Valley and including critical facilities such as I-5, I-805, SR 905, major arterials, the Bayshore Bikeway, and transit services including the Trolley, Rapid lines, and local bus lines.

2.5.4 SUPPORTING POLICIES AND PROGRAMS

The proposed Plan integrates three key strategies:

- **Invest in a reimagined transportation system**: Build a network and fund services that include multimodal roadways; an expanded network of fast, frequent, and low-cost transit; 21st century technology that manages the entire transportation system and connects people to on-demand services; and zero-emission options for vehicles and micromobility.
- **Incentivize sustainable growth and development:** Collaborate with local jurisdictions and fund programs that accelerate housing production while also addressing the intertwined issues of equity, climate resilience, and mobility.
- **Implement innovative demand and system management:** Reduce solo driving and congestion through increased remote work, carsharing, vanpooling, value pricing and user fee strategies, and parking-management programs that leverage partnerships and technology.

While SANDAG can directly implement many of the projects and policies included in the proposed Plan that support these core strategies, there are several programs and policies that require partnership with local jurisdictions or other agencies. The proposed Plan identifies 11 policy and program areas that SANDAG proposes funding to incentivize collaborative actions that will further implementation of the proposed Plan as listed below:

- Land Use and Regional Growth
- Housing
- Climate Action Planning
- Climate Adaptation and Resilience
- Electric Vehicles
- Parking and Curb Management
- Transportation Demand Management
- Vision Zero
- Fix It First[4]
- Transportation System Management and Operations
- Pricing[4]

Each of these policy and program areas is discussed below. Appendix B of the Regional Plan discusses implementation actions for each area. Table 2-13 shows phased funding for Policies and Programs under the proposed Plan.

Table 2-13
Supporting Policies and Programs ($2020 millions) of the Proposed Plan

	2025	2035	2050	Total
Land Use and Habitat~~Regional Growth~~				
Planning and Capital Mobility Hub/Smart Growth/Vehicle Miles Traveled Reduction Grants	$50~~75~~	$150~~262~~	$200~~500~~	$400~~837~~
Member Agency Resources to enhance development review/processes/update policies	$10~~25~~	$50~~100~~	$75~~208~~	$135~~333~~
Habitat conservation, management, and monitoring	$169	$555	$1,363	$2,087
Housing				
Affordable Housing Grant Program	$730	$1,400	$500	$2,630
Climate Action Planning				
CAP Monitoring Program	$4	$20	$12	$37
CAP Implementation Grants	$20	$100	$150	$270
Regional Carbon Reduction Program Management	$6	$~~1~~50	$75~~150~~	$131~~306~~
Climate Adaptation and Resilience				

[4] Costs associated with these programs are incorporated into the capital investment costs identified in Appendix B.

	2025	2035	2050	Total
Climate Adaptation and Resilience Program	$8	$50~~75~~	$50~~75~~	$108~~158~~
Nature-based Climate Solutions	$40	$325	$200	$565
Resilient Capital Grants and Innovative Solutions	$20	$75~~215~~	$100	$195~~335~~
Electric Vehicles				
Incentives for Zero-Emission Vehicles	$52	$552	--	$604
EV Charging Stations	$45	$134~~133~~	$91	$270
Hydrogen Fueling Stations	--	$100	$150	$250
Zero-Emission Buses and Infrastructure	$75	$250	$332	$657
Goods Movement Vehicles and Infrastructure	$25	$100	$104	$229
Parking and Curb Management				
Member agency resource/coordination	$8	$100	$40	$148
Transportation Demand Management				
GO by BIKE	$0.2	$0.5	$1	$1
TDM Innovation and Shared Streets Grants	$1	$50	$4	$55
E-bike incentive	$5	$15	$15	$35
Program Administration	$19	$59	$89	$167
Commuter Services ~~and Bike Program~~(Vanpool, Bike Parking, Guaranteed Ride Home)	$18	$35	$56	$109
Rideshare Incentive Program	$1	$1	$2	$4
Marketing, Outreach, and Education	$11	$23	$35	$69
TDM Ordinance	$8	$40	$60	$108
Vision Zero				
Member agency project resource/coordination	$6	$25	$15	$46
Community Based Education	$4	$25	$25	$54
Capital and Planning grants	$25	$150	$150	$325
Transportation System Management and Operations				
ATDM and SIS	$681	$2,855	$1,223	$4,759
Next OS	$66	$62	$100	$228

LAND USE AND HABITAT~~REGIONAL GROWTH~~

Land use and development patterns are central to issues in the San Diego region: affordable housing, GHG emissions, equity, and mobility throughout our communities. The proposed Plan focuses on development and growth in Mobility Hub areas in order to preserve San Diego's open space and reduce vehicle miles traveled (VMT) by supporting transportation investments. Because land use authority is reserved to local jurisdictions, SANDAG will leverage partnerships with cities and the County to provide funds for transportation-related improvements and planning efforts that support smart growth in Mobility Hub areas. SANDAG will continue its existing grant programs, partner with member agencies on State funding opportunities, and provide data and technical support to assist local jurisdictions with land use planning efforts consistent with the proposed Plan. To meet the region's habitat conservation goals, the 2021 Regional Plan identifies approximately $3 billion for habitat-related efforts. This includes $2,087 million for an enhanced habitat conservation, management, and monitoring program (see Land Use and Habitat programs in Appendix K), a $565 million Nature-Based Climate Solutions Program that will promote both habitat conservation and restoration and carbon sequestration (see

Climate Adaptation and Resilience programs in Appendix K), and $300 to $500 million of land acquisition and restoration for habitat mitigation of transportation projects (incorporated in project costs presented in Appendix A to the proposed Plan).

HOUSING

California is experiencing a housing crisis, with housing demand far outstripping supply. The proposed Plan addresses the housing crisis through Mobility Hubs, bringing locations where people live and work closer together and providing more housing options for more San Diegans through increased density. SANDAG will rely on building stronger partnerships with local jurisdictions to increase housing in the region, especially housing available to low-income residents. Through grant programs and technical support, SANDAG will serve as a funding partner and resource to assist local jurisdictions in reaching the region's housing production goals.

CLIMATE ACTION PLANNING

To help reach regional and State GHG emissions–reduction targets, the proposed Plan focuses heavily on the conversion to clean transportation and a shift from personal vehicle dependency through the 5 Big Moves. To help local jurisdictions make this transition and achieve broader reductions in GHG emissions, SANDAG will provide technical assistance, guidance resources, templates, and grant funding to incorporate the 5 Big Moves and SCS actions into their Climate Action Plans (CAPs) and plan for more well-connected, sustainable, healthy communities that are accessible to all.

CLIMATE ADAPTATION AND RESILIENCE

The San Diego region is anticipated to feel the effects of climate change through hotter and more frequent heat waves, prolonged droughts, increased wildfires, rising sea levels, and destructive storm surges. The proposed Plan aims to better prepare San Diego communities and habitats for these climate change impacts by considering evacuation and rapid mobility needs in our transit corridors, evaluating and considering climate vulnerabilities to the region's transportation infrastructure, and utilizing natural lands and conservation to absorb and protect against climate change impacts. SANDAG will establish a coordinated effort across agencies and local jurisdictions for a more holistic, comprehensive, equitable, sustainable, and resilient region.

ELECTRIC VEHICLES

The electrification of cars, trucks, and buses is a key initiative in the 5 Big Moves and the proposed Plan. Electrification is included in the proposed Plan as a way to reach regional GHG emission–reduction targets. Electric vehicles (EVs) are zero-emission vehicles that include plug-in battery EVs and hydrogen fuel cell EVs. SANDAG aims to incentivize and encourage the incorporation of all types of EVs into Flexible Fleets, Transit Leap, and goods movement and to support funding programs that increase the number of EVs and charging stations throughout the region and within Mobility Hubs and as part of the Complete Corridor strategy.

PARKING AND CURB MANAGEMENT

Proactively managing parking and curb space enables more people to access places within our communities using alternatives to driving. The proposed Plan addresses curb management by proposing strategies to help balance competing and changing travel needs at the curb while remaining flexible to resident, employee, business, and visitor needs. While the authority to implement parking and curb policies remains with local

jurisdictions, SANDAG plays a unique role of informing these policies by sharing resources and best practices and serving as the regional Mobility Data Clearinghouse.

TRANSPORTATION DEMAND MANAGEMENT

Transportation Demand Management (TDM) innovations have the potential to transform the way people travel within and between communities. Managing demands on the existing transportation system is a vital strategy for making the overall system more effective in reducing drive-alone commute trips. SANDAG will continue to administer and monitor the iCommute program by providing regional rideshare, employer outreach, and bike education and secure parking services to help reduce commute-related traffic congestion and VMT. Beyond commute trips, TDM programs are expanded to include grants and incentives that make it easier and safer to use active modes for short trips.

VISION ZERO

Traffic-related fatalities and serious injuries are a critical and preventable public health and equity issue in the San Diego region. Vision Zero is a national campaign to eliminate all traffic-related deaths and serious injuries by focusing on policies and the redesign of streets to create a transportation system that is safe for everyone. In adopting Vision Zero, SANDAG will work toward Zero by collecting and analyzing crash data to identify safety issues and recommend solutions; developing a regional safety policy; continuing to construct the Regional Bike Network; working with local jurisdictions to conduct outreach for and build out their complete streets networks; and funding educational programs, including opportunities to collaborate with tribal nations.

FIX IT FIRST

The proposed Plan envisions many improvements to the San Diego transportation system and network to set the region up for success as a world-class transportation system. To optimize investments in the region's transportation infrastructure, the proposed Plan and the 5 Big Moves focus on improving upon existing roads, rails, and sidewalks. The Fix It First strategy aims to repair existing roads and create a system for sustained maintenance in the future, creating a safe and efficient transportation network for all users.

TRANSPORTATION SYSTEM MANAGEMENT AND OPERATIONS

Transportation System Management and Operations (TSMO) employs a series of intelligent transportation system strategies designed to maximize the capacity and efficiency of the existing and future transportation system. TSMO includes the establishment of institutional and governance actions to help advance and facilitate cross-agency collaboration to ensure existing and proposed transportation systems are not operated or managed as independent systems but as a multimodal transportation system. TSMO activities focus on determining how people, processes, and tools can facilitate increased cross-agency collaboration during the planning, development, and operations of intelligent transportation system strategies like the Next OS, ATDM, and SIS. These strategies will help SANDAG coordinate the management of the Complete Corridor system across jurisdictions and operators that include capital and technology investments.

PRICING

The proposed Plan incorporates a variety of value pricing and user strategies as tools to improve mobility by encouraging changes in travel behaviors while generating revenue to address our aging infrastructure and expand travel options. Specifically, the proposed Plan explores a network of Managed Lanes, a mileage-based

road usage charge, a fee on the fares charged for rides provided by Transportation Network Companies, and further subsidization of transit fares. Strategies such as these are in different phases of planning, design, pilot, and deployment in different regions and are also being explored at the State and federal level. SANDAG will rely on coordination with the other MPOs in California along with Caltrans to integrate the selection of technology, collection methods, and account management to ensure a consistent experience for travelers. Meanwhile, the design of these strategies, such as the fee structure and distribution of revenue, should be specifically designed for the San Diego region's unique environment and priorities.

2.5.5 IMPLEMENTATION ACTIONS

The proposed Plan identifies the following priority actions that SANDAG will undertake to support implementation of the proposed Plan:

1. Apply the Social Equity Planning Framework and ensure that equity is considered throughout 2021 Regional Plan implementation.
2. Develop CMCPs to refine 2021 Regional Plan projects at the corridor level and qualify the region for future funding opportunities.
3. Update SANDAG policies, including the *TransNet* Ordinance, to reflect 2021 Regional Plan projects and priorities.
4. Evaluate the transition to free public transit and ~~D~~development a Value Pricing and User Fee Implementation Strategy.
5. Seek new local funding in addition to pursuing State and federal funding opportunities.
6. Advance Next OS by preparing technical and planning studies and initiating pilot opportunities.
7. Implement the RTIP and near-term projects.
8. Partner with local jurisdictions, tribal governments, agencies in Mexico, the military, and other agencies on collaborative efforts to implement the 2021 Regional Plan.
9. Expand regional programs and seek funding to fully support ~~on~~ low-carbon transportation options, roadway safety and maintenance, habitat conservation, and nature-based climate solutions.
10. Advance a data science program to better understand travel behavior and issues in the region, update travel demand modeling tools, and improve transparency and reporting on program effectiveness and project delivery.

Appendix B of the Regional Plan identifies near-term and continuing actions associated with each priority implementation action.

2.6 INTENDED USES OF THE EIR

The basic purposes of CEQA are to inform government decision makers and the public about potential significant environmental impacts of projects, identify ways the impacts can be reduced or avoided, prevent significant avoidable environmental damage through alternatives and mitigation, and disclose to the public the reason that decision makers approved a project that may result in unavoidable significant impacts.

The lead agency is required to consider the information in the EIR, along with any other relevant information, in making its decisions on the project approval. SANDAG is the lead agency for the proposed Plan and EIR.

Subsequent activities implementing the proposed Plan will be examined in light of this EIR to determine whether additional environmental documentation, if any, such as a Negative Declaration, Supplemental or Subsequent EIR, or Addendum, must be prepared. Where subsequent activities are "within the scope" of the Program EIR, because no subsequent environmental review would be required pursuant to CEQA Guidelines Section 15162, no further CEQA documentation would be required.

2.6.1 AGENCIES EXPECTED TO USE THE EIR

Lead agencies implementing second-tier land use or transportation projects can use this EIR as a first-tier EIR to focus project-specific CEQA documents on project-specific analyses and equally or more effective project-specific mitigation measures. These include but are not limited to cities, the County of San Diego, Caltrans, and transportation project sponsors

In addition, CEQA provides several opportunities for further CEQA streamlining for infill projects consistent with the SCS. These include opportunities are provided by:

- SB 375 (Public Resources Code Section 21155 et seq.)
- SB 226 of 2011 (Public Resources Code Section 15183.3 et seq.)
- SB 743 of 2013 (Public Resources Code Sections 21099 et seq. and Section 21155.4)

2.6.2 LIST OF PERMITS OR OTHER APPROVALS REQUIRED TO IMPLEMENT THE PROPOSED PLAN

Pursuant to 176(c) of the federal Clean Air Act (42 USC 7506(c)), SANDAG and USDOT, in consultation with EPA, must make a determination that the RTP and the RTIP conform to the SIP for air quality. See Appendix C of the proposed Plan for the conformity analysis.

2.6.3 ENVIRONMENTAL REVIEW AND CONSULTATION REQUIREMENTS

Preparation of the proposed Plan met both federal and SB 375 consultation requirements. See Appendices G, H, and I of the proposed Plan for documentation.

Federal consultation requirements (23 CFR Part 450.316) include (1) a process involving the MPO, State and local air quality planning agencies, State and local transportation agencies, EPA, and USDOT; and (2) a proactive public involvement process that provides opportunity for public review and comment by, at a minimum, providing reasonable public access to technical and policy information considered by the agency.

SB 375 (Government Code Section 65080) requires consultation with stakeholders, including affordable housing advocates, transportation advocates, neighborhood and community groups, environmental advocates, homebuilder representatives, broad-based business organization, landowners, commercial property interests, homeowners associations, congestion management agencies, transportation agencies, local agency formation commission, and members of city councils and boards of supervisors.