Section 4.3
Greenhouse Gas Emissions

4.3.1 Introduction

This section evaluates greenhouse gas (GHG) emissions from construction activities and from operations (project-related mobile sources and off-site regional traffic) that would occur at build out in the horizon year of 2035. Potential greenhouse gas impacts associated directly with the Project and indirect impacts from activities related to or affected by the Proposed Project are analyzed. The analysis of project-related GHG emissions includes a comparison to the emissions associated with baseline (2014) conditions; a comparison to Future without Project (2035) conditions is provided for additional information.

This section provides an overview of applicable regulations, presents existing conditions in the project area, describes the methodology used in the analysis, and evaluates the potential construction and operational impacts associated with the proposed updates to the Coastal Transportation Corridor Specific Plan (CTCSP) and West Los Angeles Transportation Improvement and Mitigation Specific Plan (WLA TIMP) Specific Plans (Proposed Project).

4.3.1.1 Organization of the Section

The section is organized as follows:

- **Regulatory Framework** summarizes the applicable federal, state, and local regulations, policies, and guidelines pertaining to GHG.
- **Existing Setting** describes current GHG issues and quantifies existing GHG emissions in the project area.
- **Methodology** identifies the approach and models used to evaluate project impacts.
- **Thresholds of Significance** lists the thresholds used in identifying significant impacts, as identified in Appendix G of the State CEQA Guidelines.
- **Impacts and Mitigation Measures** presents the analysis of impacts relating to GHG, and provides recommended mitigation measures, where appropriate, to reduce significant impacts. The **Significance of Impacts After Mitigation** is also identified.

4.3.1.2 Definitions of Technical Terminology

This section uses technical terminology to describe GHGs. Definitions of key terms are provided in **Table 4.3-1**.

Table 4.3-1 Key GHG Terminology

Term	Acronym	Definition
Carbon Dioxide	CO_2	A colorless, odorless gas that is the leading cause of climate change, contributing over 80 percent of US GHG emissions[1, 2]
Carbon Dioxide Equivalent	CO_{2e}	The total climate change impact of all greenhouse gases expressed in terms of carbon dioxide
Global Warming Potential	GWP	The potential for each GHG to trap heat in the atmosphere and contribute to climate change[3]
Greenhouse gas	GHG	A gas in the atmosphere that absorbs and emits radiation
Hydrofluorocarbons	HFCs	Gases used for refrigeration and air conditioning, known as a super greenhouse gas due to their high global warming potential and increased use[1]
Intergovernmental Panel on Climate Change	IPCC	The leading international body for the assessment of climate change. It was established by the United Nations Environment Programme (UNEP) and the World Meteorological Organization (WMO) in 1988 to provide the world with a clear scientific view on the current state of knowledge in climate change and its potential environmental and socio-economic impacts.[4]
Methane	CH_4	The main component of natural gas and a biogas associated with the life cycle of livestock products, methane is the most prevalent GHG after CO_2[1, 2]
Nitrous Oxide	N_2O	A GHG emitted during agricultural and industrial activities, as well as during combustion of fossil fuels and solid waste[2]
Parts per billion	ppb	The concentration of a chemical in the environment
Parts per million	ppm	The concentration of a chemical in the environment

Notes:
1. Think Global Green. Homepage. Available: http://www.thinkglobalgreen.org/CARBONDIOXIDE.html. Accessed on August 31, 2015.
2. USEPA. 2015a. Overview of Greenhouse Gases. Available: http://www.epa.gov/climatechange/ghgemissions/gases/fgases.html. Accessed on August 31, 2015.
3. Global Greenhouse Warming. Homepage. Available: http://www.global-greenhouse-warming.com/. Accessed on August 31, 2015.
4. Intergovernmental Panel on Climate Change. Homepage. Available: http://ipcc.ch/organization/organization.shtml. Accessed on August 31, 2015.

4.3.2 Regulatory Framework

The following federal, state, and local laws and policies pertain to GHG emissions.

4.3.2.1 Federal

The United States Environmental Protection Agency (USEPA) is responsible for implementing federal policy to address GHGs. On April 2, 2007, the U.S. Supreme Court issued an opinion in response to *Massachusetts et. al. v. Environmental Protection Agency et. al.* (549 U.S. 497 [2007]) that the USEPA has statutory authority to regulate emissions of GHGs from motor vehicles. The USEPA subsequently published its endangerment finding for GHGs (74 FR 66496) in response to this court case. The USEPA Administrator determined that six GHGs, taken in combination, endanger both the public health and welfare of current and future generations. Although the endangerment finding discusses the effects of six GHGs, it acknowledges that transportation sources only emit four of the key GHGs: carbon dioxide (CO_2), methane (CH_4), nitrous oxide (N_2O), and hydrofluorocarbons (HFCs). Further, the USEPA Administrator found that the combined emissions of these GHGs from new motor vehicles contribute to air pollution that endangers the public health and welfare under the Clean Air Act, Section 202(a) (USEPA, 2015b).

On May 7, 2010, the USEPA and National Highway Traffic Safety Administration (NHTSA) finalized GHG standards for model year 2012 through 2016 passenger cars, light-duty trucks, and medium-duty passenger vehicles. Under these standards, CO_2 emission limits would decrease from 295 grams per mile (g/mi) in 2012 to 250 g/mi in 2016 for a combined fleet of cars and light trucks. If all of the necessary emission reductions were made from fuel economy improvements, then the standards would correspond to a combined fuel economy of 30.1 miles per gallon (mpg) in 2012 and 35.5 mpg in 2016 (USEPA, 2010). On October 15, 2012, the agencies finalized GHG standards for model year 2017 through 2025 light-duty vehicles. The average industry CO_2 emissions are projected to be 163 g/mi in 2025 with fuel economy of 54.5 mpg in 2025 (USEPA, 2012).

On September 15, 2011, the USEPA and NHTSA finalized a rule to reduce GHG emissions and to improve fuel efficiency for model years 2014 through 2018 medium- and heavy-duty vehicles (amended June 17, 2013 and August 17, 2013). The two agencies' complementary standards form a new Heavy-Duty National Program that has the potential to reduce GHG emissions by 270 million metric tons (MMT) carbon dioxide equivalent (CO_2e) and to reduce oil consumption by 530 million barrels over the life of model year 2014 through 2018 vehicles (USEPA, 2011). The second phase of this program targets model years beyond 2018 and is anticipated to reduce GHG emissions by approximately 1 billion metric tons CO_2e and oil consumption by 1.8 billion barrels. The proposed rule was signed on June 19, 2015 (USEPA, 2015c).

In 2009, the USEPA issued the Mandatory Reporting of Greenhouse Gas Rule (74 FR 56260), which requires large sources and suppliers of GHG to report annual GHG generation and emission data starting with 2010 reporting year. The rule is intended to collect GHG data for future policy making decisions (USEPA, 2014). In 2013, 3.18 billion metric tons CO_2e were reported by 7,865 direct emitters of GHG. The largest emitting sector was the power plant sector, followed by petroleum and natural gas systems sector and refineries sector (USEPA, 2015d).

On June 3, 2010, the USEPA published the final GHG Tailoring Rule, in which GHG from stationary sources were phased into the air permitting programs (75 FR 31514). However, on June 23, 2014, the U.S. Supreme Court ruling in *Utility Air Regulatory Group v. EPA* (573 U.S. ___ [2014], Docket No. 12-1146) determined that air regulatory agencies cannot require a Prevention of Significant Deterioration (PSD) or Title V air permit solely based on GHG emissions. The air permitting threshold must first be triggered for another pollutant. Then, if the PSD or Title V air permit is required for another pollutant, the regulatory agency may consider whether or not a significant increase has also occurred for GHG emissions, and only then require GHG emissions limits and GHG Best Available Control Technology (BACT). On April 10, 2015, the D.C. Circuit vacated the permitting requirement solely based on GHGs and directed USEPA to revise regulations as necessary to comply with these determinations (USEPA, 2015e).

4.3.2.2 State

The California Air Resources Board (CARB) is responsible for the coordination and administration of federal and state air pollution control programs in California. Various statewide initiatives have been enacted to reduce the state's contribution to GHG emissions and to develop climate change adaptation strategies. Regulations and programs relevant to the Proposed Project are discussed below.

Assembly Bill 1493 - Pavley

California Assembly Bill (AB) 1493, commonly referred to as Pavley, was adopted in 2002 and amended in 2009. The bill required CARB to develop and adopt regulations to reduce GHG emissions

from model year 2009 and later passenger vehicles and light-duty trucks. CARB estimates that the regulation will reduce GHG emissions from passenger vehicles by 30 percent in 2016. In 2011, the U.S. Department of Transportation, USEPA, and California announced a single timeframe for proposing fuel and economy standards, thereby aligning the Pavley standards with the federal standards for passenger cars and light-duty trucks that were described above (CARB, 2013a).

California Executive Order S-03-05

On June 1, 2005, then California Governor Arnold Schwarzenegger signed Executive Order (EO) S-03-05. This EO established the following GHG emission reduction targets for California:

- By 2010, reduce GHG emissions to 2000 levels.
- By 2020, reduce GHG emissions to 1990 levels.
- By 2050, reduce GHG emissions to 80 percent below 1990 levels.

The order also requires the Secretary of the California Environmental Protection Agency (CalEPA) to report to the Governor and the State Legislature biannually on progress made toward meeting the GHG emission targets, commencing in January 2006. The Secretary of the CalEPA is also required to report impacts on water supply, public health, agriculture, the coastline, and forestry; mitigation and adaptation plans to combat these impacts must also be developed. According to CARB's latest *California GHG Emissions Inventory* (CARB, 2015a), total GHG emissions in California dropped below 2000 levels in 2009 and per capita emissions peaked in 2001. On April 29, 2015, Governor Jerry Brown added a target to reduce GHG emissions to 40 percent below 1990 levels by 2030 (EO B-30-15).

Assembly Bill 32 – California Global Warming Solutions Act of 2006

California AB 32, the Global Warming Solutions Act of 2006, codifies the state's GHG emissions targets by requiring the state's global warming emissions to be reduced to 1990 levels by 2020 and directs CARB to enforce the statewide cap that began to phase in during 2012 (CARB, 2014a). In 2007, CARB recommended and adopted the 1990 GHG emissions level and 2020 emissions limit of 427 $MMTCO_2e$ (CARB, 2015b). The limit is a statewide limit and does not require individual sectors or facilities to reduce emissions equally.

The Scoping Plan (CARB, 2008) provides a framework for the state's strategy to reduce GHG emissions to 1990 levels by 2020. This reduction goal means reducing GHG emissions by approximately 30 percent from business-as-usual emission levels projected for 2020 or approximately 15 percent from 2005 levels. The Scoping Plan recommends 39 measures that would achieve an emissions reduction of 174 $MMTCO_2e$/year, if fully implemented. The recommended measures cover nine sectors: 1) transportation, 2) electricity and natural gas, 3) green buildings, 4) water, 5) industry, 6) recycling and waste management, 7) forests, 8) high global warming potential gases, and 9) agriculture. Additionally, nine discrete early actions were adopted to reduce GHG emissions. Key features of the state's plan for reducing emissions include six main recommendations:

- Expand and strengthen existing energy efficiency programs as well as building and appliance standards;
- Achieve a statewide renewables energy mix of 33 percent;

- Develop a cap-and-trade program that links other partner programs to create a regional market system;
- Establish targets for transportation-related GHG emissions for regions throughout the state, and pursue policies and incentives to achieve those targets;
- Adopt and implement measures including California's clean car standards, goods movement measures, and the low carbon fuel standard; and
- Create targeted fees to fund the administrative costs of the state's long-term commitment to AB 32 implementation.

A draft update to the Scoping Plan was approved by CARB on May 22, 2014. The draft update presents the progress made so far and defines CARB's climate change priorities for the next five years. As part of the update, CARB revised the 2020 emissions goal to 431 $MMTCO_2e$ based on global warming potentials of GHGs found in IPCC's AR4. Also, the Pavley standards are now incorporated into the business as usual forecast. CARB has been proactive in its implementation of AB 32 and is on track to meet the 2020 goal (EO B-30-15).

California Executive Order S-1-07 – Low Carbon Fuel Standard

California EO S-01-07 established a statewide goal to reduce the carbon intensity of transportation fuels sold in California by at least ten percent from 2005 levels by 2020. The Low Carbon Fuel Standard (LCFS), a discrete early action item in the Scoping Plan, was approved by CARB in 2009, with amendments implemented on January 1, 2013. Each fuel provider may meet the standard by selling fuel with lower carbon content, using previously banked credits from selling fuel that exceeded the LCFS, or purchasing credit from other fuel providers who have earned credits (17 California Code of Regulations [CCR] Section 95480). By the end of February 2014, approximately 270 LCFS credit transactions were recorded, with credits generated primarily from ethanol (62 percent). New amendments to the LCFS have been proposed and are currently open to public comment. Re-adoption of the LCFS is anticipated to occur in 2015 (CARB, 2014b; CARB, 2015c).

Senate Bill 375 – Sustainable Communities and Climate Protection Act of 2008

Senate Bill (SB) 375, adopted on September 30, 2008, required CARB to develop regional GHG reduction targets from passenger vehicles. Targets for 2020 and 2035 were developed by CARB in 2010 for each area covered by a metropolitan planning organization (MPO). SB 375 requires the MPOs to prepare Sustainable Communities Strategies (SCS) as part of their Regional Transportation Plans (RTPs) to meet these GHG emission reduction targets (CARB, 2015d).

California Executive Order S-13-08

California EO S-13-08, signed in November 2008, tasked state agencies to develop California's first climate change adaptation strategy to identify and prepare for expected climate change impacts, including sea level rise, increased temperature, shifting precipitation, and extreme weather events. In response, the *2009 California Climate Adaptation Strategy* (CAS) report (California Natural Resources Agency [CNRA], 2009) was released; the report summarized the best known science on climate change impacts and outlined possible solutions to promote resiliency and reduce California's vulnerability to climate impacts.

The CAS included 12 recommendations that are largely geared towards state agencies, but have implications for project-level analyses. For example, the CAS recommends that the potential impacts

of climate change be considered for all significant state projects, to the extent required by State CEQA Guidelines Section 15126.2, which relates to the consideration and discussion of significant environmental impacts. This CEQA section requires lead agencies to identify and focus on the significant environmental effects of the proposed project; to describe any significant impacts, including those that can be mitigated but not reduced to a level of insignificance; to evaluate significant irreversible environmental changes that would be caused by the proposed project; and to discuss growth-inducing impacts of the proposed project.

In 2010, the CNRA released the *First Year Progress Report* (CNRA, 2010) that describes California's progress towards completing the tasks outlined in the CAS. *Safeguarding California Plan* was developed in 2014 to update the CAS and to guide policy makers in implementing key actions to address climate risks. Strategies to implement cross-sector actions are presented in the 2014 plan (CNRA, 2014).

Senate Bills 97 & 743 - CEQA Guidelines

On March 18, 2010, the California Natural Resources Agency adopted amendments to the State CEQA Guidelines to include provisions for evaluating the significance of GHG emissions in response to SB 97. The amended guidelines give the lead agency leeway in determining whether GHG emissions should be evaluated quantitatively or qualitatively, but requires that the following factors be considered when assessing the significance of impacts from GHG emissions (Section 15064.4):

- The extent to which the project may increase or reduce GHG emissions as compared to the existing environmental setting.
- Whether the project emissions exceed a threshold of significance that the lead agency determines apply to the project.
- The extent to which the project complies with regulations or requirements adopted to implement a statewide, regional, or local plan for the reduction or mitigation of GHG emissions.

The 2010 amended State CEQA Guidelines (Section 15126.4[c]) also suggest measures to mitigate GHG emissions, including implementing project features to reduce emissions, obtaining carbon offsets, or sequestering GHG.

SB 743, adopted on September 27, 2013, encourages land use and transportation projects that reduce vehicle miles traveled (VMT) and resulting GHG emissions. SB 743 requires the Governor's Office of Planning and Research (OPR) to establish new criteria in the State CEQA Guidelines for determining the significance of transportation impacts and define alternative metrics for traffic level of service. The new criteria are still under review by OPR and updated State CEQA Guidelines have not been adopted. OPR released a preliminary discussion draft of updates to the State CEQA Guidelines implementing Senate Bill 743 on August 6, 2014 (OPR, 2014a). Based on comments received on the draft updates in 2014, OPR is developing a revised draft for further review and comment (OPR, 2014b; OPR, 2015a). On August 11, 2015, OPR released a preliminary discussion draft of a comprehensive update to the State CEQA Guidelines; this discussion draft does not encompass amendments to transportation impacts analysis pursuant to SB 743, but it does endorse a VMT standard for assessing transportation impacts (OPR, 2015b).

4.3.2.3 Regional and Local

The CARB divided California into regional air basins according to common topographic and meteorological features. The Proposed Project is located in the Los Angeles County subarea of the South Coast Air Basin (SoCAB), which is under the jurisdiction of the South Coast Air Quality Management District (SCAQMD). The SCAQMD is the regional agency responsible for air quality regulations and implementing strategies to improve air quality and to mitigate effects from new growth within the SoCAB.

The SCAQMD, Southern California Association of Government (SCAG), and the City of Los Angeles have adopted policies and plans to reduce GHG emissions from the region.

SCAQMD Policies

The SCAQMD adopted a *Policy on Global Warming and Stratospheric Ozone Depletion* on April 6, 1990. The 1990 Policy phased out the use of chlorofluorocarbons (CFCs) and hydrochlorofluorocarbons (HCFCs). Following the 1990 Policy, SCAQMD conducted impact assessments and created regulations related to GHGs (SCAQMD, 2014).

Actions that the SCAQMD will take to help reduce GHG emissions are outlined in the *SCAQMD Climate Change Policy*, which was approved on September 5, 2008. Some of the actions involve supporting development of protocols, rules, and programs related to climate change, updating the SoCAB's GHG inventory, and sharing with other policy makers any knowledge related to, and educating the public about, climate change (SCAQMD, 2008a).

The 2011 *AQMD Air Quality-Related Energy Policy* promotes zero and near-zero emissions technologies to reduce criteria pollutant and GHG emissions from stationary and mobile sources. The Energy Policy summarizes energy use and associated air emissions in the SoCAB in 2008 and presents energy policies and actions to reduce energy consumption and associated air emissions in the SoCAB (SCAQMD, 2011).

SCAQMD CEQA Thresholds

The SCAQMD created a GHG Significance Threshold Working Group to assist in the development of GHG significance thresholds. The SCAQMD released draft guidance on interim CEQA thresholds for GHGs in October 2008, and a quantitative threshold for GHG emissions of 10,000 metric tons CO2e per year (MTCO2e/year) for industrial projects was approved on December 5, 2008 (SCAQMD, 2008b). The draft guidance included a recommended screening threshold for residential and commercial development of 3,000 MTCO2e/year, which was not adopted (SCAQMD, 2008c).

Regional Transportation Plan/Sustainable Communities Strategy

As noted above, SB 375 requires SCAG to develop a Sustainable Communities Strategy to reduce per capita GHG emissions. SCAG adopted the *2012-2035 Regional Transportation Plan/Sustainable Communities Strategy (RTP/SCS)* on April 4, 2012, and subsequent amendments of project lists were approved on June 6, 2013 and September 11, 2014 (SCAG, 2015). The 2012-2035 RTP/SCS aims to reduce emissions from transportation sources to comply with SB 375 and meet the State's GHG emission reduction targets, improve public health, and reduce air emissions. The following goals are included in the 2012-2035 RTP/SCS:

- Align the plan investments and polices with improving regional economic development and competitiveness;
- Maximize mobility and accessibility for all people and goods in the region;
- Ensure travel safety and reliability for all people and goods in the region;
- Preserve and ensure a sustainable regional transportation system;
- Maximize the productivity of our transportation system;
- Protect the environment and health for our residents by improving air quality and encouraging active transportation (non-motorized transportation, such as bicycling and walking);
- Actively encourage and create incentives for energy efficiency, where possible;
- Encourage land use and growth patterns that facilitate transit and non-motorized transportation; and
- Maximize the security of the regional transportation system through improved system monitoring, rapid recovery planning, and coordination with other security agencies.

The current SCAG target, as established by CARB, is to reduce per capita emissions by 8 percent below 2005 levels by 2020 and 13 percent below 2005 levels by 2035. The 2012-2035 RTP/SCS achieves per capita GHG emission reductions relative to 2005 of 9 percent in 2020 and 16 percent in 2035 (SCAG, 2012a).

SCAG identified a range of strategies to meet these targets in four key areas:

- A Land Use growth pattern that accommodates the region's future employment and housing needs and protects sensitive habitat and natural resource areas;
- A Transportation Network that consists of public transit, highways, local streets, bikeways, and walkways;
- Transportation Demand Management (TDM) measures that reduce peak-period demand on the transportation network; and
- Transportation System Management (TSM) measures that maximize the efficiency of the transportation network.

SCAG also identified specific implementation strategies that local governments, SCAG, and other stakeholders may consider in order to successfully implement the SCS. The following transportation strategies are relevant to the Proposed Project (land use strategies are not identified below as the Proposed Project would not alter land uses in the project area):

Transportation Network Actions and Strategies

- Perform and support studies with the goal of identifying innovative transportation strategies that enhance mobility and air quality, and determine practical steps to pursue such strategies, while engaging local communities in planning efforts.

- Explore and implement innovative strategies and projects that enhance mobility and air quality, including those that increase the walkability of communities and accessibility to transit via non-auto modes, including walking, bicycling, and neighborhood electric vehicles (NEVs) or other alternative fueled vehicles.
- Collaborate with local jurisdictions to provide a network of local community circulators that serve new transit oriented development (TOD), HQTAs, and neighborhood commercial centers providing an incentive for residents and employees to make trips on transit.
- Develop first-mile/last-mile strategies on a local level to provide an incentive for making trips by transit, bicycling, walking, or NEV or other zero emission vehicle (ZEV) options.
- Work with transit properties and local jurisdictions to identify and remove barriers to maintaining on-time performance.
- Develop policies and prioritize funding for strategies and projects that enhance mobility and air quality.

Transportation Demand Management Actions and Strategies

- Develop a comprehensive regional active transportation network along with supportive tools and resources that can help jurisdictions plan and prioritize new active transportation projects in their cities.
- Encourage the implementation of a Complete Streets policy that meets the needs of all users of the streets, roads and highways – including bicyclists, children, persons with disabilities, motorists, NEV users, movers of commercial goods, pedestrians, users of public transportation and seniors – for safe and convenient travel in a manner that is suitable to the suburban and urban contexts within the region.
- Support work-based programs that encourage emission reduction strategies and incentivize active transportation commuting or ride-share modes.
- Emphasize active transportation and alternative fueled vehicle projects as part of complying with the Complete Streets Act (AB 1358).

Transportation System Management Actions and Strategies

- Collaborate with local jurisdictions and subregional COGs to continually update the intelligent transportation system (ITS) inventory.

Green LA Plan and Climate LA

In May 2007, the City of Los Angeles introduced *Green LA - An Action Plan to Lead the Nation in Fighting Global Warming* (City of Los Angeles, 2007). Green LA proposes to reduce the City's GHG emissions by 35 percent below 1990 levels, or 35.1 $MMTCO_2e$ per year, by 2030. The plan calls for an increase in the City's use of renewable energy to 35 percent by 2020 in combination with promoting water conservation, improving the transportation system, reducing waste generation, greening the ports and airports, creating more parks and open space, and greening the economic sector. Green LA identifies over 50 action items in various focus areas. Actions identified for transportation include:

- Complete the automated traffic signal synchronization and control system;
- Make transit information easily available, understandable, and translated into multiple languages;
- Promote walking and biking to work, within neighborhoods, and to large events and venues; and
- Expand the regional rail network.

In 2008, the City of Los Angeles published the *Climate LA - Municipal Program Implementing the Green LA Climate Action Plan* to provide a GHG inventory for the city and mechanisms to monitor and evaluate progress of the Green LA action items (City of Los Angeles, 2008).

Mobility Plan 2035

The City of Los Angeles updated the Transportation Element of the City's General Plan, now referred to as Mobility Plan 2035 or MP 2035, to reflect policies and programs that will lay the policy foundation for safe, accessible, and enjoyable streets for pedestrians, bicyclists, transit users, and vehicles throughout the City of Los Angeles, including the Westside (City of Los Angeles, 2015a). The MP 2035 and Final EIR were in November, 2015. MP 2035 is compliant with the 2008 Complete Streets Act (Assembly Bill 1358), which mandates that the circulation element of a city's General Plan be modified to plan for a balanced, multimodal transportation network that meets the needs of all users of streets, roads, and highways, defined to include motorists, pedestrians, bicyclists, children, persons with disabilities, seniors, movers of commercial goods, and users of public transportation, in a manner that is suitable to the rural, suburban, or urban context of the general plan.

One of the key policy initiatives of MP 2035 is to target greenhouse gas reductions through a more sustainable transportation system. The following goals, objectives, and policy topics from the MP2035 relate to this initiative and are applicable to the Proposed Project.

- Goal: **Clean Environments and Healthy Communities** focuses on topics related to environment, health, clean air, clean fuels and fleets, and open street events.
  - Objective: Decrease VMT per capita by 5% every five years, to 20% by 2035.
  - Objective: Meet a 9% per capita GHG reduction for 2020 and a 16% per capita reduction for 2035 (SCAG RTP).
  - Policy Topic 5.1: *Sustainable Transportation.* Encourage the development of a sustainable transportation system that promotes environmental and public health.
  - Policy Topic 5.2: *Vehicle Miles Traveled (VMT).* Support ways to reduce VMT per capita.

Plan for A Healthy Los Angeles (General Plan Health and Wellness Element)

The City of Los Angeles adopted the Plan for A Healthy Los Angeles, a Health and Wellness Element of the General Plan, in 2015 (City of Los Angeles, 2015b). The following goals, objectives, and policy topics from the Plan for a Healthy Los Angeles are applicable to the Proposed Project.

- Goal 5: **An Environment Where Life Thrives**
  - Objective: Decrease the respiratory disease mortality rate citywide by 20% and reduce the disparity between the City Council Districts with the highest and lowest respiratory disease mortality rates by at least 50%.
  - Objective: Decrease the rate of asthma-related emergency department (ED) visits among children citywide by 20% and reduce the disparity between the Community Plan Areas with the highest and lowest rates of ED by at least 50%.
  - Objective: Reduce the disparity in communities that are impacted by a high Pollution Exposure Score (exposure to six exposures indicators, including ozone concentrations, fine particulate matter (PM2.5) concentrations, diesel particulate matter (DPM) concentrations, pesticide use, toxic releases from facilities, and traffic density) so that every zip code has a score less than 1.7 (current citywide average).
  - Policy Topic 5.1: *Air pollution and respiratory health.* Reduce air pollution from stationary and mobile sources; protect human health and welfare and promote improved respiratory health.

4.3.3 Existing Setting

4.3.3.1 Global

GHGs – CO_2, CH_4, N_2O, sulfur hexafluoride, HFCs, and perfluorocarbons (PFCs) – are emitted from human activities and natural systems into the atmosphere and trap heat that would otherwise be released into space. Thermal radiation absorbed by the GHGs is re-radiated in all directions, including back toward the surface of the earth. This results in an increase of Earth's surface temperatures above what they would be without the presence of the GHGs, which are persistent and remain in the atmosphere for long periods of time. The long term and irrevocable shifts in weather, including temperature, precipitation and seasonal patterns are referred to as climate change.

Each GHG contributes to climate change differently, as expressed by its global warming potential (GWP). Combined GHG emissions are discussed in terms of CO_2e emissions, which is the amount of CO_2 that would have the same GWP over a specific timescale as the GHG mixture. CO_2e is determined by multiplying the mass of each GHG by its GWP. Currently, GWPs from the Intergovernmental Panel on Climate Change's (IPCC's) *Fourth Assessment Report* (AR4) (IPCC, 2007) are commonly used in inventories; CO_2e that are presented in this report are based on GWPs of 25 and 298 for CH_4 and N_2O, respectively.

Although many organizations have been studying global climate change and its impacts for decades, it was not until 2007 that a landmark report was published by the IPCC that moved global climate change into the mainstream. The IPCC finalized an updated report, *Fifth Assessment Report* (AR5), in 2014 with additional data and results of improved climate models since AR4 (IPCC, 2014). The AR5 concluded that global atmospheric concentrations of CO_2, N_2O, and CH_4 have reached an unprecedented level in the last 800,000 years. Atmospheric concentrations of CO_2, CH_4, and N_2O were 391 parts per million (ppm), 1,803 parts per billion (ppb), and 324 ppb, respectively, in 2011, substantially exceeding the natural ranges over the last 800,000 years that have been measured in ice core samples. This substantial increase is attributed to anthropogenic sources of GHGs, such as burning of fossil fuels and land use changes (e.g., deforestation) (IPCC, 2013; IPCC, 2014).

AR5 also stated that the observed increase in anthropogenic GHG emissions is extremely likely the source of observed increase in global average temperatures since the mid-20th century. In addition to rising temperatures, human activities very likely contributed to Arctic sea-ice loss, increase in upper ocean temperature, and global sea level rise during the latter half of the 20th century. It is virtually certain that there will be warmer and more frequent hot days and nights and very likely that heat waves will occur more frequently and last longer. Heavy precipitation events will very likely increase in frequency and intensity in many regions. The ocean is expected to warm and acidify, and an increase in global mean sea level will very likely occur at a faster pace in the 21st century (IPCC, 2013; IPCC, 2014).

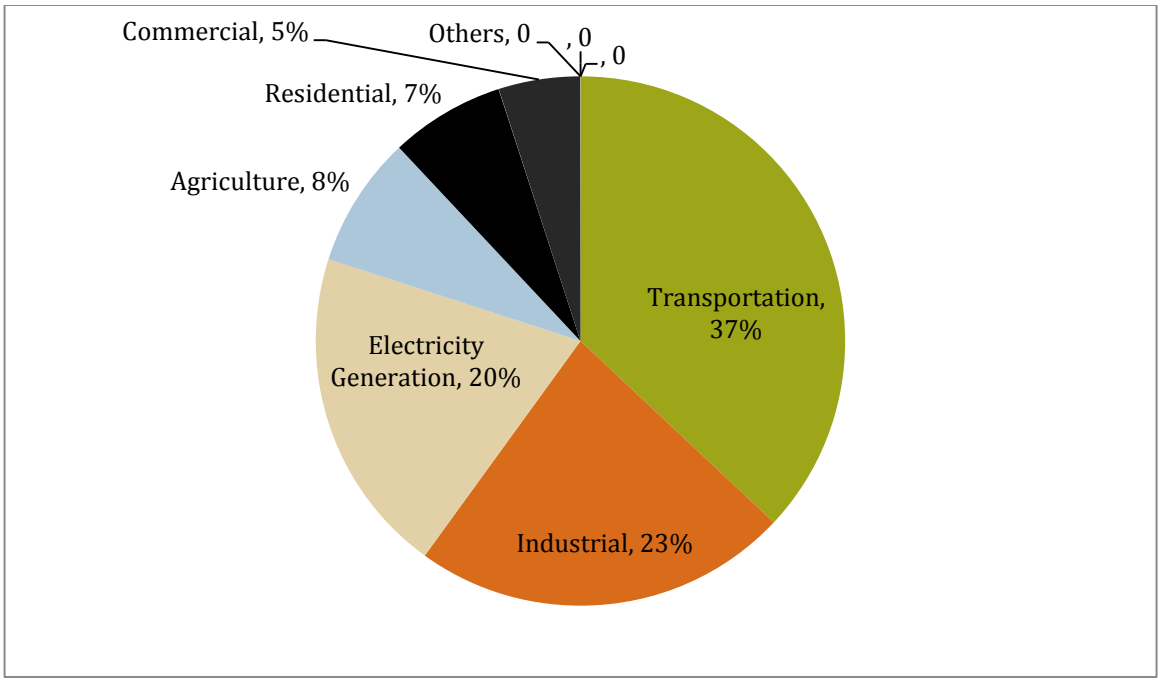
Climate change is anticipated to result in climate-related hazards, extinction of species, reduced food production, exacerbated health problems, slower economic growth, and displacement of people. Additional mitigation efforts to reduce GHG emissions, along with adaptation planning and implementation by all levels of government and individuals, are required to reduce the risk of climate change (IPCC, 2014).

4.3.3.2 National

In 2013, GHG emissions from the United States were approximately 6,673 $MMTCO_2e$. Increases in electricity generation, vehicles miles traveled, heating due to a cooler winter, and industrial production resulted in an increase of 2 percent from 2012 to 2013. Between 1990 and 2013, U.S. GHG emissions increased 5.9 percent, however, U.S. GHG emissions peaked in 2007. By GHG type, 2013 emissions in CO_2e were 82.5 percent CO_2, 9.5 percent CH_4, 5.3 percent N_2O, with the balance made up of the fluorinated GHGs. Fossil fuel combustion accounted for 93.7 percent of CO_2 emitted in 2013, of which electricity generation and transportation were the largest sources. Enteric fermentation, natural gas systems, and landfills were the three largest sources of CH_4. Approximately 74.2 percent of N_2O emissions were from agricultural soils (USEPA, 2015f).

4.3.3.3 State

Worldwide, California would be the 20th largest emitter of CO_2 if it were a country and 38th on a per capita basis, based on 2010 data (CARB, 2014c). California GHG emissions in 2013 (the last year inventoried) totaled approximately 459.3 $MMTCO_2$ (CARB, 2015e). As shown in **Figure 4.3-1,** transportation is responsible for 37 percent of the state's GHG emissions, followed by the industrial sector (23 percent), electricity generation (20 percent), agriculture (8 percent), residential (7 percent), commercial (5 percent), and other sources (less than 1 percent). Emissions of CO_2 (84 percent) are largely byproducts of fossil fuel combustion. Methane (9 percent) and N_2O (3 percent) results largely from off-gassing associated with agricultural practices. Fluorinated gases with high global warming potentials are approximately 4 percent of the total emitted GHGs.



Source: CARB, 2015e.

Figure 4.3-1 California 2013 GHG Emissions Inventory

4.3.3.4 Local

The current average daily VMT in the study area is 5,637,534 miles. The resulting annual emission of CO_2 from vehicles in the study area is estimated to be 1,034,529 metric tons.

4.3.4 Methodology

CARB's EMFAC2014 Mobile Source Emission Inventory Model was used to calculate regional emissions from motor vehicles in the study area. EMFAC2014 provides emission rates for various on-road vehicle types at different speeds within different counties in California. The default EMFAC2014 fleet mix for Los Angeles County was used to determine the county-wide emission factor for CO_2 (CARB, 2015f).

To calculate the daily per capita emissions, VMT in the study area by passenger vehicles and light trucks were assumed to be approximately 79 percent of the total study area VMT based on the default EMFAC fleet mix. The per capita emission rate for the 2012-2035 RTP/SCS was calculated assuming no implementation of the Pavley standards, therefore, EMFAC2011, a version of EMFAC prior to EMFAC2014 that outputs emission rates without Pavley standard implementation, was used (CARB, 2013b). Appendix D, *Air Quality/Greenhouse Gas Emissions*, includes detailed GHG emission calculations.

4.3.5 Thresholds of Significance

The significance criteria described below were developed consistent with the State CEQA Guidelines to determine the significance of potential impacts related to GHG that could result from implementation of the Proposed Project. Appendix G of the State CEQA Guidelines identifies the following two criteria when considering GHG impacts:

- Generate GHG emissions, either directly or indirectly, that may have a significant impact on the environment; and/or
- Conflict with an applicable plan, policy or regulation adopted for reducing the emissions of GHGs.

There are no widely-established or readily accepted thresholds of significance to determine whether a project would generate GHG emissions that may have a significant impact on the environment. The amendments to the State CEQA Guidelines that became effective in March 2010 do not identify a threshold of significance for GHG emissions but, instead, allow lead agencies to exercise discretion and make their own determinations of significance. The SCAQMD's approved quantitative threshold for GHG emissions (10,000 $MTCO_2e$/year) is applicable only for industrial facilities (2015). The City's L.A. CEQA Thresholds Guide (City of Los Angeles, 2006) was published prior to the amendments to the State CEQA Guidelines; there are no GHG significance thresholds in the City's Guide.

The City finds there is no applicable numeric threshold of significance for the Proposed Project and the City declines to adopt one based on the nature of the impact area. As the California Supreme Court recognized with approval in *Center for Biological Diversity v. California Department of Fish and Wildlife (DFW)* (2015):

> "[F]or a global environmental issue (such as climate change), utilizing an absolute number as a significance criterion equates to attempting to use CEQA to discourage population growth. Of note, the future residents and occupants of development [from project approval] would exist and live somewhere else if [a project] is not approved. Whether here or there," GHG emissions associated with population growth will occur.

Instead, of a numeric threshold, the Court reasoned that a lead agency relying on consistency with state and regional plans for reducing GHG's may serve as a better measure of significance:

> "…given that multiple agencies' efforts at framing greenhouse gas significance issues have not yet coalesced into any widely accepted set of numerical significance thresholds, but have produced "a certain level of consensus" on the value of A.B. 32 consistency as a criterion, [ ] we cannot conclude [a lead agency's] discretionary choice of A.B. 32 consistency as a significance criterion for this project violated Guidelines section 15064.4, subdivisions (b)(1) or (b)2).
>
> As noted by the Natural Resources Agency in its amicus curiae brief, "a discussion of a project's consistency with the State's long-term climate stabilization objectives . . . will often be appropriate . . . under CEQA**,"** *provided the analysis is "tailored . . . specifically to a particular project"* (emphasis added). Indeed, to proceed in this manner is consistent with CEQA's "inherent recognition . . . that if a plan is in place to address a cumulative problem, a new project's incremental addition to the problem will not be 'cumulatively considerable' if it is consistent with the plan and is doing its fair share to achieve the plan's goals. (*Addressing the Significance of Greenhouse Gas Emissions, supra,* 4 Golden Gate U. Envtl. L.J. at pp. 210–211.)"

In outlining potential options that could be used to determine if GHG emissions from a given project are significant, the Court provided the following:

> "Second, a lead agency might assess consistency with A.B. 32's goal in whole or part by *looking to compliance with regulatory programs designed to reduce greenhouse gas emissions from particular activities* (emphasis added). (See Final Statement of Reasons, *supra*, at p. 64 [greenhouse gas emissions "may be best analyzed and mitigated at a programmatic level."].) To the extent a project's design features comply with or exceed the regulations outlined in the Scoping Plan and adopted by the Air Board or other state agencies, a lead agency could appropriately rely on their use as showing compliance with "performance based standards" adopted to fulfill "a statewide . . . plan for the reduction or mitigation of greenhouse gas emissions." (Guidelines, § 15064.4, subds. (a)(2), (b)(3); see also *id*., § 15064, subd. (h)(3) [determination that impact is not cumulatively considerable may rest on compliance with previously adopted plans or regulations, including "plans or regulations for the reduction of greenhouse gas emissions"].)
>
> In addition, CEQA expressly allows streamlining of transportation impacts analysis for certain land use projects based on metropolitan regional "sustainable communities strategies." Under follow-up legislation to A.B. 32 (Stats. 2008, ch. 728, p. 5065, commonly known as S.B. 375) each metropolitan planning organization in the state is to prepare a "sustainable communities strategy" or alternative plan to meet regional targets set by the Air Board for greenhouse gas emissions from cars and light trucks. (Gov. Code, § 65080, subd. (b)(2).) CEQA documents for certain residential, mixed use and transit priority projects that are consistent with the limits and policies specified in an applicable sustainable communities strategy need not additionally analyze greenhouse gas emissions from cars and light trucks. (§§ 21155.2, 21159.28; Guidelines, § 15183.5, subd. (c).)"

The Proposed Project is unlike traditional development projects that would represent a change in existing or future land uses or land use patterns, contribute to population and/or employment growth, or generate new vehicle trips. Instead, the Proposed Project is a transportation plan that would provide improved mobility and access to transportation options. The Proposed Project would not result in increased growth or land use activity and, therefore, would not directly result in GHG emissions. The Proposed Project is a plan that supports the land use plans in the project area and is intended to support mobility options and transportation facilities. Therefore, for the purpose of this analysis, GHG impacts would be considered significant if the project would:

- Exceed existing or Future without Project GHG emission levels;
- Impede attainment of SCAG's per capita GHG emission reduction targets as established in the 2012-2035 RTP/SCS; and/or
- Conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs.

These thresholds reflect the fact that the 2012-2035 RTP/SCS is the regional plan that was adopted for the purpose of reducing GHG emissions in the region consistent with AB 32 and subsequent legislation and state agency action to address climate change. Moreover, these thresholds are consistent with the State CEQA Guidelines relative to determining the significance of impacts from GHG.

4.3.6 Impacts and Mitigation Measures

The proposed update to the Transportation Impact Assessment (TIA) fee program and the administrative and minor revisions of the specific plans would not result in any physical impacts that could affect greenhouse gas emissions. Therefore, the following analysis addresses whether implementation of the proposed updates to the lists of transportation improvements in the CTCSP and WLA TIMP would result in significant impacts related to GHG. No specific construction projects would be implemented based on this EIR; rather, the transportation improvements are evaluated at a conceptual level of detail.

SCAQMD recommends that amortized GHG construction emissions (i.e., total construction emissions divided by the lifetime of the project, assumed to be 30 years) be added to operational emissions to evaluate significance. As a result, construction-related significance is not determined on an individual basis for GHG emissions; rather, the discussion below quantitatively evaluates the significance of the combined construction-related and operations-related GHG emissions associated with the Proposed Project.

Impact 4.3-1: Implementation of the Proposed Project would not exceed existing or Future without Project emission levels. This impact would be *less than significant*.

Construction

Construction of the proposed transportation improvements would result in temporary increases in GHG emissions. Implementation of these transportation improvement projects would be subject to available funding collected through the proposed TIA fee program, which would be dependent on the rate of development within the project area, as well as funding obtained from other sources; therefore, implementation schedules and specific design of these transportation improvement projects are not yet available.

The 2012-2035 RTP/SCS estimated that construction emissions in Los Angeles County would be approximately 0.2 percent of countywide GHG emissions in 2035 (SCAG, 2012a). These emissions include construction emissions from all development activity, not just transportation improvements. Project-related construction emissions would be associated with construction equipment, construction-related truck trips, and worker commute trips. Most of the proposed transportation improvements would not involve substantial construction activity (see Table 4.1-11 in Section 4.1, *Air Quality*) and would not require construction equipment with heavy duty engines. The higher intensity construction improvements, including the Lincoln Boulevard Bridge Enhancement, the Lincoln Boulevard and Sepulveda Boulevard Bus Rapid Transit (BRTs), and the I-10 Ramp Reconfiguration at Bundy Drive, would use heavy equipment on a temporary basis, which would generate GHG emissions for relatively short durations. However, these transportation improvements would not require substantial grading or excavation, which are activities that require heavy equipment and often use such equipment for extended periods. Moreover, the ongoing implementation of motor vehicle emission control and fuel mileage standards in new vehicles, along with the gradual transition to newer, cleaner, and more fuel efficient engines over time, would result in reduced GHG emissions per engine or vehicle by 2035. Construction-related emissions associated with the Proposed Project would be a small portion of total construction emissions estimated in the 2012-2035 RTP/SCS, which themselves are expected to represent only 0.2 percent of countywide GHG emissions in 2035.

As noted above, the amortized GHG construction emissions associated with the Proposed Project are combined with operational emissions to evaluate significance. The combined emissions analysis is provided below.

Operations

A change in vehicle operations in the study area as a result of project implementation may result in GHG emissions in the study area. The existing (2014) daily VMT in the study area, as described previously, is approximately 5.6 million. In 2035, without implementation of the Proposed Project (i.e., Future without Project), the daily VMT in the study area is anticipated to increase to 6.2 million, an increase of 9.6 percent over existing conditions. With implementation of the Proposed Project (i.e., Future with Project), daily VMT would increase to approximately 6 million, an increase of 5.9 percent over existing conditions, but a reduction of 3.4 percent compared to conditions in the future without the project. The emphasis of the proposed transportation improvements on alternative modes of transportation would result in a reduction in VMT per capita (which includes both project area residents and employees) of 4.4 percent compared to existing conditions and a reduction of 3.4 percent compared to future conditions without the project. Although the daily VMT in the study area would be higher in the future with or without the project, technological advances in vehicle emissions systems, projected turnover in the vehicle fleet, and future emission standards are expected to reduce the vehicle emission rates of CO_2. GHG emissions from operations, as combined with emissions from construction, are evaluated below.

Combined Construction and Operations GHG Emissions

Annual GHG emissions from operations in the project area are based on projected daily VMT. These emissions were combined with construction-related emissions to determine total project-related GHG emissions. Normally, amortized construction-related emissions would be added to operational emissions to calculate total project-related emissions. However, the Proposed Project includes a large number of transportation improvements, and the details of many of these improvements have not yet been determined. As a result, there is no methodology for calculating amortized construction-related emissions for all of the proposed improvements at this time. Assumptions have been made regarding the four most significant construction projects—the Lincoln Boulevard Bridge Enhancement, the Lincoln Boulevard and Sepulveda Boulevard BRTs, and the I-10 Ramp Reconfiguration at Bundy Drive—to allow construction-related emissions to be estimated. In order to account for GHG emissions from the other transportation improvements, the unamortized emissions from these four projects have been used in the combined emissions summary, instead of amortized emissions. This provides a conservatively high value for construction-related GHG emissions, which accounts for the emissions associated with the other transportation improvements. These total combined GHG emissions are presented in **Table 4.3-2**.

Table 4.3-2 GHG Emissions Summary

Activity	Existing Conditions (2014)	Future without Project	Compared to Existing	Significant?	Future with Project	Compared to Existing	Significant?	Compared to Future without Project
Operational GHG Emissions, MT/yr	1,463,748	974,627			958,914			
Construction GHG Emissions, MT/yr [1]	0	0			6,392			
Total GHG Emissions, MT/yr (as CO_2e) [2]	**1,463,748**	**974,627**	**-489,121**	**No**	**965,306**	**-498,442**	**No**	**-9,321**

Source: CDM Smith, 2015.

Notes:

1. Construction emissions shown represent total estimated GHG emissions from the Lincoln Boulevard Bridge Enhancement, the Lincoln Boulevard and Sepulveda Boulevard BRTs, and the I-10 Ramp Reconfiguration at Bundy Drive elements **before** amortization. Since these elements represent the Westside elements with the highest GHG emissions, using this total for project-related construction emissions (instead of using the much lower amortized emissions) accounts for the other transportation improvement projects. Even using the unamortized emissions, combined construction and operational emissions associated with the Future with Project would be lower than existing conditions and would be less than significant.
2. CO_2e emissions were estimated by multiplying CO_2 emissions by 1.009, based on CO_2, CH_4, and N_2O factors from The Climate Registry for gasoline and diesel fuels (The Climate Registry, 2015).

As noted above, although the daily VMT in the study area would be higher in the future with or without the project, technological advances in vehicle emissions systems, projected turnover in the vehicle fleet, and future emission standards are expected to reduce the vehicle emission rates of CO_2. As a result, regional GHG emissions with implementation of the Proposed Project would be almost 500,000 metric tons (MT) lower than existing conditions, a reduction of 34 percent, and almost 10,000 MT lower than Future without Project conditions, a reduction of approximately 1 percent. Therefore, impacts related to GHG emissions associated with Proposed Project construction and operations would be ***less than significant***.

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

Impacts from the Proposed Project related to GHG emissions would be ***less than significant.***

Impact 4.3-2: Implementation of the Proposed Project would not impede attainment of SCAG's per capita GHG emission reduction targets as established in the 2012-2035 RTP/SCS. This impact would be *less than significant*.

In accordance with the 2008 Scoping Plan and SB 375, the 2012-2035 RTP/SCS aims to meet the GHG per capita emission reduction targets for the region established by CARB. As identified in Section 4.3.2.3, SCAG identified a range of implementation strategies to meet these targets, including strategies pertaining to transportation. With implementation of the strategies in the 2012-2035 RTP/SCS, the region will exceed the 2020 and 2035 targets established by CARB. Implementation strategies that apply to the Proposed Project are identified in Section 4.3.2.3 and consist of three transportation-related components. The Transportation Network Actions and Strategies identify steps

to enhance mobility and improve air quality by increasing non-automobile modes of travel and improving the efficiency of these alternative travel modes. The applicable Transportation Demand Management Actions and Strategies focus on developing programs and physical infrastructure to support the use of alternative travel modes, and the relevant component of the Transportation System Management Actions and Strategies would increase the efficiency of the vehicular circulation network through upgrades to the ITS inventory. The Proposed Project would enable the implementation of these strategies throughout the Westside. The proposed updates to the lists of transportation improvements in the CTCSP and WLA TIMP incorporate a wide range of transportation improvements, including enhanced transit service, bicycle facilities, and pedestrian accommodations to promote multi-modal transportation in the project area; roadway projects to improve intersections, safety, and traffic flow; installation of automated traffic surveillance and control systems and cameras; and trip reduction programs. These transportation improvements reflect the SCAG strategies that are identified for implementation by local jurisdictions and would result in the intended outcome of encouraging the use of alternative modes of transportation, thereby minimizing the increase in vehicle travel in the region and reducing per capita GHG emissions. Although the total VMT in the study area would increase due to regional growth, the Proposed Project is anticipated to reduce the study area VMT as compared to the Future without Project conditions. The proposed transportation improvements would increase mobility options, increase access to alternative modes of transportation, and reduce future transportation emissions; therefore, these improvements would advance the goals of the 2012-2035 RTP/SCS.

The regional CO_2 emission reduction targets in the 2012-2035 RTP/SCS equate to per capita emissions of approximately 20.5 pounds per day in 2035 (SCAG, 2012a). In order to determine the Project's consistency with the 2012-2035 RTP/SCS targets and with SB 375, daily per capita emissions associated with the Proposed Project were estimated (see **Table 4.3-3**). As shown in the table, the per capita CO_2 emissions with and without the Proposed Project were estimated to be 8.6 and 8.7 pounds per day, respectively, both of which are less than the SCAG projection of 20.5 pounds per day. Therefore, the Proposed Project would meet the goals of the 2012-2035 RTP/SCS and SB 375.

Table 4.3-3 SB 375 Consistency Analysis

	RTP/SCS (2035)[1]	Future without Project (2035)[2,3]	Future with Project (2035)[2,3]
Geographic Boundary	Region	Study Area	Study Area
Population	21,773,000	737,700	737,700
CO_2 Emissions (1,000 pounds per day)	445,800	6,404	6,276
Per Capita Emissions (pounds per day)	20.5	8.7	8.6
Significant Impact?	-	No	No

Source: SCAG, 2012b; CDM Smith, 2015.

Notes:
1. RTP/SCS values are for the entire SCAG region.
2. Because the RTP/SCS calculations did not include implementation of the Pavley standards, future emissions with and without the Proposed Project were calculated using EMFAC2011's CO2 emission rates without Pavley reductions. Emissions include engine running exhaust, startup, and idling.
3. Cars/light truck percentage in the study area was assumed to be approximately 79% based on the default fleet mix in EMFAC2014.

As discussed above, implementation of the Proposed Project would advance the goals of the RTP/SCS throughout the Westside and would contribute to the region's attainment of CARB's per capita GHG emission reduction targets. Therefore, the Proposed Project would not impede attainment of SCAG's

per capita GHG emission reduction targets as established in the 2012-2035 RTP/SCS and, thus, the impact would be ***less than significant.***

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

Impacts from the Proposed Project related to attainment of SCAG's per capita GHG emission reduction targets would be ***less than significant***.

Impact 4.3-3: Implementation of the Proposed Project would not conflict with an applicable plan, policy or regulation adopted for the purpose of reducing the emissions of GHGs. This impact would be *less than significant*.

The 2012-2035 RTP/SCS, Mobility Plan 2035, and Green LA Plan are regional and local plans adopted for the purpose of reducing emissions of GHGs. These plans aim to minimize impacts, including to GHG emissions, as a result of growth in the region while supporting regional mobility. Potential transportation improvements related to the Proposed Project include enhancing transit service, bicycle facilities, and pedestrian accommodations to promote multi-modal transportation in the project area; roadway projects to improve intersections, safety, and traffic flow; installation of automated traffic surveillance and control systems and cameras; and trip reduction programs. The improvement projects are intended to encourage the use of alternative modes of transportation and to minimize the increase in vehicle travel in the region.

As noted in Impact 4.3-2 above, the Proposed Project would advance the goals of the 2012-2035 RTP/SCS with respect to achieving GHG emission reduction targets by implementing transportation-related strategies incorporated into the plan. Similarly, the Proposed Project would implement components of MP 2035 in the Westside, and would be consistent with MP 2035's sustainable transportation policy, which would result in a decrease in VMT and related GHG emissions. In addition, the Proposed Project would achieve actions identified in the Green LA Plan, such as improving the ITS system, promoting pedestrian and bicycle modes, and expanding transit.

Although the total VMT in the study area would increase due to regional growth, the Proposed Project is anticipated to reduce the study area VMT as compared to the Future without Project conditions. The proposed transportation improvements would increase mobility options, increase access to alternative modes of transportation, and reduce future transportation emissions; therefore, these improvements would be aligned with the 2012-2035 RTP/SCS, Mobility Plan 2035, Green LA Plan, and the Plan for a Healthy Los Angeles. Finally, a comparison of these plans to the Proposed Project demonstrates no conflict between the goals and anticipated improvements associated with the Proposed Project and the goals, policies, targets, regulations, and requirements of the 2012-2035 RTP/SCS, Mobility Plan 2035, Green LA Plan, and the Plan for a Healthy Los Angeles.

As discussed above, implementation of the Proposed Project would not conflict with applicable plans, policies, or regulations adopted for the purpose of reducing GHG emissions and, thus, the impact would be ***less than significant.***

Mitigation Measures

No mitigation measures are required.

Significance of Impacts After Mitigation

Impacts from the Proposed Project related to conflicts with applicable plans to reduce GHG emissions would be ***less than significant***.

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