6 CUMULATIVE IMPACTS

This section addresses cumulative impacts associated with implementation of the Focused General Plan Update (FGPU). Per California Environmental Quality Act Guidelines Section 15355, "Cumulative impacts" refers to:

> *"[...]two or more individual effects which, when considered together, are considerable or which compound or increase other environmental impacts. The individual effects may be changes resulting from a single project or a number of separate projects. The cumulative impact from several projects is the change in the environment which results from the incremental impact of the project when added to other closely related past, present, and reasonably foreseeable probable future projects. Cumulative impacts can result from individually minor but collectively significant projects taking place over a period of time"*

6.1 CUMULATIVE ANALYSIS SETTING AND METHODOLOGY

The FGPU includes a number of land use and zoning changes for the Planning Area that would ultimately be built out over a 30-year buildout horizon. Cumulative effects would result from development associated with buildout attributed to the FGPU combined with effects of development on land within and around the Planning Area and the region in the horizon year (2050). The cumulative impacts of the FGPU would, therefore, take into account growth projected by the County General Plan for the unincorporated communities of Lincoln Acres, the City of Chula Vista General Plan, the City of San Diego General Plan, and the Unified Port of San Diego Master Plan, along with other anticipated growth in the Planning Area itself. A broad examination of cumulative impacts involves considering buildout under the FGPU together with growth and new development in the surrounding jurisdictions identified above. For example, growth within the Planning Area and adjacent jurisdictions would result in increased traffic on area roadways and regional facilities, such as Interstate 5 and State Route 54. The geographic area considered for each cumulative impact depends on the impact that is being analyzed. For example, in assessing air quality impacts, all development within the air basin contributes to regional emissions of criteria pollutants, and basin-wide projections of emissions are the best tool for determining the cumulative effect. Each subsection below identifies the specific parameters for the cumulative evaluation.

A significant impact would occur if the FGPU's contribution to the cumulative effect is determined to be substantial. Each subsection below provides an overview of the potential cumulative impacts that could occur, followed by a summary of the FGPU's contribution to that cumulative effect. The subsection concludes with a determination of the significance of the FGPU.

6.2 PLANS AND PROJECTS EVALUATED FOR DETERMINATION OF CUMULATIVE IMPACTS

Multiple planning documents and programs were used to evaluate the FGPU's contribution to cumulative impacts. These plans and programs are discussed under the Regulatory Framework subsections throughout Chapter 4.0 Environmental Analysis. See Chapter 3.0 Project Description, Section 3.2.2 Local Plans, Programs and Studies; and Chapter 4.6 Land Use, Section 4.5.2 Regulatory Framework for a detailed description of plans and programs evaluated. Highlighted below are a number of regional and City plans and programs used in the cumulative impacts evaluation:

- San Diego Forward: The 2021 Regional Plan; SANDAG 2021
- Port Master Plan Update; Unified Port of San Diego 2022
- General Plan Update and Amendments; County of San Diego 2012–2021

- Bicycle Master Plan; National City 2010 (developed in coordination with the 2011 Comprehensive Land Use Update [CLUU])
- SMART Foundations Plan; National City 2014
- National City Marine Terminal Optimization Study; Unified Port of San Diego 2015
- Harbor Drive Multimodal Corridor Study; Unified Port of San Diego 2017
- Downtown Specific Plan; National City 2017
- Integrating Neighborhoods with Transportation Routes for All Connections (INTRAConnect) Planning Study; National City 2020
- Waterfront to Homefront Connectivity Study; National City 2020
- 24th Street Transit Oriented Development Overlay Planning Study; National City 2021
- Accessory Dwelling Unit Ordinance; National City
- General Plan; National City 2011
- Municipal Code; National City
- Westside Specific Plan; National City
- Harbor District Specific Area Plan; National City

6.3 Cumulative Effects Analysis

6.3.1 Aesthetics (Visual Character/Visual Quality)

Based on the location of focused land use changes proposed, the study area for the assessment of cumulative aesthetic impacts is the Planning Area.

Future growth within the Focus Areas has the potential to cumulatively impact the visual environment through the design and location of future development projects. Changes in neighborhood character from individual development projects within the Focus Areas could contribute incrementally to cumulative impacts with regard to aesthetics.

As discussed in Section 4.1 Aesthetics, implementation of the FGPU would increase opportunities for the development of residential, mixed-use, and industrial uses throughout the Focus Areas. The FGPU revises zoning to allow for higher-density residential land uses near transit and mixed-use land uses in commercial areas. The FGPU would also propose changes to the transportation network to provide better connectivity between the community and these land uses.

Adherence to zoning standards and to community design guidelines would ensure that visual contrasts between existing and new development would not be adverse. Although the FGPU would result in an increase in overall residential density within the Planning Area, implementation of the zoning requirements and design guidelines would avoid conflicts with any regulation relative to the protection of visual resources. The FGPU provides a framework for the City to develop a mix of land uses that are compatible with each other and for an improved transportation network that would improve visual quality and character on local streets through streetscape improvements and a change in scale that would benefit the pedestrian and bicyclist experience. Future qualifying multi-unit developments under buildout of the FGPU would be required to be in conformance with the Objective Design Standards to ensure that new development retains the aesthetic character of the Planning Area. In addition, development of the Focus Areas under the FGPU, combined with continued infill development in the surrounding cumulative study area, would not result in a cumulatively significant visual impact due to the urbanized nature of the cumulative study area.

Therefore, the FGPU's incremental contribution to visual impacts would not be cumulatively considerable.

6.3.2 Air Quality

Cumulative impacts to air quality may be regional or localized. Regional air quality would be impacted if emissions from the buildout of the FGPU contributed to cumulative degradation of air quality in the San Diego Air Basin (SDAB). Localized air quality would be impacted if emissions from the FGPU and other proximate emissions sources resulted in pollutant concentrations that exceeded standards at a sensitive receptor. Future development within the study area could have a cumulative impact on air quality due to increased air pollution emissions associated with construction and operations, including transportation sources. The analysis provided in Chapter 4.2 Air Quality is cumulative in nature as it considers buildout of land uses to the year 2050.

6.3.2.1 Regional

The study area for the assessment of cumulative regional air quality impacts is the SDAB, which is currently in nonattainment for federal and State ozone standards and respirable particulate matter standards (for particulate matter less than or equal to 10 and 2.5 microns across; PM_{10} and $PM_{2.5}$, respectively). The cumulative assessment of regional air quality impacts to the SDAB relies partially on assessment of the FGPU's consistency with the adopted Regional Air Quality Strategies (RAQS) and State Implementation Plan (SIP).

The RAQS and SIP are based on growth forecasts for the region, which are in turn based on maximum buildout of land uses as allowed in the adopted community and general plans. As discussed in Chapter 4.2 Air Quality, the FGPU would result in increased buildout intensity compared to what is anticipated under the adopted CLUU, and thereby would result in increased air emissions that are not accounted for in the San Diego RAQS. The FGPU would include zoning changes that would result in future buildout of approximately 600 additional residential dwelling units and 200,000 square feet of commercial development.

Cumulative air quality impacts are considered part of the analysis of the regulatory changes proposed by the FGPU, since a cumulative traffic model was used to generate the future traffic projections used for the air quality analysis. The traffic model considered growth under the proposed FGPU in conjunction with projected regional growth in San Diego County and vehicle miles traveled (VMT). VMT was used as the primary indicator, since this is by far the greatest source of air pollutant emissions from land use development. Population growth and other mobile and stationary sources were evaluated as well.

Traffic modeling of the land use changes for the FGPU demonstrated that the FGPU would result in a net decrease in VMT per capita in 2050. This reduction indicates that the FGPU would be a more efficient plan than the adopted CLUU in terms of vehicular trips. However, because the proposed FGPU would result in greater density, overall future operational emissions associated with buildout of the FGPU would be greater than future emissions associated with buildout of the adopted CLUU land uses. Therefore, emissions of ozone precursors (reactive organic gases and nitrogen oxide) would be greater than what is accounted for in the RAQS. Thus, the FGPU would conflict with implementation of the RAQS and with regional planning efforts to attain ambient air quality standards. Future updates to the Ozone Attainment Plan and RAQS would use SANDAG projections that include updated land use assumptions. Although clean air planning efforts (in terms of control measures) can be adjusted to meet the plan objective and take into account the effects of the FGPU land use assumptions, these projections are not included in the current Attainment Plan (SIP) or RAQS. Therefore, the proposed FGPU would result in a *cumulatively considerable* contribution to a significant cumulative impact to regional air quality.

6.3.2.2 Localized

The FGPU may result in the development of projects that could exceed air quality impact screening levels for construction emissions, which could contribute to a violation of National Ambient Air Quality Standards or California Ambient Air Quality Standards, resulting in a cumulatively considerable air quality impact at the program level. Implementation of mitigation measure **MM-AQ-2**, detailed in Chapter 4.2 Air Quality, Section 4.2.9 Mitigation, Monitoring, and Reporting, would reduce potential cumulative construction level emissions; however, impacts would remain *cumulatively considerable* at the program level.

6.3.3 Cultural and Tribal Cultural Resources

The study area for the assessment of cumulative impacts to cultural resources includes the San Diego region because loss of cultural resources would be detrimental to the entire region. Future development within the cumulative study area could have a cumulative impact on cultural resources through loss of records or artifacts as land is developed (or redeveloped). As discussed in Chapter 4.3 Cultural Resources and Tribal Cultural Resources, future development in accordance with the FGPU could impact historical or archaeological resources, which may be present within the Planning Area (see **Impact CUL-1** and **CUL-2**). Implementation of **MM-CUL-1** through **MM-CUL-4** would reduce impacts to cultural resources to *less than significant* through the requirement for historic and archaeological surveys and archaeological/Native American monitoring during grading and construction.

Implementation of these measures would ensure that the FGPU would not contribute to a cumulatively considerable impact to historical or archaeological resources.

6.3.4 Paleontology

The study area for the assessment of cumulative impacts to paleontological resources includes the San Diego region because loss of paleontological resources would be detrimental to the entire region.

With respect to paleontological impacts, future development projects within the Planning Area have the potential to cause ground disturbance within paleontologically sensitive areas in the Holocene and Pleistocene Formations, resulting in a significant impact to subsurface paleontological resources (**Impact PALEO-1**). Implementation of **MM-PALEO-1** would reduce impacts by requiring a paleontological monitor to have the authority to halt grading should paleontological resource be encountered. Should a resource be discovered, an excavation plan would be prepared to evaluate the resource and recommend additional mitigation. Although future projects throughout the Planning Area would contribute to incremental cumulative impacts to paleontological resources, adherence to the mitigation framework described in Chapter 4.4 Paleontology would ensure that the FGPU's incremental contribution to paleontological impacts would not be cumulatively considerable.

6.3.5 Hazards and Hazardous Waste

The study area for the assessment of cumulative impacts related to hazards and hazardous materials impacts is the San Diego region due to the migration of subsurface hazardous plumes and the transport of wastes to facilities across the region. As population growth increases, the number of people potentially exposed to hazards and hazardous materials would increase.

Generally, the release of hazardous materials has site-specific impacts that do not compound or increase in combination with impacts elsewhere. As discussed in Chapter 4.5 Hazards and Hazardous Materials, future development in accordance with the FGPU could result in hazards to the public or the environment by redevelopment of sites with existing soil or groundwater contamination (**Impact HAZ-1**). **MM-HAZ-1** would require that future projects identify potentially hazardous conditions prior to grading, through preparation of a Phase I Environmental Site Assessment (ESA) and a Phase II ESA if necessary. Remediation of any contaminated soils would be required prior to development.

Additionally, cumulative projects within the region would be required to comply with applicable federal, State, and local regulations of agencies having jurisdiction over hazardous materials, including the U.S. Environmental Protection Agency, federal Resource Conservation and Recovery Act, County Department of Health Services, and County of San Diego Department of Environmental Health.

Therefore, potential incremental impacts related to hazardous materials exposure would not be cumulatively considerable.

6.3.6 Land Use

The study area for the assessment of cumulative land use impacts is the Planning Area and surrounding jurisdictions. Cumulative land use impacts could result from inconsistencies with or changes to adopted land use plans, which could result in unsustainable development patterns.

Adoption of the FGPU could contribute to cumulative impacts if buildout would conflict with land use plans and/or policies or State planning initiatives. Per analysis in Chapter 4.6 Land Use, the SPEIR found that the FGPU would be consistent with policies of adopted plans and regulations governing land use and development in the City. In addition, the FGPU would not conflict with any relevant regional or local plans. Specifically, the FGPU is consistent with the goals of San Diego Forward and the City's adopted CLUU objectives and policies. While development within the Focus Areas would contribute to an incremental increase in density and intensity of uses, the FGPU has been developed to be consistent with key Citywide goals of the adopted CLUU.

In addition, the FGPU would be consistent with applicable State planning initiatives, which include Senate Bill (SB) 375 and SB 743. As detailed in Chapter 4.9 Energy and Greenhouse Gas Emissions, implementation of the FGPU would generate greenhouse gas (GHG) emissions consistent with State and regional GHG emission reduction targets, and thus would be consistent with SB 375. Regarding consistency with SB 743, implementation of the FGPU is anticipated to result in a reduction of approximately 1.4 percent in VMT citywide compared to the adopted General Plan VMT, thereby complying with SB 743.

Therefore, the FGPU's incremental contribution to land use impacts associated with land use plans, policies, and State planning initiatives would not be cumulatively considerable.

6.3.7 Noise

Noise levels generated by multiple noise sources typically correspond closely to the noise levels generated by the single loudest noise sources. As distance increases, noise levels attenuate quickly; multiple noise sources only result in greater cumulative noise levels when located near each other. The study area for the assessment of cumulative noise impacts is the Planning Area and neighboring jurisdictions, as detailed above. Although the Planning Area and surrounding jurisdictions are largely urbanized, future development or redevelopment cumulatively could increase ambient noise.

Buildout of the FGPU would include stationary sources such as construction activities; heating, ventilation, and air conditioning units; children at play; landscape maintenance machinery; etc. The areas surrounding the Planning Area are developed urban areas and thus generate a level of noise similar to that of future development consistent with the FGPU. As noise levels generated by stationary noise sources would correspond to the single loudest noise sources, these sources do not inherently result in cumulative impacts. However, without detailed operational data, it cannot be verified that future projects implemented in accordance with the FGPU would be capable of reducing noise levels to comply with the City's Noise Ordinance property line standards, resulting in a potentially significant impact.

Whereas stationary noise sources often result in direct impacts, traffic noise increases often result in cumulative ambient noise impacts. Traffic volumes on a roadway segment do not necessarily originate from land uses near that segment. As discussed in Section 4.6 and shown in Table 4.6-13, accounting for

buildout of the FGPU (along with other ambient growth through the horizon year), the cumulative noise level increases that would occur between the existing condition and the project planning horizon (2050) would include a barely perceptible noise level increase along all local roadway segments.

Segments that would be subject to a barely perceptible cumulative noise level increase (3 A-weighted decibels; [dBA]) would include D Avenue between 4th Street and 18th Street, D Avenue between 24th and 30th Street, and along 4th Street between National City Boulevard and Euclid Avenue. Implementation of the FGPU would not result in a perceptible contribution to the cumulative noise level increases along these segments. Segments that would be subject to a barely perceptible cumulative noise level increase (3 dBA) would occur along D Avenue between 18th and 24th Streets and along Wilson Avenue between 20th and 24th Street. As the overall contribution of the FGPU to ambient noise levels would be less than perceptible, impacts would be less than cumulatively considerable.

6.3.8 Transportation

Due to the long-range planning nature of the FGPU being an update to the adopted General Plan with no specific development project being proposed at this time, the transportation analysis provided in Chapter 4.8 Transportation and Circulation is considered cumulative in nature. The analysis provided in Chapter 4.8 considers buildout of land uses and network improvements to the year 2050. The implementation of the FGPU in 2050 would result in a reduction of VMT per capita in the City when compared to the Adopted Plan (Without Project) conditions. Table 4.8-2 outlines the resident VMT 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 the horizon year. Therefore, impacts associated with FGPU buildout would be less than cumulatively considerable relative to VMT.

6.3.9 Greenhouse Gas Emissions

The analysis of GHG emissions is, by its nature, a cumulative issue; thus, the study area is global in nature. The analysis provided in Chapter 4.9 Energy and Greenhouse Gas Emissions considers buildout of land uses and the circulation network, along with implementation of the Climate Action Plan through the year 2050. Future development in accordance with the FGPU would result in emissions that are consistent with State GHG emissions targets codified by Assembly Bill 32 and identified in Executive Order B-30-15. Additionally, the FGPU would not conflict with any applicable plan, policy, or regulation adopted for the purposes of reducing the emissions of GHGs. Thus, as further detailed in Chapter 4.9, implementation of the FGPU would result in GHG emissions that are less than cumulatively considerable.