4.8 TRANSPORTATION AND CIRCULATION

The analysis in this section provides focused updates to Chapter 4.13 Transportation and Circulation in the 2011 Comprehensive Land Use Update (CLUU) Program Environmental Impact Report (PEIR), with an emphasis on potential transportation impacts that may change as a result of the Focused General Plan Update (FGPU). Unlike the 2011 CLUU PEIR, this analysis evaluates transportation impacts using vehicle miles traveled or vehicle miles travelled (VMT)-based modelling as currently required under the California Environmental Quality Act (CEQA) Guidelines.

4.8.1 Existing Conditions

The Planning Area is largely built out, and the circulation facilities within National City largely remain the same since preparation of the 2011 CLUU PEIR. A complete description of all existing circulation facilities in the Planning Area is included in the Transportation Element Update in Appendix 13.B.2.

4.8.1.1 Roadway Facilities

The Planning Area currently has approximately 110 miles of paved streets and 90 signalized intersections. The existing roadway system generally follows a traditional grid pattern. The main regional freeway facilities through the Planning Area are Interstate 5 (I-5), Interstate 805 (I-805), and State Route 54 (SR-54). Both I-5 and I-805 provide north-south movement, while SR-54 is an east-west corridor. The Planning Area has 15 major arterial roadways providing circulation across the Planning Area and to major destination points throughout the region. These streets are typically four lanes and spaced at half-mile intervals. Additionally, the Planning Area is served by 30 collector roadways that operate as local conduits to take users in and out of neighborhoods and business districts onto the arterial routes. These are generally two-lane roads with signalized intersections.

4.8.1.2 Transit Facilities

Residents of National City rely more on public transportation than commuters throughout San Diego County. National City is served by a regional transit system operated by the San Diego Metropolitan Transit System (MTS). There are 10 bus routes running through the Planning Area, with a total of 205 bus stops. Additionally, the Planning Area includes two MTS Trolley stations, which are located on the Blue Line Trolley running from Old Town and Downtown San Diego to the United States–Mexico border. The 8th Street Trolley Station is located near the intersection of 8th Street and Harbor Drive, and the 24th Street Trolley Station is located near the intersection of 22nd Street and Wilson Avenue. Recently completed improvements include new benches at bus stops throughout downtown National City, and streetscape enhancements on 8th Street encourage connections to and from the 8th Street Trolley Station.

4.8.1.3 Pedestrian Facilities

National City is made up of multimodal communities with high rates of pedestrian activity. To address gaps in pedestrian connections, the City completed several sidewalk improvements from 2013 to2019, including the installation of 16.9 miles of new sidewalk and 675 ramp upgrades and installations throughout the City to bring them into compliance with the Americans with Disabilities Act. From 2013 to 2019, the City also completed several bicycle infrastructure enhancements through the Capital Improvement Program and Safe Routes to Schools Program.

4.8.1.4 Bicycle Facilities

In addition to the local serving bikeways, the Planning Area also contains two regional bikeways: the Bayshore Bikeway and the Sweetwater River Bikeway. The Bayshore Bikeway is a 26-mile regional bicycle route that encircles San Diego Bay and passes through the Planning Area along Harbor Drive and Tidelands Avenue and provides a link to the nearby cities of San Diego, Coronado, Imperial Beach, and Chula Vista. This route also provides an alternative transportation option to many industrial and military job sites. The Sweetwater River Bikeway is located along the southern border of National City

with segments in Chula Vista. It runs parallel with the Sweetwater River Flood Control Channel. It is approximately 1.7 miles long and varies between 8 and 10 feet in width. It connects to the Bayshore Bikeway at the Sweetwater Channel near the Gordy Shields Bridge.

4.8.2 Regulatory Framework

4.8.2.1 State

Government Code Section 65032(b)
California State law (Government Code Section 65302(b)) requires that a general plan include a circulation element that consists of "the general location and extent of existing and proposed major thoroughfares, transportation routes, terminals... and other local public utilities and facilities, all correlated with the land use element of the [general] plan."[1]

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

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

California Department of Transportation
The California Department of Transportation (Caltrans) is the primary State agency responsible for transportation issues. One of its duties is the construction and maintenance of the State highway system. Caltrans has established standards for street traffic flow and has developed procedures to determine if intersections require improvements. For projects that may physically affect facilities under its administration, Caltrans requires encroachment permits before any construction work may be undertaken. For projects that would not physically affect facilities but may influence traffic flow and LOS at such facilities, Caltrans may recommend measures to mitigate the traffic impacts of such projects. In addition, Caltrans must review proposals to signalize any freeway ramp interchanges through its Intersection Control Evaluation process (Caltrans Traffic Operations Policy Directive #13-01).

4.8.2.2 Local

San Diego Forward: The 2019 Federal Regional Transportation Plan (2019)
San Diego Forward is the merging of the Regional Comprehensive Plan (2004) and the 2050 Regional Transportation Plan (RTP) and Sustainable Communities Strategy (SCS). Every four years, the San Diego Association of Governments (SANDAG) prepares and updates a Regional Plan in collaboration with the 18 cities and County of San Diego, along with regional, State, and federal partners. The 2019 Federal Regional Transportation Plan is the San Diego region's current long-range plan, adopted by the SANDAG Board of Directors on October 25, 2019. This plan is the region's long-range transportation plan and SCS and meets the requirements of 23 Code of Federal Regulations 450.322 by incorporating the following federal congestion management process: performance monitoring and measurement of

1 California Government Code 65302 (b), https://law.justia.com/codes/california/2005/gov/65300-65303.4.html

the regional transportation system, multimodal alternatives, and non-single-occupancy-vehicle analysis, land use impact analysis, the provision of congestion management tools, and integration with the Regional Transportation Improvement Program (RTIP) process. Performance monitoring for the congestion management process utilizes the State of the Commute performance monitoring program.

San Diego Forward: The 2021 Regional Plan (2021)
The 2021 Regional Plan embodies 5 Big Moves, which includes transformative strategies that reimagine the transportation system through Complete Corridors, Transit Leap, Mobility Hubs, Flexible Fleets, and Next Operating Systems.

Regional Transportation Improvement Program (RTIP) (2018)
SANDAG, as the Metropolitan Planning Organization and the Regional Transportation Planning Agency, is required by State and federal laws to develop and adopt an RTIP. The RTIP covers five fiscal years and incrementally implements San Diego Forward: The Regional Plan, which is the long-range transportation plan for the San Diego region. The current Regional Plan was approved by the SANDAG Board of Directors at its meeting on October 9, 2015. At its meeting on September 28, 2018, the SANDAG Board of Directors adopted the final 2018 RTIP. The 2019/2020 Final State Transportation Improvement Plan received federal approval on December 17, 2018.

San Diego Regional Bicycle Plan: Riding to 2050
The San Diego Regional Bike Plan was adopted to provide a regional strategy to make riding a bicycle a useful form of transportation for everyday travel. This plan describes five categories of bicycle-related programs that are essential facets of the overall bicycle system envisioned for the San Diego region: education, marketing/public awareness programs, encouragement, enforcement, and ongoing monitoring. The plan includes policies to improve bicycling and to recommend a system of safe, convenient, regionally significant bicycle facilities, including standard bikeways, innovative facilities such as bicycle boulevards, bicycle parking, and programs such as an annual evaluation program.

National City Bicycle Master Plan (2010)
The National City Bicycle Master Plan outlines a range of recommendations to increase the number of people who bike and frequency of bicycle trips, improve safety for bicyclists, and increase public awareness and support for bicycling. This plan provides direction for expanding the existing bikeway network, connecting gaps, and ensuring greater local and regional connectivity.

General Plan Land Use Element

- ***Goal LU-7:*** *The efficient use of land and infrastructure*
    - ***Policy LU-7.6:*** *Support the strategic conversion of certain sections of streets into developable land only where the conversion positively contributes to the redevelopment and revitalization of the area, improves traffic safety, and does not impede emergency access.*

General Plan Safety Element

- ***Goal S-3:*** *Minimized wildland and urban structural fire risk and increased protection of lives and property.*
    - ***Policy S-3.5:*** *Enforce the City's fire code including minimum road width standards for fire equipment access.*
- ***Goal S-5:*** *Minimized loss of life and property and disruptions in the delivery of vital public and private services during and following emergencies and disasters.*
    - ***Policy S-5.6:*** *Adopt and enforce requirements for emergency access in new development and redevelopment.*

4.8.3 Methodology

The 2011 CLUU PEIR utilized the 2011 CQEA Appendix G significance thresholds, which relied on determining impacts related to changes in vehicle delay (i.e., LOS). As of 2020, an updated metric is used to evaluate transportation impacts consistent with CEQA Guidelines Section 15064.3(b) and SB 743. As noted above, the CEQA Guidelines were amended to direct the analysis of transportation impacts based on VMT rather than LOS or auto delay. Additionally, the issue of parking was removed as a topic area to be addressed in CEQA documents.

A traffic impact analysis was conducted based on modelling the assumptions of the FGPU. Data and metrics utilized in the transportation analysis were obtained from the SANDAG's Series 13 Activity Based Model (ABM), which is a travel demand forecasting model that uses base year (2012) and projected demographics to simulate daily travel behaviors and forecasts daily traffic volumes on the regional transportation network. SANDAG's regional ABM was calibrated at the local level and customized for the proposed FGPU. The SANDAG Series 13 Regional Model Base Year (2012) calibrated for National City established the existing baseline VMT for the FGPU, which is referred to as the Base Year (2012) scenario. While the future buildout conditions were developed based on the project's land use and proposed mobility network superimposed on the SANDAG 2050 Series 13 Regional Travel Demand Model. The model then resulted in future roadway forecasts, including VMT utilized, to identify potential traffic impacts associated with the proposed FGPU.

Detailed modeling information and documentation can be found in Appendix 13.C.1 Transportation Impact Analysis Report.

4.8.4 Significance Determination Thresholds

The 2022 CEQA Guidelines Issue XVII Transportation includes the following significance thresholds:

a) *Conflict with a program, plan, ordinance or policy addressing the circulation system, including transit, roadway, bicycle and pedestrian facilities?*
b) *Conflict or be inconsistent with CEQA Guidelines Section 15064.3(b) [criteria for analyzing transportation impacts]?*
c) *Substantially increase hazards due to geometric design feature (e.g., sharp curves or dangerous intersections) or incompatible uses (e.g., farm equipment)?*
d) *Result in inadequate emergency access?*

4.8.5 Issue Area 1: Conflict with Program, Plan, Ordinance, or Policy

The Transportation Element and Bike Master Plan updates would assist the City in achieving an improved circulation network in accordance with the visions presented in the California Complete Streets Act, within SANDAG's RTP (San Diego Forward), within the San Diego Regional Bicycle Plan, and the City's adopted Bicycle Master Plan.

The FGPU's update to the Transportation Element includes a community corridor street typology guide, per the requirements of the California Complete Streets Act. These typologies would guide the City in establishing a network that balances the needs of all users of the street. The community corridors classification is focused more on the qualitative characteristics of a roadway than the quantitative properties specified in the functional classifications. These corridors represent locations for proposed multimodal improvements to increase the comfort of walking and/or bicycling on these roads, such as through the addition of lighting, bicycle lanes, street trees, highly visible pedestrian crossings, and larger walkways.

This street type is applied to arterials, collectors, and local streets and is intended to increase the comfort of walking and/or bicycling on these roads through traffic-calming measures such as on-street parking, bulb-outs, or gloriettas; 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 bicycle rack facilities.

The FGPU would be consistent with the goals of San Diego Forward, which include helping the region achieve the efficient movement of people and goods through the development of walkable communities close to transit connections and consistent with smart growth principles and facilitating the improvement of cleaner air and reduced greenhouse gas emissions regionwide. The FGPU seeks to expand the City's housing capacity and implement mobility improvements throughout the City, which would be consistent with San Diego Forward's strategies of a reimagined transportation system, sustainable growth and development, and innovative demand and system management. The FGPU's Focus Areas were selected to facilitate the creation of 10-minute neighborhoods, consistent with the Regional Plan's walkable communities strategy. In addition, National City is identified as part of the RTP's 2036 potential transit priority areas. The FGPU also updates policies in the Transportation Element to support the development of connections to transit and the proposed zoning changes at the 24th Street Transit Station Focus Area and encourages the development of 10-minute neighborhoods, of which transit is an integral part.

In addition, the Bike Master Plan Update (see Appendix 13.B.11), included as part of the FGPU, has identified opportunities for additional local bikeways through the Planning Area. Comprehensive bicycle infrastructure and facilities are an important component of creating a balanced and complete transportation network, and the FGPU has assessed these proposed bikeways in consultation with these regional and local bikeway network plans and vision.

Therefore, the FGPU would have a *less than significant* impact on conflict with a State or local program, plan, ordinance, or policy addressing the circulation system.

4.8.6 Issue Area 2: Result in VMT Exceeding the City's Threshold for Compliance with SB 743

Issue 2 focuses on whether the FGPU would have a significant impact if proposed new residential, mixed-use, and industrial land uses would, cumulatively, exceed the respective VMT thresholds identified below.

VMT Significance Threshold

The Traffic Impact Analysis discloses impacts of the proposed FGPU based on VMT[2] in conformance with the CEQA Guidelines Section 15064.3 and 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/ 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.

The City has identified VMT thresholds in conformance with Institute of Transportation Engineers guidance. 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 has

2 Vehicle Miles Traveled (VMT), a single vehicle traveling one mile is equal to one VMT, are summarized using different methods for state laws and climate analysis. SB 743 focuses on travel by residents of National City and employees who work in National City. SB 743 Resident VMT summarizes vehicle travel by National City residents, regardless of what geographic area the trip takes place in, for all of the different purposes a person travels, such as going to work or grocery shopping. SB 743 Employee VMT summarizes vehicle commute travel by people who work in National City, regardless of where their home residence is located. Employee VMT includes all stops along a person's commute journey, including, for example, stopping for gas or coffee going into work, going out for a sandwich at lunch, or stopping to pick up kids at school on the way home from work.

adopted these guidelines to identify transportation-related impacts for CEQA projects in the Planning Area.

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 percent, 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 Planning Area. Therefore, for the purposes of this report, VMT from the preferred alternative is compared to VMT from the adopted General Plan to determine transportation-related impacts.

Impact Analysis
SANDAG's ABM was used to calculate the VMT that would result from the FGPU. The proposed Land Use Element and Transportation Element were used to develop future roadway forecasts and VMT.

Table 4.8-1 presents the 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 4.8-1 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%

Full buildout of the FGPU in 2050 would result in a reduction of VMT per capita in the Planning Area when compared to the Adopted Plan (Without Project conditions). Table 4.8-2 outlines the Planning Area resident VMT for the proposed FGPU. As shown in the table, the VMT per capita in the Planning Area is projected to reduce from 27.8 to 27.2 in the horizon year.

Table 4.8-2 VMT Impact Determination

VMT Metric	2050 Without Project	2050 With Project	Significant Impact?
Resident per capita	8.33	8.21	No

Based on the results, it is determined that the FGPU would have *less than significant* transportation impacts related to VMT and no mitigation would be required.

4.8.7 Issue Area 3: Geometric Design Feature Hazards

Issue 3 relates to whether transportation infrastructure meets design standards as identified in the City's Street Design Manual or other transportation infrastructure-related codes and regulations enforced by the City Engineer.

The FGPU proposes accommodating all modes of transportation through infrastructure improvements, which would alter the existing street geometry of some roadways in the Planning Area. The design of roadways in the Planning Area, however, would be required to conform with applicable State and City design criteria that contain provisions to minimize roadway hazards. Compliance with these standards and design to the satisfaction of the City Engineer would avoid impacts related to roadway hazards due to a design feature or incompatible uses. Furthermore, the FGPU would improve existing transportation deficiencies by providing higher-quality bicycle facilities and improving pedestrian connectivity with the closure of facility gaps. These multimodal enhancements are intended to improve safety for bicycles and pedestrians on the roadway. Therefore, impacts related to hazardous design features would be *less than significant.*

4.8.8 Issue Area 4: Emergency Access

The City has adopted California Building Code access standards to address potential emergency access issues. Future development proposed under the FGPU would be required to comply with these regulations when designing emergency access to future residential, commercial, and industrial sites. Additionally, future roadway improvements proposed under the FGPU would be required to comply with these regulations. Thus, compliance with the City Municipal Code would preclude inadequate emergency access issues.

Implementation of the FGPU would maintain the existing circulation patterns within the area and would implement road diets along some roadways, which could affect levels of delay. Changes to roadway configurations would maintain access and connectivity throughout the Planning Area, allowing for multiple routes for emergency travel.

The FGPU includes updates to the City's Land Use and Safety Elements. These elements include the following policies regarding emergency access:

- ***Policy LU-7.6****: Support the strategic conversion of certain sections of streets into developable land only where the conversion positively contributes to the redevelopment and revitalization of the area, improves traffic safety, and does not impede emergency access.*
- ***Policy S-3.5:*** *Enforce the City's fire code including minimum road width standards for fire equipment access.*
- ***Policy S-5.6****: Adopt and enforce requirements for emergency access in new development and redevelopment.*

Adherence to the City's access requirements would avoid potentially significant traffic hazard or emergency access issues. Impacts would be *less than significant*.

4.8.9 Mitigation, Monitoring, and Reporting

No mitigation is necessary.