13.C.1 TRAFFIC IMPACT ANALYSIS

National City Focused General Plan Update

Traffic Impact Analysis Report

Prepared by

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for

City of National City

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1 INTRODUCTION

WSP has prepared this Transportation Impact Analysis (TIA) for the City of National City (City) to identify and document potential CEQA impacts related to the City's Focused General Plan Update (FGPU). The FGPU includes updates to the City's land use, transportation network, and mobility circulation (Project).

This TIA has been prepared to evaluate the potential effects of the proposed FGPU Project by evaluating changes in Vehicle Miles Traveled (VMT), as proposed by the California Governor's Office of Planning and Research (OPR) to implement California State Law Senate Bill (SB) 743.

1.1 REPORT ORGANIZATION

This report is organized in the following sections:

- Section 2 summarizes the proposed land use and transportation network updated within the FGPU.
- Section 3 describes the background of VMT analysis via SB 743 and outlines the general guidelines for presenting information in CEQA reporting.
- Section 4 details the procedures necessary for analysis
- Section 5 documents the results of the impact analysis and identifies any transportation impacts.

2 PROJECT DESCRIPTION

2.1 LOCATION

The City of National City is located in the south bay region of the San Diego metropolitan area in San Diego County approximately 7 miles north from the United States of America and Mexico border. National City covers a total of 9.12 square miles and currently holds a population of over 61,000. Figure 1 illustrates the project location.

2.2 BACKGROUND

The City's General Plan was last updated in 2011 under the name Comprehensive Land Use Update (CLUU). Since the last update, new state legislation, regional and local changes, and an adopted Housing Element have taken place.

To address new State legislation, a changing regional context, forecasted future growth, and the City's new 2021 Housing Element, National City is conducting the FGPU as required by State law (Government Code Section 65300). The FGPU collectively includes targeted updates to General Plan element goals and policies; and supporting updates to codes, ordinances, and development standards.

2.3 FOCUSED GENERAL PLAN UPDATES

2.3.1 KEY LAND USE CHANGES

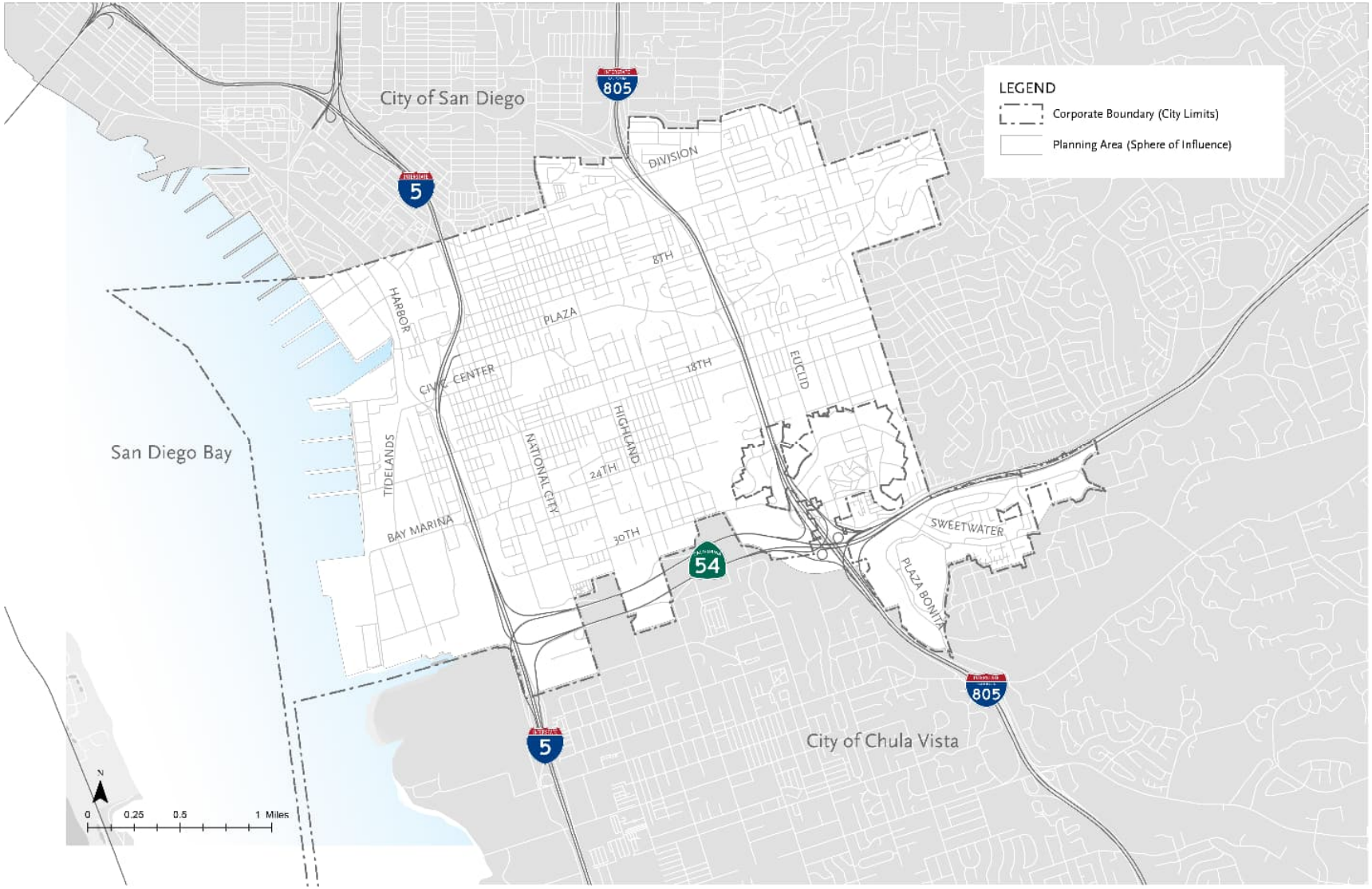
The proposed FGPU includes several changes to the City's current zoning ordinances and land use element. These changes are centered around several focus areas across the City that have been identified as candidates for zoning changes to facilitate housing production and promote mixed-use development. These focus areas were found to highly benefit from an increase in maximum density and height, as well as allowing commercial areas in currently zoned residential use areas. Table 1 summarizes the City's existing and projected buildout land use for both the currently adopted general plan and the preferred alternative from the FGPU.

Table 1: Land Use Summary

Type	Existing (2020) Development	Horizon (2050) Buildout of Currently Adopted General Plan	Horizon (2050) Buildout of Preferred Alternative General Plan	Δ Change in Horizon Buildout (Preferred – Adopted)
Dwelling Units	18,179	22,729	23,325	595
Retail/Office Space (SF)	6,858,359	13,133,424	13,332,112	198,688
Industrial Space (SF)	4,031,983	5,772,092	5,772,092	(0)
Population	58,582	72,961	74,872	1,911

Source: 2020 Decennial Census, Table H1, Table P1

Figure 1: Project Location Map



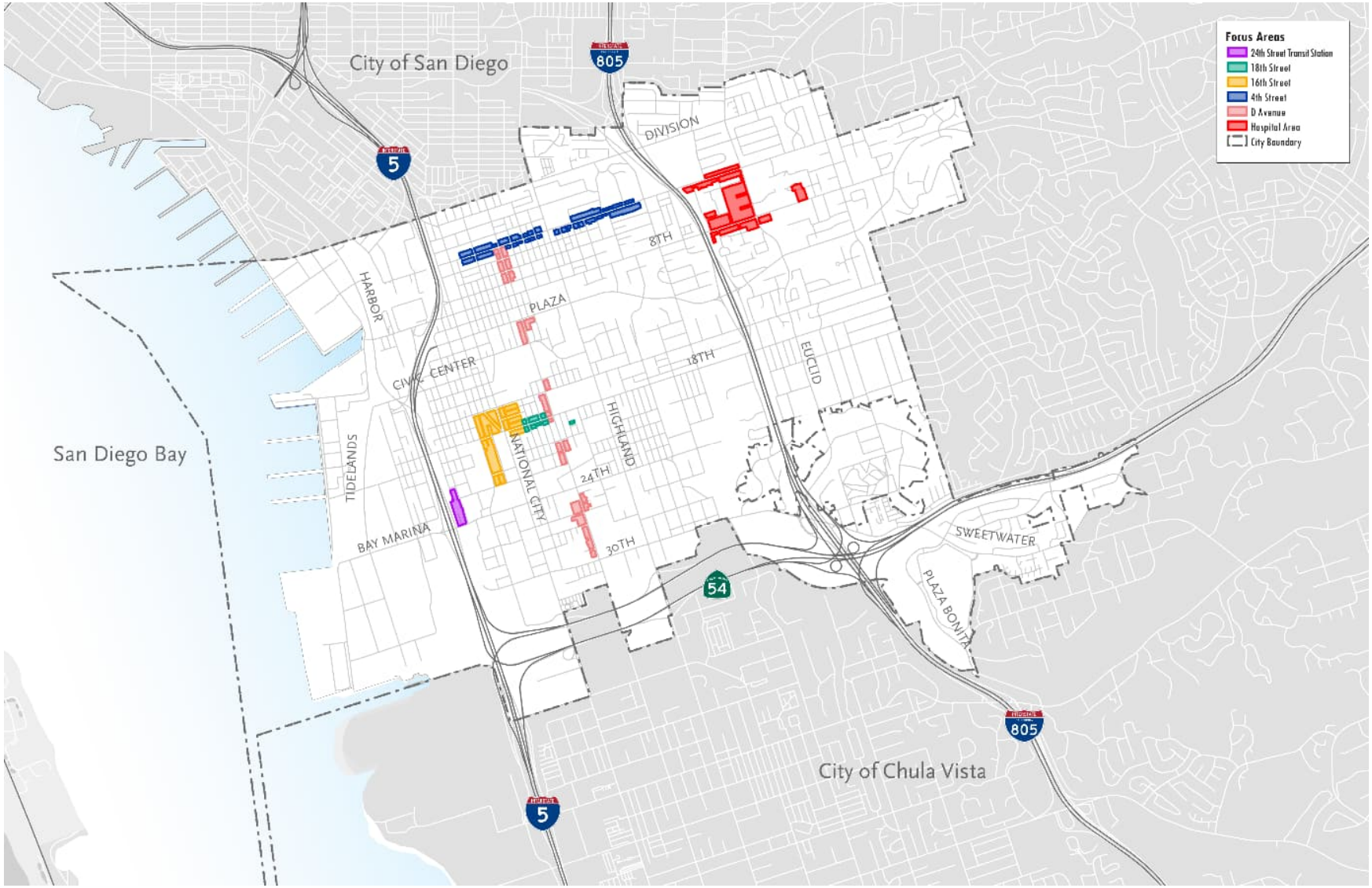
In addition to the proposed zoning changes, a Transit-Oriented Development (TOD) overlay area is being proposed to allow for multi-family development in areas zoned for commercial and institutional uses and near transit. The focus areas were identified based on the recommendations of prior studies, existing conditions analyses, and community feedback, and are identified in Table 2 and Figure 2.

Table 2: Focus Area Proposed Rezonings

Focus Area	Acres	Current Adopted Zoning	Du/ac	Proposed Zoning	Du/ac
24th Street	4.2	Limited Commercial (CL)	0	Mixed Commercial Residential (MCR-1)	24
18th Street	2.2	Small Lot Residential (RS-2)	9	Mixed Use Transition (MXT) Open Space (OS)	24 0
4th Street	16.6	Small Lot Residential (RS-2)	9	Large Lot Residential (RM-1)	23
D Avenue	17.4	Small Lot Residential (RS-2)	9	Medium Density Multi-Unit Residential (RM-1)	24
Hospital Area	38.6	Small Lot Residential (RS-2)	9	Minor Mixed-Use Corridor (MXC-1)	48
		Medium-Low Density Multi-Unit Residential (RS-3)	15		
		Institutional (I)	0		
16th Street	18.6	Mixed Commercial Residential (MCR-1)	24	Mixed-Use Overlay	24
		Limited Commercial (CL	0		
		Service Commercial (CS)	0		

Du=Dwelling Units; ac=acres

Figure 2: Proposed Focus Areas

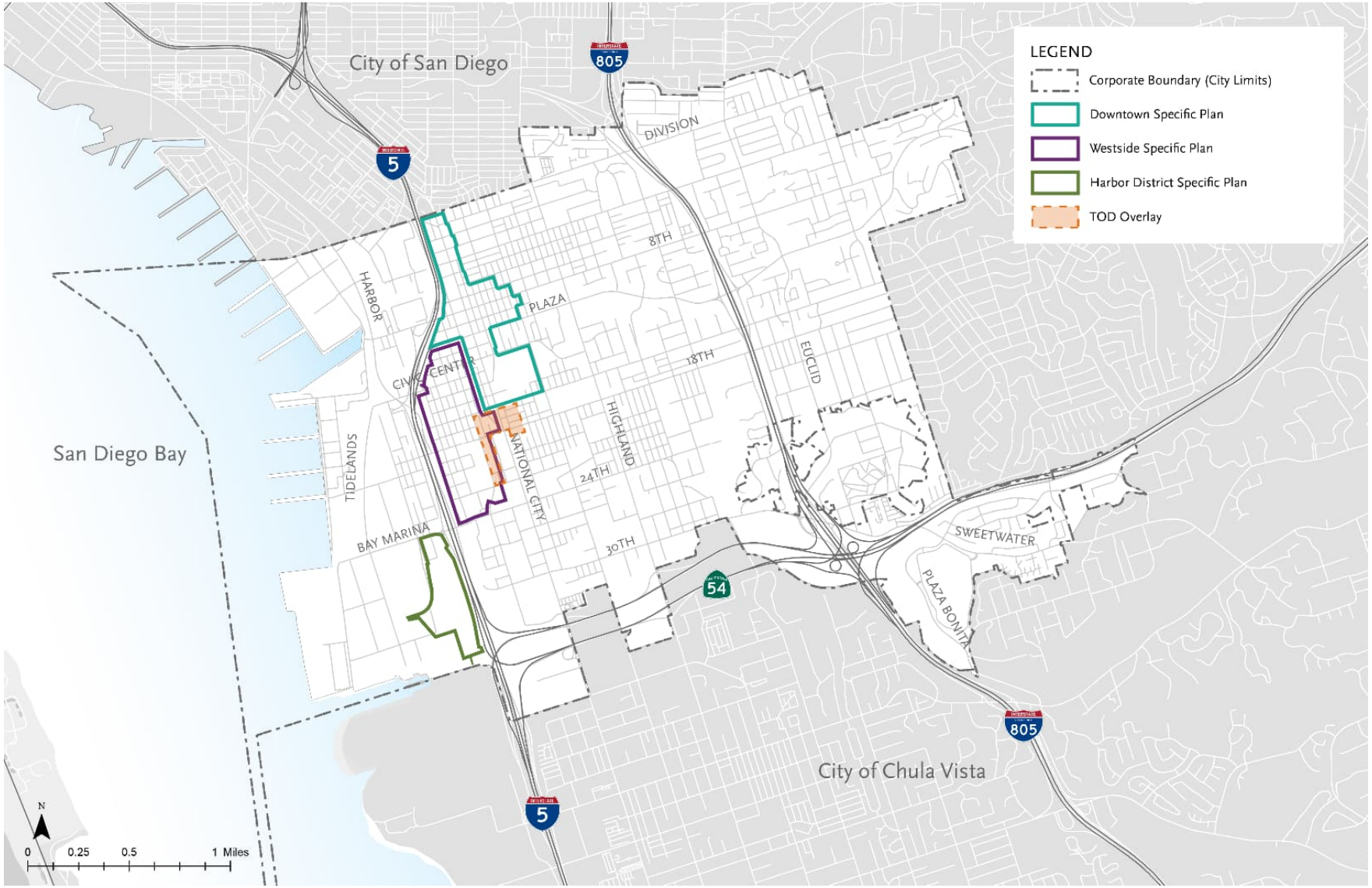


The FGPU amends several specific plans to promote and encourage an increase in City dwelling units across all income categories by updating development standards and guidelines. The policies aim to streamline housing production and alter allowed uses, densities, FARs, heights and other development standards to better serve the city and align with policies and goals. A general outline of the updates can be found below:

- Amendments to the Downtown Specific Plan as part of the FGPU include updates to sections referencing the general plan's goals and policies, additions of references to the objective design standards, clarifications to regulations where residential uses are involved, and providing clarification that in cases where the procedures of the Specific Plan and Municipal Code conflict, the Municipal Code shall prevail.
- The FGPU proposes allowing transitional/supportive housing as a permitted use in the MCR-1 and MCR-2 zones and group homes as a permitted use in the RS-4, MCR-1, and MCR-2 zones in the Westside Specific Plan, in accordance with State law.
- Zoning changes are proposed for the entire 24th Street "Transit Center" Focus Area within the Westside Specific Plan boundary. The site is currently zoned CL with a proposed zoning change to MCR-1.
- Portions of the 16th Street Focus Area, which is within the boundaries of the Westside Specific Plan boundary, fall within the TOD Overlay. This overlay allows for multi-family residential development in areas zoned for commercial and institutional uses and near transit. This overlay is optional and does not propose a change in zoning to these parcels.

Figure 3 displays the specific plan areas and TOD overlay.

Figure 3: Specific Plan Areas and TOD Overlay



2.3.2 KEY TRANSPORTATION NETWORK CHANGES

Included in the City's FGPU are a diverse collection of improvements to the City's circulation network. The Transportation Element update builds on the focused studies and plans that were completed since the last CLUU with updated goals and policies to serve the implementation of additional community corridors, traffic calming corridors and districts, and pedestrian-oriented improvements. In addition, the FGPU incorporates the 24th Street TOD Overlay Network recommendations, including:

- Road diets on 24th Street, 30th Street & Hoover Ave
- Closure of 19th Street under Interstate 5 (I-5)
- Conversion of 1-way to 2-way traffic on 18th Street under I-5
- Signal at National City Blvd and 22nd Street

Figure 4 shows the location of the proposed community corridors to the circulation network to better connect multi-modal resources into a complete network. "Community Corridors", as defined by the City's street typologies, are those streets where the primary focus is not on vehicular throughput, but on other functions related to streets. This street type is intended to increase the comfort of walking and/or bicycling on these roads through traffic calming measures such as on-street parking, bulb-outs; streetscape improvements such as landscaping, street trees, and medians; pedestrian enhancements such as wider sidewalks and street furniture; and bicycle improvements such as designated bicycle lanes and bike rack facilities.

Figure 5 shows the location of location-based pedestrian projects, sidewalk needs and new corridor typologies specific to pedestrians: walkable retail corridors and pedestrian safety corridors. Both typologies are focused on pedestrian improvements to improve the pedestrian experience and pedestrian safety. Walkable retail corridors are located along existing/planned commercial corridors. Pedestrian safety corridors are located along existing/planned residential corridors. Amenities offered for each corridor differ slightly based on this context.

Figure 6 outlines the roadways and district areas that have been found to most benefit from traffic calming measures. The safety of pedestrians, cyclists, and motorists alike are impacted by the toolkit of physical design standards and other measures that reduce traffic speeds and/or reduce traffic congestion in an area.

The City's Bicycle Master Plan is also being updated in coordination with the FGPU and is considered a part of the overall project. This update revises the bicycle network to guide the City in planning for a more connected, safe, and accessible network. Figure 7 outlines the existing and proposed network as defined in the Bike Master Plan Update.

Figure 4: Proposed Community Corridors

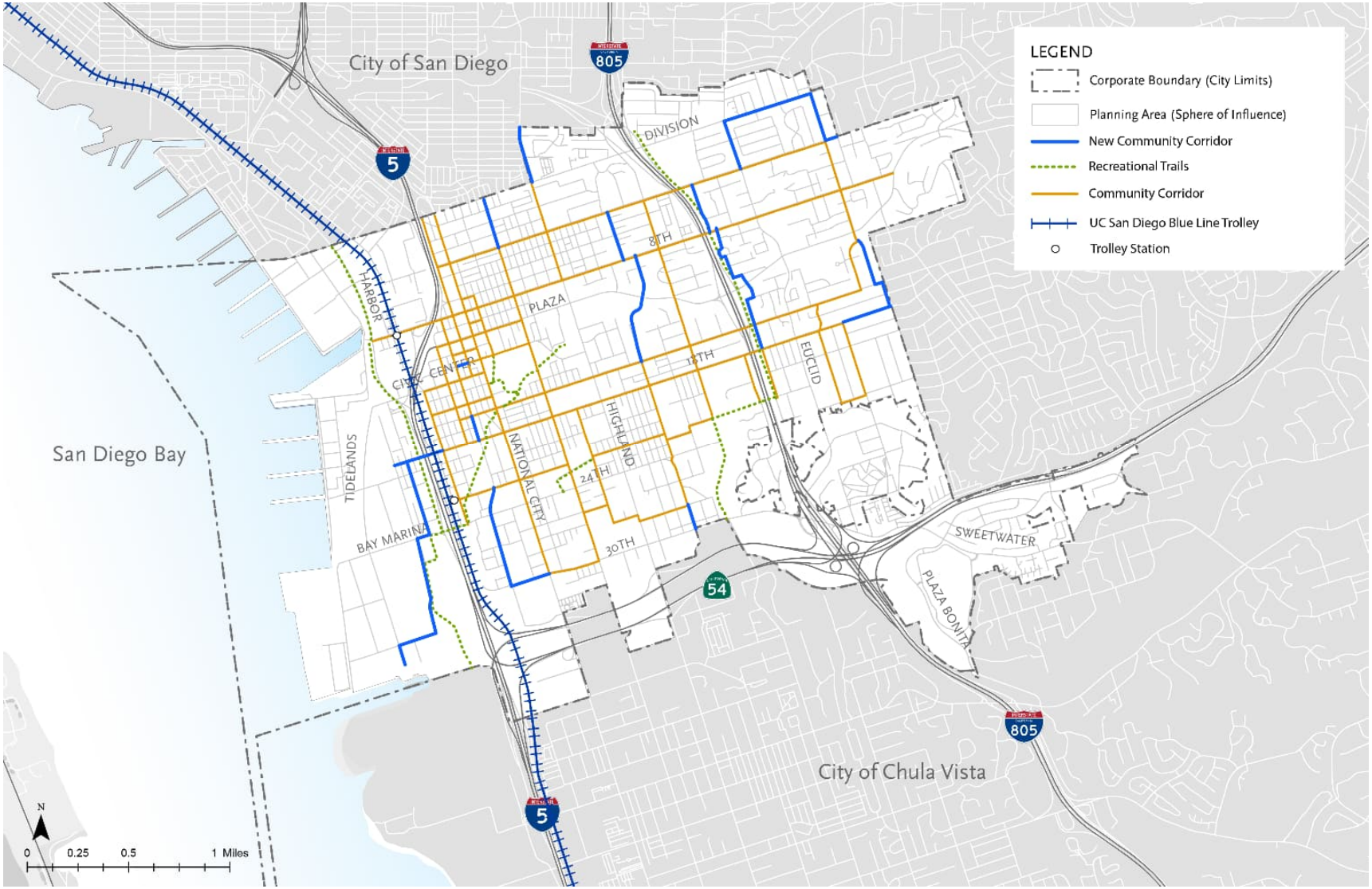


Figure 5: Proposed Pedestrian Corridors and Improvements

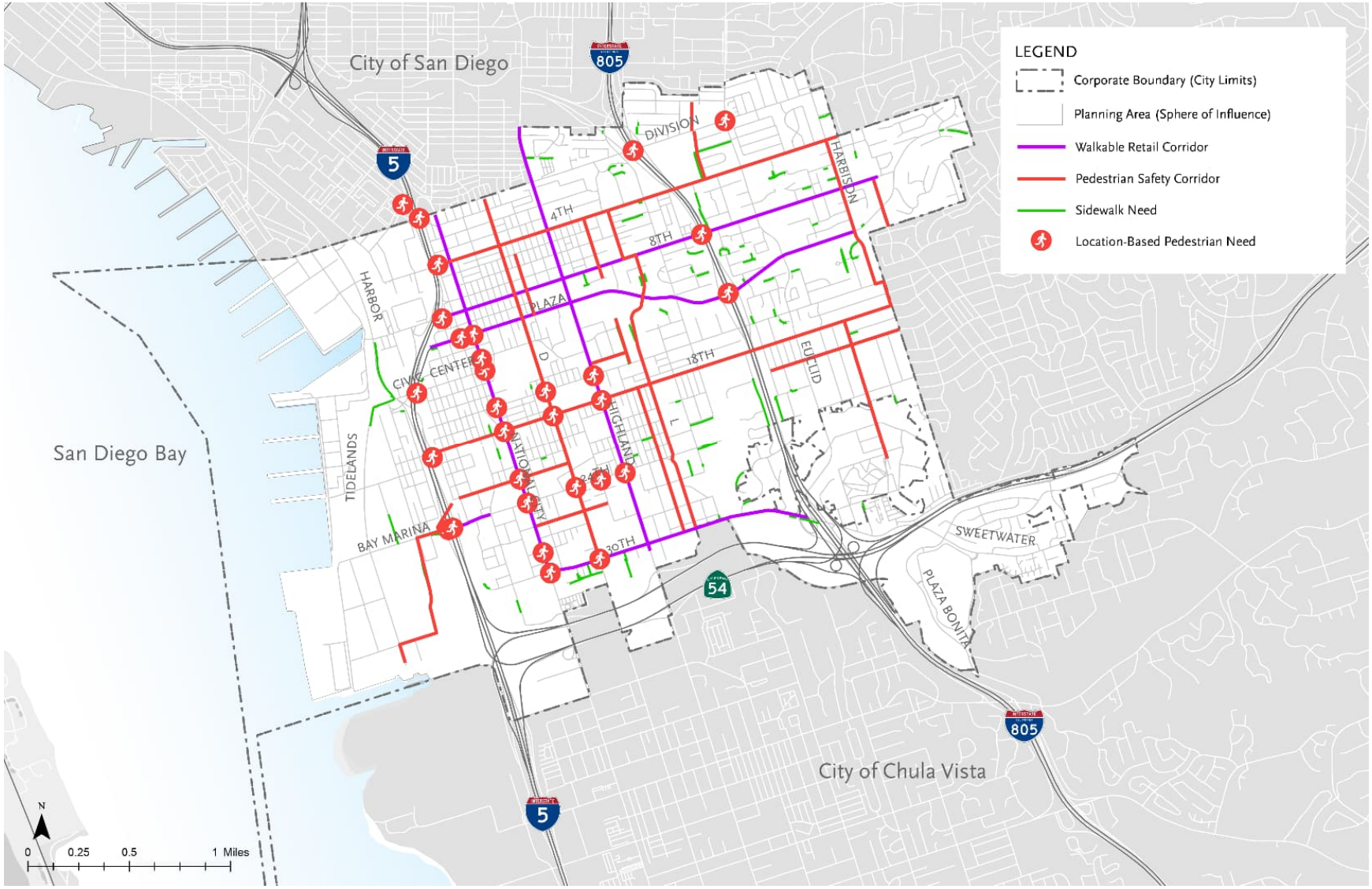


Figure 6: Proposed Traffic Calming Districts and Corridors

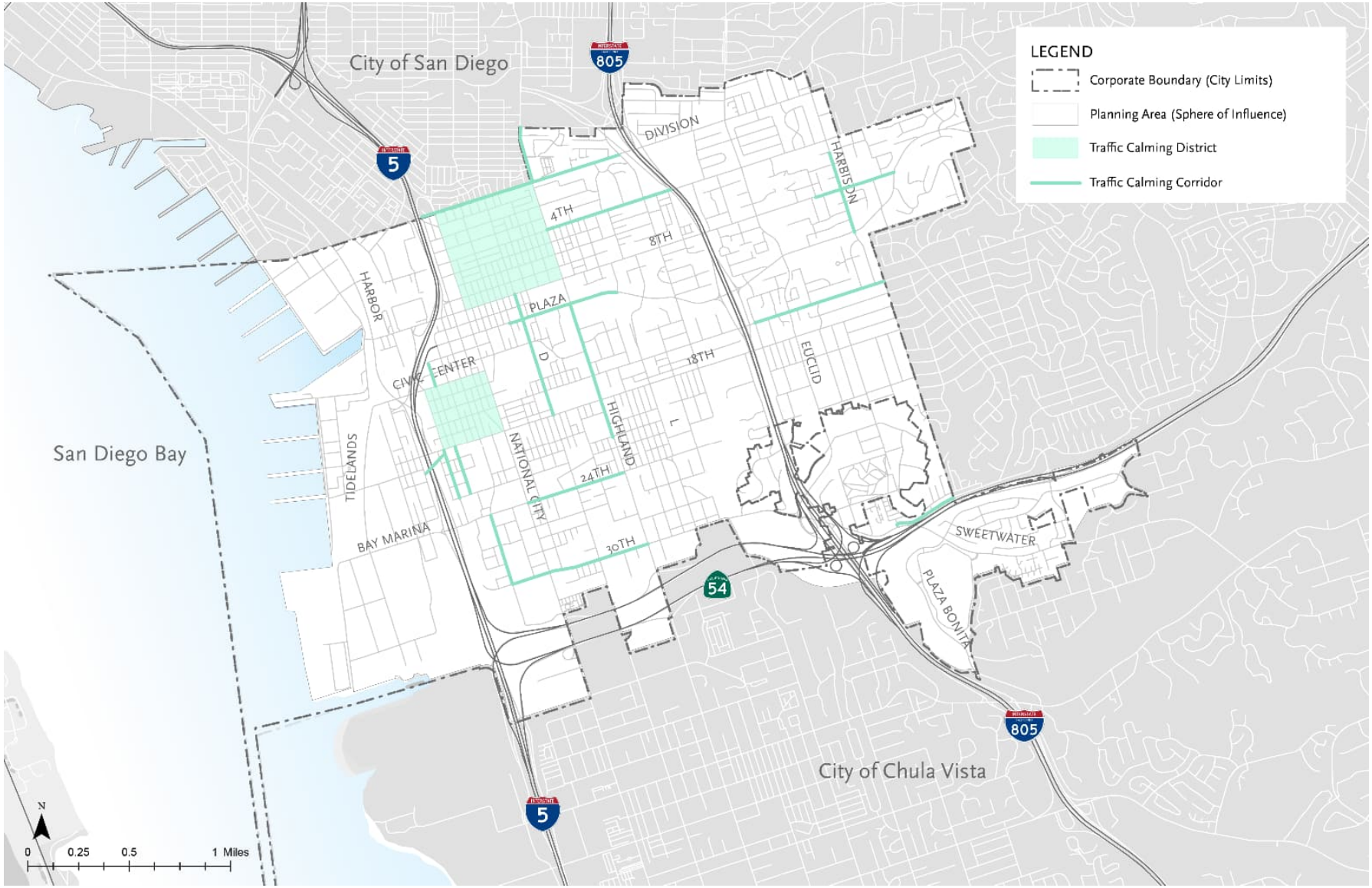
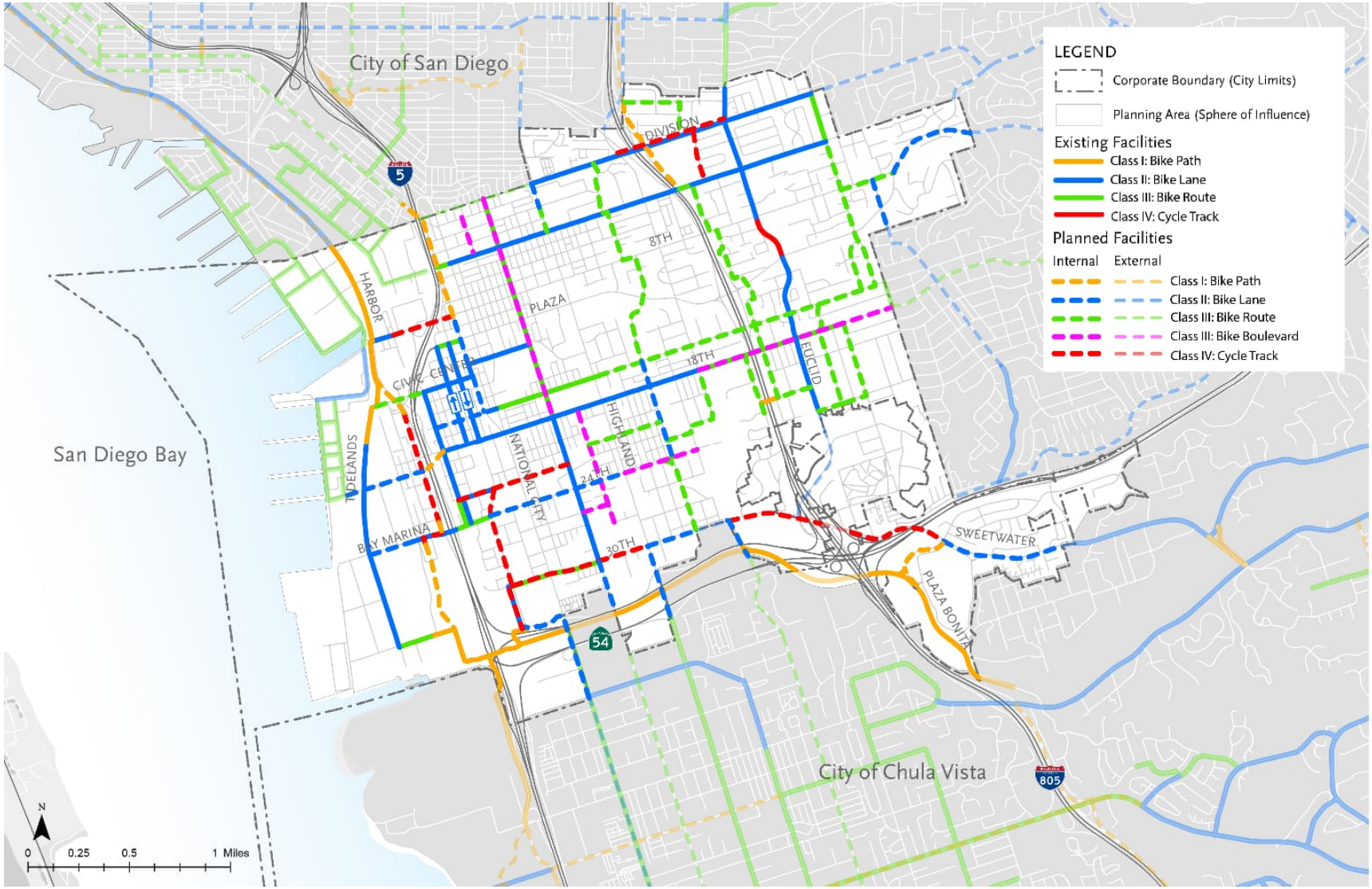


Figure 7: Proposed Bicycle Network from the Bike Master Plan Update



3 GUIDELINES AND VMT BACKGROUND

3.1 VMT REPORTING

This report reviews the potential impacts of the proposed FGPU based on VMT to satisfy the California Environmental Quality Act (CEQA) guidelines through SB 743. Public Resources Code section 20199, enacted pursuant to SB 743, identifies VMT as an appropriate metric for measuring Transportation impacts along with the elimination of auto delay/Level of Service (LOS) for CEQA purposes statewide. VMT is defined as the "amount and distance of automobile travel attributable to a project" per CEQA Guidelines Section 15064.3. VMT is a measure of the use and efficiency of the transportation network as well as land uses in a region. VMT is calculated based on individual vehicle trips generated and their associated trip lengths. VMT measures the roundtrip travel for a typical weekday.

3.2 ITE GUIDELINES

In May 2019, members of the Institute of Transportation Engineers (ITE) SB 743 subcommittee San Diego Section outlined and published a technical paper providing methodology guidance for VMT calculation.

The recommended methodology for conducting a VMT analysis for community plans and general plans is to compare the existing VMT per capita for the community plan or general plan area with the expected horizon year VMT per capita. The recommended target is to achieve a lower VMT per capita in the horizon year with the proposed plan than occurs for existing conditions. The City of National City has adopted these guidelines to identify transportation related impacts for CEQA projects in the City.

In the currently adopted General Plan, the City has projected that land uses such as Retail/Office Space and Industrial Space would increase by approximately 91% and 43%, respectively, in the Buildout year (2050) when compared to existing conditions. It is unreasonable to compare the VMT generated by the preferred alternative to existing conditions when such growth is expected in the City. Therefore, for the purposes of this report, VMT from the preferred alternative is compared to VMT from the adopted General Plan to determine the transportation related impacts.

4 METHODOLOGY

4.1 DATA SOURCES AND METHODS

Population and employment data were obtained from the San Diego Association of Governments' (SANDAG) Series 13 Activity Based Model (ABM), which was customized for the City's FGPU. The ABM is a travel demand forecasting model that incorporates census data and travel surveys to inform the algorithms of the model's projections. It uses a simulated population based on existing and projected demographics to match residents to employment and forecasts the daily travel on the regional transportation network. In addition, the model is able to estimate the daily travel of individuals in the simulated population, including origins, destinations, travel distances and mode choices. The Series 13 ABM has four (4) forecast years: 2012, 2020, 2035, and 2050. The regional forecast for the listed years can be found at SANDAG's Transportation Forecast Information Center (http://tfic.sandag.org/).

For the City's FGPU, the baseline year of 2012 was used for existing conditions input data and VMT was calculated with the 2050 forecast. The Series 13 2050 Revenue Constrained Model network was modified to represent the 2050 Adopted Circulation Element conditions. The network properties such as functional classification of roadways, number of lanes, roadway speed, types of median, etc. were modified before running the 2050 Adopted (Without Project) scenario. Then project specific land use and network modifications were applied to develop the Preferred (With Project) model runs. Separate model runs were conducted for Without Project and With Project scenarios and VMT for both were extracted from the model runs.

4.2 VMT SIGNIFICANCE THRESHOLD

Project-specific significance thresholds for the City FGPU have been developed to guide programmatic analysis for the Proposed Project. A significant transportation impact could occur if the Proposed Project would generate higher VMT per capita than the Adopted General Plan.

5 IMPACT ANALYSIS

This section documents the process and results of any impacts resulting from the proposed City FGPU projects.

5.1 PROJECT VMT

SANDAG's ABM was used to calculate the proposed Project's VMT. The proposed Land Use Element and Transportation Element were used to develop future roadway forecasts and VMT.

Table 3 presents the City VMT efficiency metrics for Base Year (2012) conditions. The results show that the VMT per capita for the City is below the regional base year average.

Table 3: National City Base Year VMT Metrics

VMT Metric	Base Year (2012)		% of Regional Base Year (average)
	Region	National City	National City
VMT per capita	17.6	11.1	63.1%

The projected implementation of the 2050 With Project has resulted in a reduction of VMT efficiency in the City when compared to the Without Project conditions. Table 4 outlines the City VMT per capita for the proposed FGPU. As shown in the table, the VMT per capita in the City is projected to reduce from 8.33 to 8.21. In addition, the VMT per capita for the City would also be lower than the regional average and lower than the VMT per capita for the City in the base year.

Table 4: VMT Impact Determination

VMT per capita	2050 Without Project	2050 With Project	Significant Impact?
National City	8.33	8.21	No
Regional	14.72	14.72	

Based on the results, it is determined that the Preferred Alternative (2050 With Project) is not anticipated to cause a significant transportation impact.