APPENDIX D

Planning Area Profiles

Every community in Los Angeles County has a role to play in reducing environmental impacts due to GHG emissions and in reaching the County's GHG emissions reduction goals. Unincorporated communities are diverse in their demographics, geography, land use, and built form, and therefore the potential to reduce GHG emissions can vary significantly by community.

The following profiles were included in the previous Public Review Draft of the Los Angeles County 2045 Climate Action Plan in March 2020. These profiles provide an overview of each of the eleven planning areas as outlined in the County's General Plan. These planning profiles provide some information about the unincorporated areas from a climate action perspective and identify "Key Climate Actions" for each community. The profiles highlight select data points such as stationary energy emissions, population, exposure to pollution, health, and transportation patterns in each planning area. The planning profiles presented herein represent GHG emissions as they were quantified in 2020, using on-road transportation emission factors from CARB's EMFAC2017 model. The emissions inventory for the unincorporated County has since been revised using updated models including the more recent EMFAC2021 model, with the result showing that on-road transportation represents a lower percentage of overall County emissions than estimated using the EMFAC2017 model. However, the revised emissions estimates do not affect the general conclusions regarding the key climate actions for each planning area, as the relative breakdown of emissions by sector remains roughly the same, with transportation and building energy constituting the majority of emissions in each planning area.

Transportation related emissions from passenger vehicles and trucks, account for more than half of all GHG emissions in unincorporated areas. Based on commute to work data, most planning areas seem to have a similar

mode split. The Metro Planning Area has the lowest rates of driving and the highest rates of transit use. However, without additional information about travel behavior it is not possible to make meaningful interpretations about the distance traveled and transportation related emissions in each community. Due to limited data availability the Planning Area Profiles only note the commute mode split for each community.

Stationary energy, in particular buildings energy use is responsible for about one-third of GHG emissions in unincorporated areas. A comparative analysis of stationary energy by planning area, population, sector, and fuel type is shown in Figures D-1, D-2 and D-3. Each area's unique characteristics inform "Key Climate Action" priority recommendations to maximize the GHG reductions for each planning area. Opportunities for emissions reductions exist in all communities. Some key observations are:

- The Metro Planning Area has the highest total emissions but has the lowest emissions per capita. Similarly, the East San Gabriel Valley has the 2nd highest total emissions and the 2nd lowest emissions per capita. These are also the two most populous planning areas.
- The Santa Monica Mountains and the San Fernando Valley have high emissions per capita, but very low overall emissions.
- Of the eight planning areas with a population over 20,000, the Santa Clarita Valley has the highest per capita emissions. The Gateway Planning Area has the highest emissions per capita of the four planning areas with a population over 100,000.
- The West San Gabriel Valley, the Antelope Valley, and the East San Gabriel Valley have high percentage of emissions from the residential sector.
- The Westside Planning Area has a high percentage of emissions from the commercial sector.
- The Gateway Planning Area has high percentage of emissions from the industrial sector. Industrial emissions not only contribute to climate change but may also contain more local air quality pollutants than emissions from other sectors.
- The Metro Planning Area and the West San Gabriel Valley have the highest consumption of natural gas.
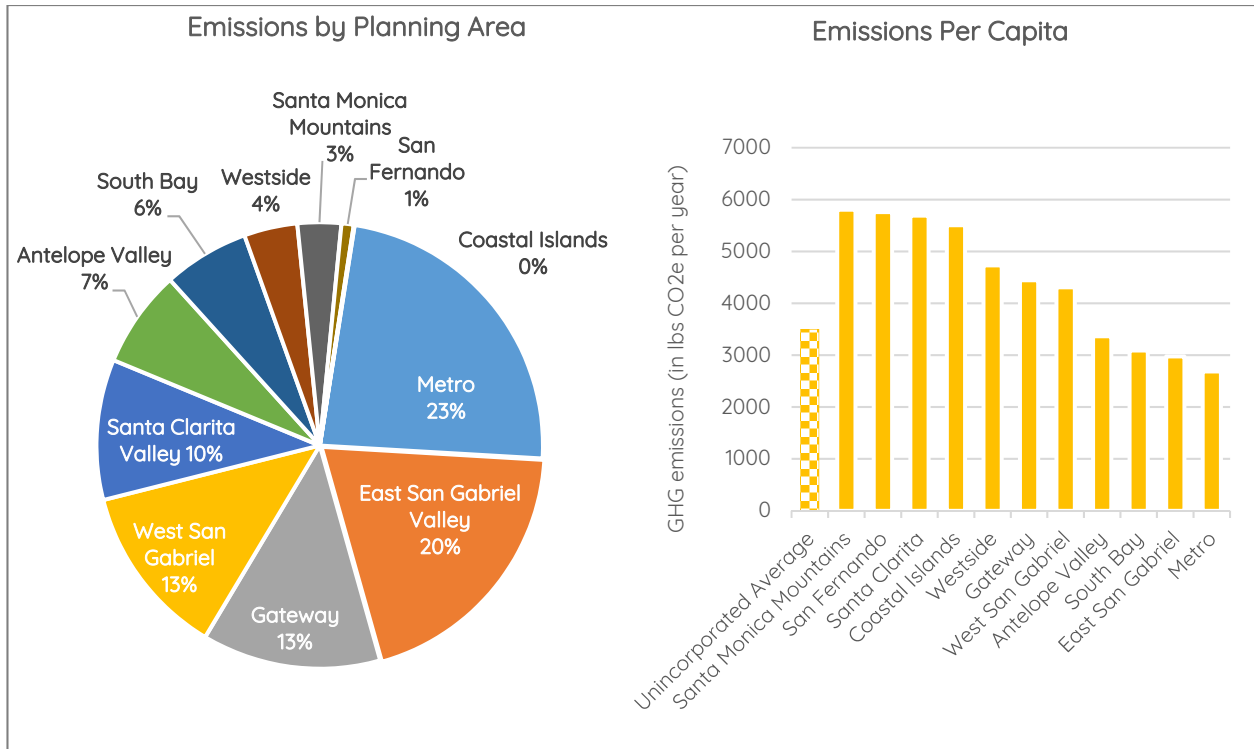
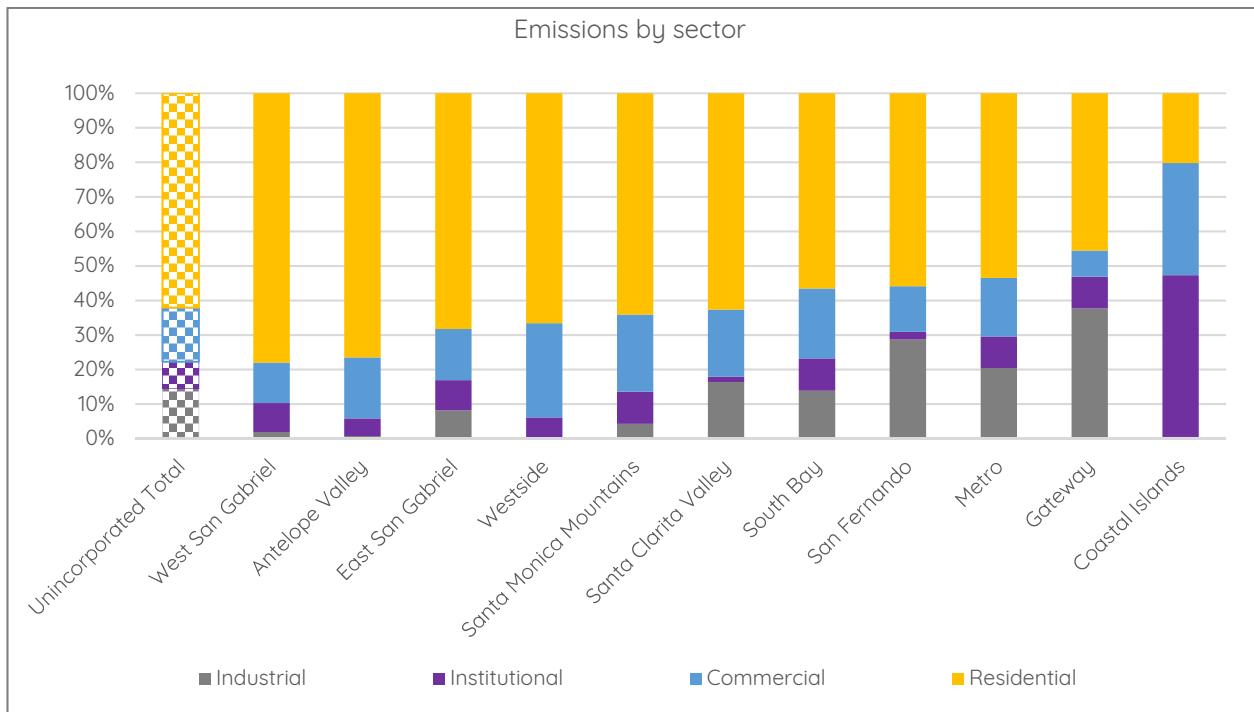Figure D1: Stationary Energy Emissions Comparative Analysis

Figure D2: Stationary Energy GHG Emissions by Sector

Note: the figures presented above represent GHG emissions as they were quantified in 2020. The emissions inventory for the unincorporated County has since been revised. However, the relative breakdown of emissions by sector remains roughly the same.
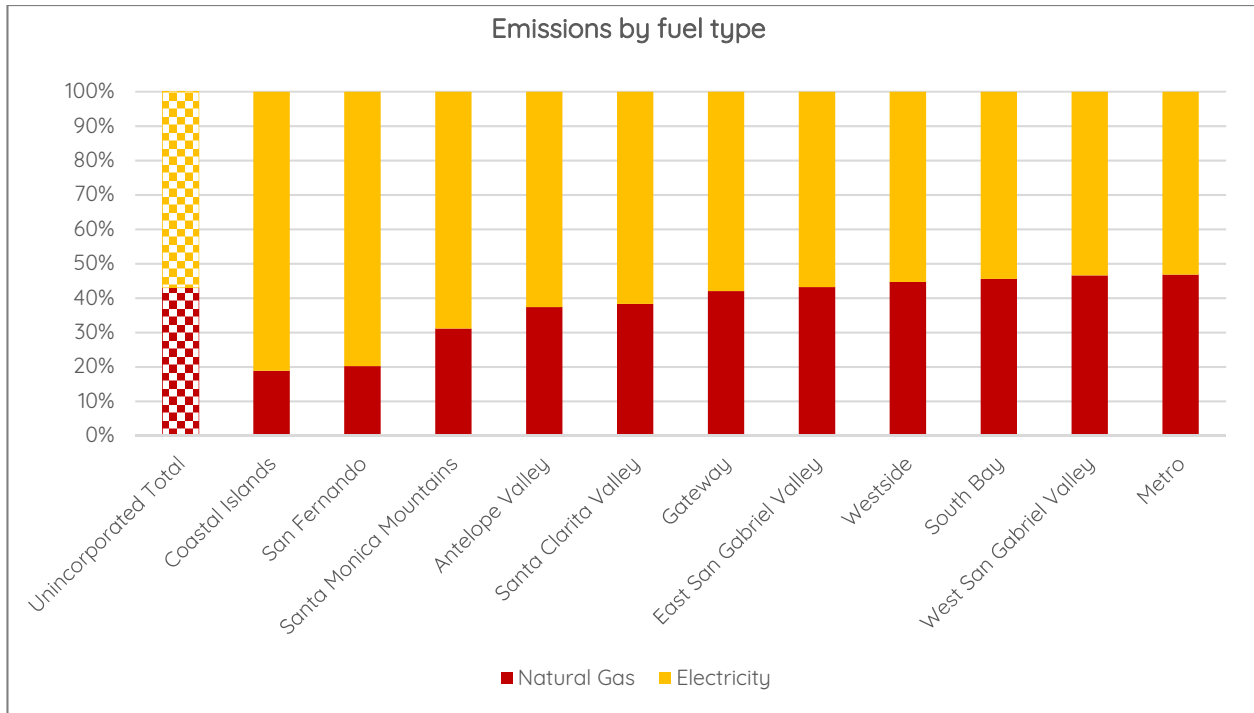
Figure D3: Stationary Energy GHG Emissions by Sector

Note: the figures presented above represent GHG emissions as they were quantified in 2020. The emissions inventory for the unincorporated County has since been revised. However, the relative breakdown of emissions by sector remains roughly the same.

Terms used in Planning Area Profile

PM2.5 Percentile: PM is a combination of solid and liquid droplets found in the air. PM can include dust, dirt, soot, or smoke. Some PM is large enough to be seen but other types are microscopic (fine PM with a diameter of less than 2.5 microns). Fine PM can travel deeply into the human respiratory tract and can cause health effects such as throat irritation, coughing, or asthma. The PM2.5 percentile indicates the concentration of fine PM in each planning area as compared to all Census tracts within the State of California, as measured by CalEnviroScreen 3.0 (retrieved in October 2019. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30).

Pollution Burden Percentile: Pollution Burden indicators are issues of widespread concern in California that CalEPA's boards, departments, and office can take action to remedy, and are divided into two categories: Exposures are pollutants that may come into direct contact with people, while environmental effects are adverse environmental conditions caused by pollutants. The Pollution Burden Percentile indicates the pollution burden score in each planning area compared to all Census tracts within the State of California as measured by CalEnviroScreen 3.0 (retrieved in October 2019. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30).

Asthma Percentile: Age-adjusted rate of asthma-related emergency department visits. Percentile is relative to all Census tracts within the State of California.[1]
**Estimated Population in Disadvantaged Communities:** Unincorporated population in Census tracts where 75 percent or more of the population are identified as disadvantaged as measured by CalEnviroScreen 3.0 (retrieved in October 2019. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30).

Estimated Population in Disadvantaged Communities: Unincorporated population in Census tracts where 75 percent or more of the population are identified as disadvantaged as measured by CalEnviroScreen 3.0 (retrieved in October 2019. https://oehha.ca.gov/calenviroscreen/report/calenviroscreen-30).

Estimated Population in High Quality Transit Areas (HQTA): HQTA are walkable areas within one half-mile of a well-serviced transit stop or a transit corridor, with 15-minute or better service frequency during peak commute hours. This indicator measures the population within unincorporated areas living within HQTAs. (SCAG RTP SCS, BuroHappold analysis)

Estimated Population in Transit Oriented District (TOD): Unincorporated population living within areas designated as TOD by Los Angeles County Department of Regional Planning. (Los Angeles County DRP, BuroHappold analysis)

Drive Alone/Carpool/Transit: Percentage of travelers using a particular type of transportation for trips to work. (American Community Survey 2013-2017)

Stationary Energy Emissions: Emissions from stationary sources in unincorporated areas by sector.
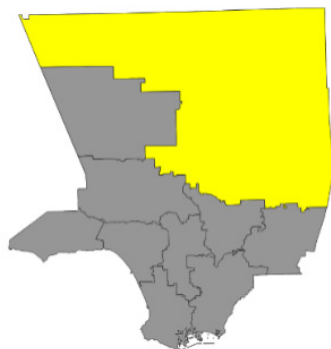
ANTELOPE VALLEY PLANNING AREA

The Antelope Valley Planning Area contains the majority of active agricultural land in Los Angeles County. The area faces a number of environmental challenges, including extreme heat, limited water supply, threats of wildfires, and floods. But the Antelope Valley also contains some of the County's richest sources of biodiversity as identified through the County's SEA Program. The area has a high rate of commuting by driving alone, but also has the highest bicycle mode split in the County (2 percent of trips to work are made by bicycle).

SECTOR/SUB-SECTOR	ALL UNINCORPORATED AREAS	ANTELOPE VALLEY
Total Population	1,037,227	76,101
Estimated Population in HQTAs	330,000	4,000
Estimated Population in TODs	69,000	0
Drive Alone/ Carpool/ Transit	77% / 10% / 5%	80% / 11% / 1%
PM2.5 Percentile	63.6	14.5
Pollution Burden Percentile	62.3	25.2
Asthma Percentile	51.4	51.1
Estimated Population in Disadvantaged Communities	383,000	8,000

Stationary Energy Emissions by Sector

- Residential
- Commercial
- Institutional
- Industrial
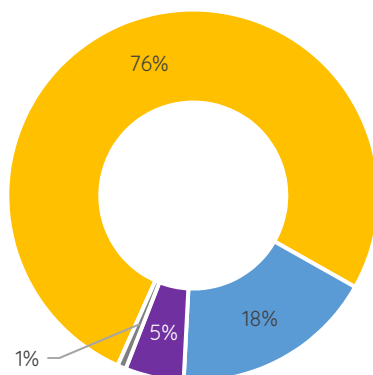
Key Climate Actions

- **Actions supporting transportation electrification**
- **Actions to encourage biking and active transportation**
- **Actions to preserve agricultural and natural areas**
- **Actions decarbonizing agricultural practices**
- **Actions targeting zero carbon energy in wildfire-prone areas**

Note: this figure and all figures presented below represent GHG emissions as they were quantified in 2020. The emissions inventory for the unincorporated County has since been revised. However, the revised emissions estimates do not affect the general conclusions regarding the key climate actions for each planning area, as the relative breakdown of emissions by sector remains roughly the same.

## COASTAL ISLANDS PLANNING AREA

The Coastal Islands are characterized by rugged landscape and a cliffed shoreline. While much of Santa Catalina Island is protected natural space, there is a landfill on the island. The area has the lowest population, lowest GHG emissions, and lowest natural gas use of any planning area. Institutional uses are responsible almost half of the areas GHG emissions.

Note: Data on health, pollution, and transportation patterns for the Coastal Islands Planning Area is unavailable, but data on population and energy use are provided.

| SECTOR/SUB-SECTOR	ALL UNINCORPORATED AREAS	COASTAL ISLANDS
Total Population	1,037,227	374
Estimated Population in HQTAs	330,000	0
Estimated Population in TODs	69,000	0

Stationary Energy Emissions by Sector

- Residential
- Commercial
- Institutional
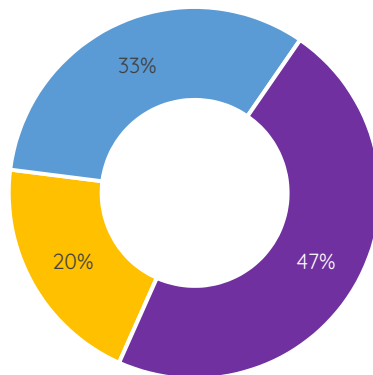
Key Climate Actions

- Actions to preserve agricultural and natural areas
- Actions relating to landfills and waste management
- Actions focused on reducing institutional emissions.
- Consider opportunities to preserve and nourish the islands' kelp forests for their ability to sequester carbon
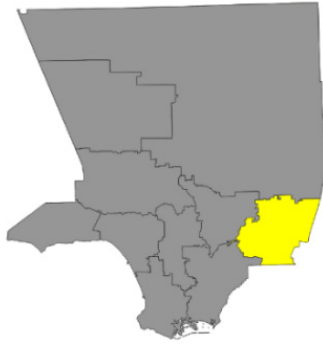
EAST SAN GABRIEL VALLEY PLANNING AREA

The East San Gabriel Valley Planning Area is characterized by valleys and rolling, dry hills. The northern portion of the planning area connects to the Angeles National Forest and San Gabriel Mountains. Wildfires and landslides pose safety hazards in the foothill communities. The East San Gabriel Valley Planning Area's has the highest residential GHG emissions in the County. The area also has the highest rate of commuting by driving alone in the County.

| SECTOR/SUB-SECTOR	ALL UNINCORPORATED AREAS	EAST SAN GABRIEL VALLEY
Total Population	1,037,227	240,274
Estimated Population in HQTAs	330,000	38,000
Estimated Population in TODs	69,000	0
Drive Alone/ Carpool/ Transit	77% / 10% / 5%	80% / 9% / 3%
PM2.5 Percentile	63.6	71.7
Pollution Burden Percentile	62.3	67.9
Asthma Percentile	51.4	44.1
Estimated Population in Disadvantaged Communities	383,000	48,000

Stationary Energy Emissions by Sector

- Residential
- Commercial
- Institutional
- Industrial

68% / 15% / 9% / 8%
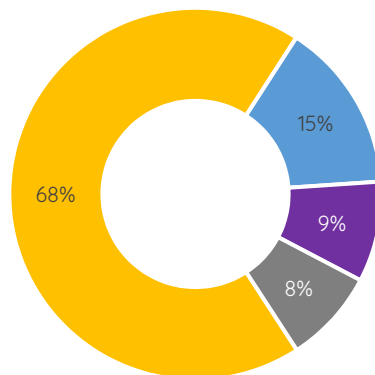
Key Climate Actions

- Actions focused on improving transit services
- Actions encouraging density and active transit near high quality transit
- Actions supporting transportation electrification
- Actions to reduce residential and commercial stationary energy emissions
- Actions focusing on disadvantaged/vulnerable communities
- Actions to preserve agricultural and natural areas
- Actions targeting zero carbon energy in wildfire-prone areas
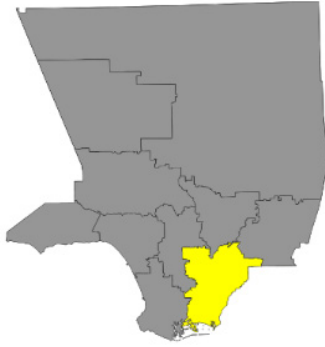
GATEWAY PLANNING AREA

The Gateway Planning Area has a large amount of built-out industrial land. The concentration of industrial uses and freight traffic impact air and water pollution in this area. The Gateway Planning Area also suffers from a lack of parks and recreational opportunities. The area has a high rate of commuting by driving alone, a high rate of natural gas emissions per capita, and the highest industrial emissions in the County. The Puente Hills landfill and material recovery facility is located in the planning area.

| SECTOR/SUB-SECTOR	ALL UNINCORPORATED AREAS	GATEWAY
Total Population	1,037,227	105,641
Estimated Population in HQTAs	330,000	10,000
Estimated Population in TODs	69,000	600
Drive Alone/ Carpool/ Transit	77% / 10% / 5%	80% / 10% / 3%
PM2.5 Percentile	63.6	79.2
Pollution Burden Percentile	62.3	69.1
Asthma Percentile	51.4	62.6
Estimated Population in Disadvantaged Communities	383,000	57,000

Stationary Energy Emissions by Sector

- Residential
- Commercial
- Institutional
- Industrial
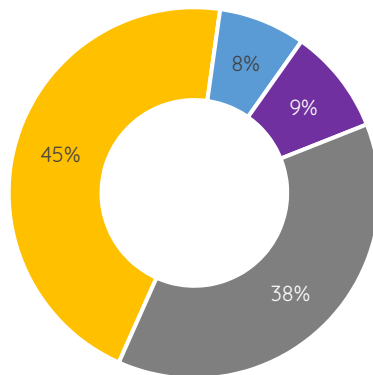
Key Climate Actions

- Actions to reduce industrial stationary energy emissions
- Actions to limit oil and natural gas production
- Actions to reduce emissions from heavy duty trucks
- Actions supporting transportation electrification
- Actions focusing on disadvantaged communities
- Actions to reduce VMT and traffic congestion
- Actions diverting waste from landfills
- Actions focused on building decarbonization
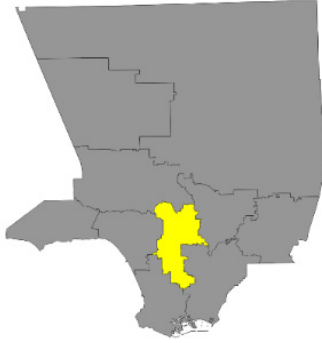
METRO PLANNING AREA

The majority of the Metro Planning Area is urbanized and there are no large areas of natural open space outside of parks and recreational areas. The presence of industrial districts in residential areas creates land use conflicts and health impacts. The planning area also suffers from traffic congestion and inadequate pedestrian and bicycle infrastructure. The Metro planning area has the lowest rate of driving alone, the highest rate of commuting by transit, and the highest rate of commuting by walking.

SECTOR/SUB-SECTOR	ALL UNINCORPORATED AREAS	METRO
Total Population	1,037,227	316,629
Estimated Population in HQTAs	330,000	208,000
Estimated Population in TODs	69,000	57,000
Drive Alone/ Carpool/ Transit	77% / 10% / 5%	72% / 12% / 9%
PM2.5 Percentile	63.6	83.6
Pollution Burden Percentile	62.3	80.4
Asthma Percentile	51.4	76.4
Estimated Population in Disadvantaged Communities	383,000	211,000

Stationary Energy Emissions by Sector

- Residential
- Commercial
- Institutional
- Industrial
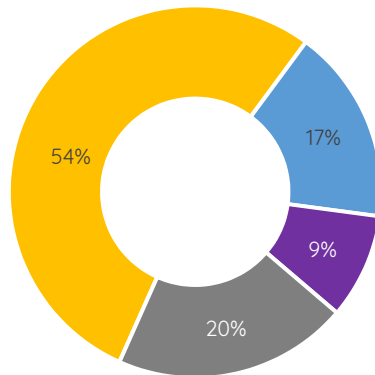
Key Climate Actions

- **Actions focused on improving transit services**
- **Actions encouraging density near high quality transit**
- **Actions to reduce VMT and traffic congestion**
- **Actions to encourage biking and active transportation**
- **Actions to limit oil and natural gas production**
- **Actions to reduce emissions from heavy duty trucks**
- **Actions focusing on disadvantaged communities**
- **Actions to reduce all sources of stationary energy emissions**
- **Actions focused on building decarbonization**

SAN FERNANDO VALLEY PLANNING AREA

The San Fernando Valley Planning Area is ringed with distinct hillsides and mountain ranges. Only a small portion of the planning area is unincorporated. These communities are primarily low-density, suburban communities. The area faces significant wildfire hazards.

| SECTOR/SUB-SECTOR	ALL UNINCORPORATED AREAS	SAN FERNANDO
Total Population	1,037,227	5,559
Estimated Population in HQTAs	330,000	0
Estimated Population in TODs	69,000	0
Drive Alone/ Carpool/ Transit	77% / 10% / 5%	79% / 9% / 2%
PM2.5 Percentile	63.6	49.9
Pollution Burden Percentile	62.3	38.1
Asthma Percentile	51.4	27.3
Estimated Population in Disadvantaged Communities	383,000	88

Stationary Energy Emissions by Sector

- Residential
- Commercial
- Institutional
- Industrial
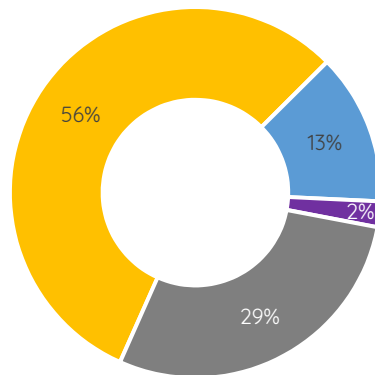
Key Climate Actions

- **Actions to encourage biking and active transportation**
- **Actions supporting transportation electrification**
- **Actions targeting zero carbon energy in wildfire-prone areas**
- **Actions to preserve agricultural and natural areas**
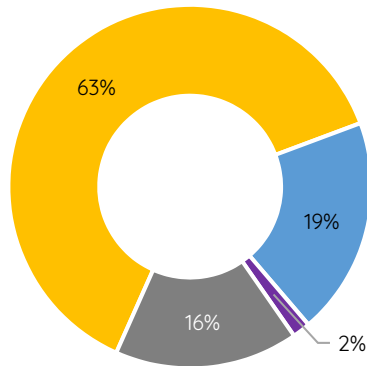- **Actions to expand urban forest areas and increase existing tree canopy**
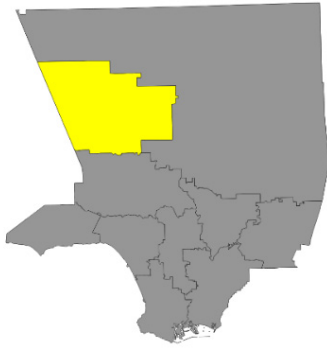
SANTA CLARITA VALLEY PLANNING AREA

The Santa Clarita Valley Planning Area is framed by mountain ranges and the Angeles National Forest. The planning area is one of the fastest growing areas in Los Angeles County. Due to this rapid growth, the planning area faces multiple challenges related to infrastructure planning, preservation of open space, and reducing vehicle miles traveled. The area has a high rate of commuting by driving alone, and the highest per capita natural gas emissions in the County.

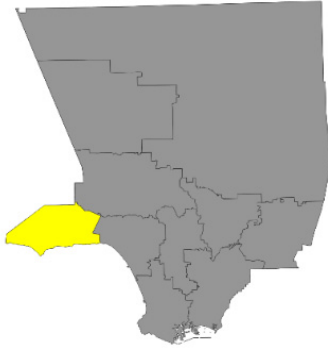| SECTOR/SUB-SECTOR	ALL UNINCORPORATED AREAS	SANTA CLARITA VALLEY
Total Population	1,037,227	64,838
Estimated Population in HQTAs	330,000	0
Estimated Population in TODs	69,000	0
Drive Alone/ Carpool/ Transit	77% / 10% / 5%	79% / 9% / 2%
PM2.5 Percentile	63.6	33.2
Pollution Burden Percentile	62.3	38.9
Asthma Percentile	51.4	19.0
Estimated Population in Disadvantaged Communities	383,000	0

Stationary Energy Emissions by Sector

- Residential
- Commercial
- Institutional
- Industrial

63%
19%
16%
2%

Key Climate Actions

- Actions supporting transportation electrification
- Actions to limit oil and natural gas production
- Actions to reduce commercial emissions
- Actions to preserve agricultural and natural areas
- Actions focused on building decarbonization
- Actions targeting zero carbon energy in wildfire-prone areas
- Actions to expand urban forest areas and increase existing tree canopy

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SANTA MONICA MOUNTAINS PLANNING AREA

The Santa Monica Mountains Planning Area is characterized by mountains, dry valleys, and beaches. The planning area's natural beauty comes with numerous environmental issues and natural hazards including severe wildfire risks and landslides. The Calabasas Landfill is in the planning area.

| SECTOR/SUB-SECTOR	ALL UNINCORPORATED AREAS	SANTA MONICA MOUNTAINS
Total Population	1,037,227	19,781
Estimated Population in HQTAs	330,000	0
Estimated Population in TODs	69,000	0
Drive Alone/ Carpool/ Transit	77% / 10% / 5%	78% / 5% / 1%
PM2.5 Percentile	63.6	46.7
Pollution Burden Percentile	62.3	42.8
Asthma Percentile	51.4	2.8
Estimated Population in Disadvantaged Communities	383,000	0

Stationary Energy Emissions by Sector

- Residential
- Commercial
- Institutional
- Industrial

64%
22%
4%
10%
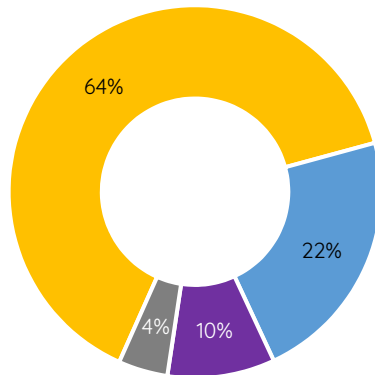
Key Climate Actions

- **Actions to preserve natural areas**
- **Actions targeting DER in wildfire-prone areas**
- **Actions relating to landfills and waste management**
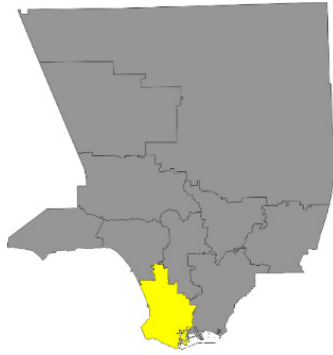
SOUTH BAY PLANNING AREA

The South Bay Planning Area is covered with hills, open spaces, and rocky shorelines along the Pacific Coast. Issues facing the planning area include traffic congestion, limited public transportation options, and air quality concerns. The region's proximity to LAX and the ports creates planning and air quality challenges. Petroleum refining is also a significant source of air pollution in the region.

| SECTOR/SUB-SECTOR	ALL UNINCORPORATED AREAS	SOUTH BAY
Total Population	1,037,227	73,085
Estimated Population in HQTAs	330,000	32,000
Estimated Population in TODs	69,000	10,000
Drive Alone/ Carpool/ Transit	77% / 10% / 5%	77% / 10% / 4%
PM2.5 Percentile	63.6	78.1
Pollution Burden Percentile	62.3	83.1
Asthma Percentile	51.4	67.3
Estimated Population in Disadvantaged Communities	383,000	39,000

Stationary Energy Emissions by Sector

- Residential
- Commercial
- Institutional
- Industrial

57%
20%
9%
14%
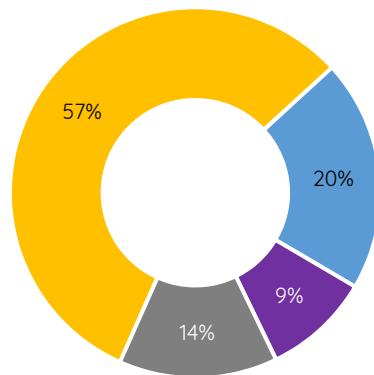
Key Climate Actions

- **Actions to limit oil and natural gas production**
- **Actions focusing on improving transit services**
- **Actions encouraging density near high quality transit**
- **Actions to reduce emissions from heavy duty trucks**
- **Actions relating to landfills and waste management**
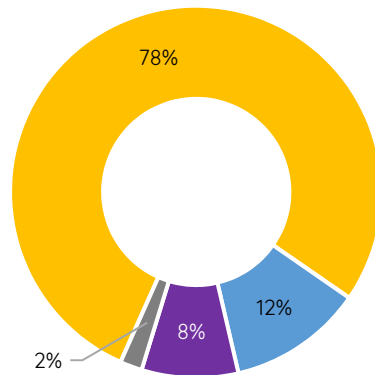- **Actions focused on building decarbonization**
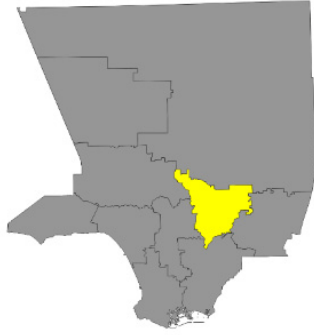
WEST SAN GABRIEL VALLEY PLANNING AREA

The West San Gabriel Valley Planning Area includes the foothills of the San Gabriel Mountains and Angeles National Forest. The San Gabriel River flows north-south along the planning area's eastern border. The planning area is almost entirely developed with historically suburban developments. Many of the communities are designated Very High Fire Hazard Severity Zones, which reflects the threat of wildfires and subsequent mudslides within those areas. The area has the third highest per capita natural gas emissions in the County.

| SECTOR/SUB-SECTOR	ALL UNINCORPORATED AREAS	WEST SAN GABRIEL VALLEY
Total Population	1,037,227	105,252
Estimated Population in HQTAs	330,000	13,000
Estimated Population in TODs	69,000	2,000
Drive Alone/ Carpool/ Transit	77% / 10% / 5%	79% / 10% / 3%
PM2.5 Percentile	63.6	62.0
Pollution Burden Percentile	62.3	61.5
Asthma Percentile	51.4	32.6
Estimated Population in Disadvantaged Communities	383,000	16,000

Stationary Energy Emissions by Sector

- Residential
- Commercial
- Institutional
- Industrial

78%
12%
8%
2%

Key Climate Actions

- Actions supporting transportation electrification and improved transit service
- Actions to encourage transit for youth and seniors
- Actions to reduce residential emissions
- Actions focused on building decarbonization
- Actions targeting zero carbon energy in wildfire-prone areas
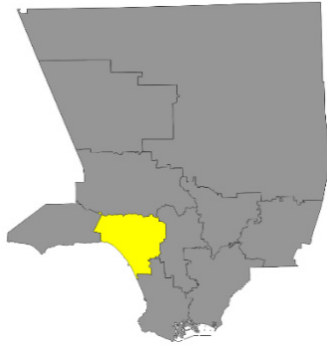
WESTSIDE PLANNING AREA

The Westside Planning Area is comprised of beaches, Marina del Rey, Baldwin Hills and Kenneth Hahn State Park. Significant environmental resources exist in the planning area, most notably the Ballona Wetlands, which are threatened by potential sea level rise due to climate change. Most of Ladera Heights / View Park–Windsor Hills is in a Very High Fire Hazard Severity Zone. The Westside Planning Area also includes a large urban oil field in Baldwin Hills. The area has low access to transit, but the 2nd highest bicycle mode split in the County (2 percent). The area has the second highest per capita natural gas emissions in the County.

SECTOR/SUB-SECTOR	ALL UNINCORPORATED AREAS	WESTSIDE
Total Population	1,037,227	29,693
Estimated Population in HQTAs	330,000	26,000
Estimated Population in TODs	69,000	0
Drive Alone/ Carpool/ Transit	77% / 10% / 5%	76% / 7% / 3%
PM2.5 Percentile	63.6	75.5
Pollution Burden Percentile	62.3	71.8
Asthma Percentile	51.4	41.2
Estimated Population in Disadvantaged Communities	383,000	3,000

Stationary Energy Emissions by Sector

- Residential
- Commercial
- Institutional
- Industrial
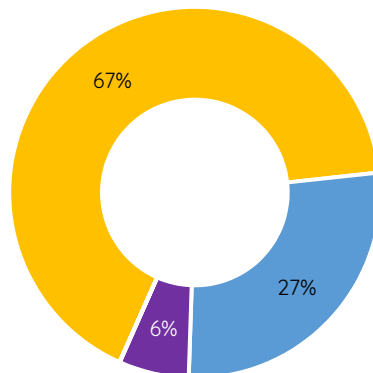
Key Climate Actions

- Actions focusing on improving transit services
- Actions encouraging density near high quality transit
- Actions to encourage biking and active transportation
- Actions to reduce commercial emissions
- Actions to limit oil and natural gas production
- Actions to reduce emissions from heavy duty trucks
- Actions focused on building decarbonization