



2020

SNAPSHOT FAQ



WHAT IS THE RECAP SNAPSHOT?

The ReCAP Snapshots are made available to member agencies of the San Diego Association of Governments (SANDAG) as part of the Regional Climate Action Planning Framework (ReCAP). Each ReCAP Snapshot is meant to assist jurisdictions with monitoring community-wide greenhouse gas (GHG) emissions and/or Climate Action Plan (CAP) implementation over time and includes the following components: GHG Inventory, Jurisdiction Quick Facts, and Activity Data. It is important to note that: 1) the ReCAP Snapshot is meant to support, but not replace, a jurisdiction’s efforts to monitor and report on implementation of their individual CAP; and 2) Climate planning activities vary by jurisdiction and are dependent on a variety of factors, such as funding and staff capacity. For jurisdictions without an adopted CAP, the ReCAP Snapshot provides data that can help inform ongoing or future CAP development and/or other sustainability plans and initiatives.

The table below outlines the various components covered in the 2020 ReCAP Snapshot:

Recap Snapshot Category	Description	Overview of Data Sources
GHG Inventory	<p>Includes an annual GHG emissions inventory associated with community-wide activities that are specific to each jurisdiction.</p> <p>Common GHG emissions categories include, but are not limited to: Transportation, Electricity, Natural Gas, Solid Waste, Water, and Wastewater.</p>	<p>The GHG inventory in the 2020 ReCAP Snapshot is based on best available data. The sources for GHG emissions calculations include:</p> <p>On-road Transportation: N/A*</p> <p>Off-road Transportation: emissions from off-road vehicles and equipment, CARB OFFROAD2021</p> <p>Electricity and Natural Gas: community-wide consumption, SDG&E</p> <p>Solid Waste: waste sent to landfill, CalRecycle</p> <p>Water and Wastewater: water consumption and wastewater produced, City/water agency</p>
Jurisdiction Quick Facts	<p>Includes basic facts on each jurisdiction for reference. This section includes information on a jurisdiction’s total population, number of square miles, and number of occupied households (excluding group quarters). This section also provides links and information on a jurisdiction’s current CAP progress and identifies the jurisdiction’s subregion within San Diego County.</p>	<p>Jurisdiction Quick Facts are provided for 2020 to coincide with the GHG emissions inventory year. Sources include:</p> <p>Population: SANDAG</p> <p>Area Square Miles: SANDAG</p> <p>Occupied Housing Units: SANDAG</p> <p>Current CAP Progress: City</p> <p>Subregion: SANDAG</p>

ReCap Snapshot Category	Description	Overview of Data Sources
Activity Data	<p>Represents select GHG reduction activities commonly included in local CAPs in the San Diego region. While activity data may not align precisely with GHG reduction measures and/or the metrics identified in a jurisdiction’s CAP, they are regionally consistent and similar among all jurisdictions. The activity data are primarily community-wide, some municipal indicators have been included in each jurisdiction’s 2020 ReCAP Snapshot, where data are available. Community-wide data represents activities that take place within a jurisdiction’s boundaries, while municipal data represents activities that take place at City-owned facilities and buildings.</p>	<p>Activity data are from 2020. In cases where jurisdictions do not track specific activity data, that activity is not included. Sources include:</p> <p>Transportation: SANDAG, DMV, MTS, NCTD, DOE</p> <p>Water and Wastewater: City, water agency, wastewater agency</p> <p>Carbon Sequestration: City</p> <p>Energy Use: SDG&E</p> <p>Renewable Energy: CEC, California Distributed Generation Statistics, City</p> <p>Solid Waste: CalRecycle</p>

Notes:

CAP = Climate Action Plan; CEC = California Energy Commission; DMV = Department of Motor Vehicles; DOE = Department of Energy; GHG = greenhouse gas; NCTD = North County Transit District; SANDAG = San Diego Association of Governments; SDG&E = San Diego Gas & Electric; MTS = San Diego Metropolitan Transit System; VMT = vehicle miles traveled, CalRecycle = California Department of Resources, Recycling, and Recovery; ReCAP = Regional Climate Action Planning Framework

*More information on why on-road transportation was omitted is available later in this FAQ
 Source: SANDAG 2022

For more information, please see the Methods and Data Sources Summary available at sandag.org/climate.

HOW WERE THE ACTIVITY DATA SELECTED?

Activity data were selected based on input from staff from the local jurisdictions and additional selection criteria such that activity data should:

- be representative of a majority of common GHG reduction activities included in local CAPs;
- demonstrate impact of City policies and/or actions; and
- have data sources that are consistently available, can be regularly updated, and have jurisdiction-level regional consistency.

WHAT IS THE RELATIONSHIP BETWEEN THE GHG EMISSIONS INVENTORY, ACTIVITY DATA, AND EACH CAP?

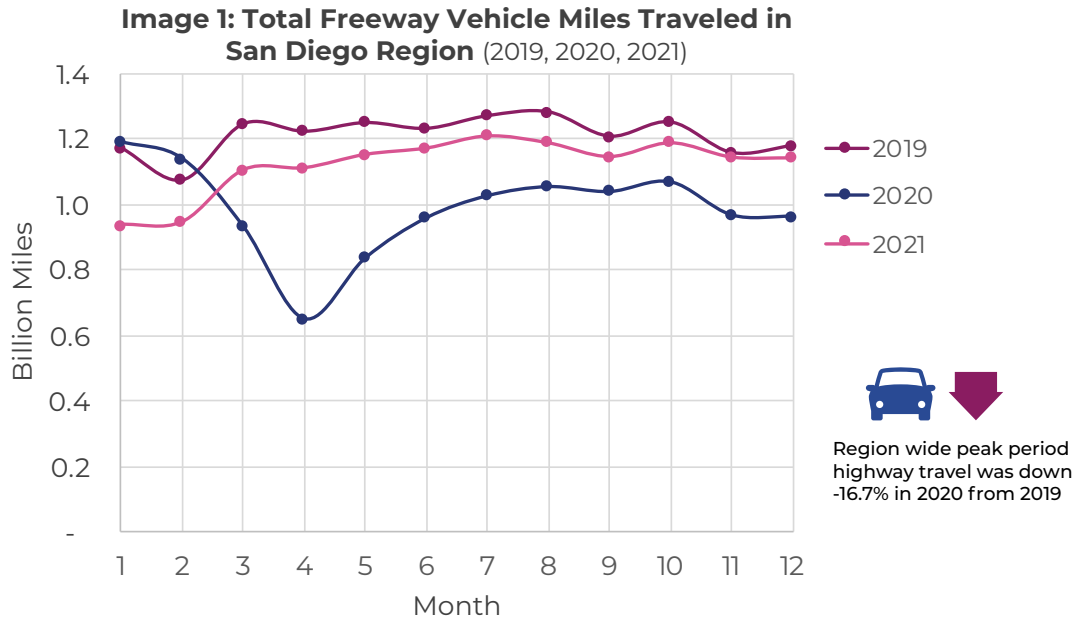
A CAP is a long-range plan that outlines specific activities a jurisdiction will take to reduce GHG emissions. CAPs include a community-wide GHG emissions inventory, GHG reduction target(s), and a selection of GHG reduction measures to meet the target(s). As of February 2023, 17 of the 19 jurisdictions in the region have adopted a CAP.

The GHG emissions inventory provided in the ReCAP Snapshots quantifies emissions based on the methodologies described in [ReCAP Technical Appendix VI](#) and aligns with the best available data. In comparing this 2020 GHG inventory to prior inventories and/or reduction targets in a jurisdiction's CAP, it is important to consider how the current data and methods may differ from prior analyses and identify where direct comparison may not be possible.

Furthermore, because the activity data are meant to be regionally consistent, the indicators may not align precisely with the GHG reduction measures and/or the metrics identified in an individual CAP. Each jurisdiction will have unique GHG reduction measures and may identify specific metrics for monitoring CAP implementation that are not included in their respective ReCAP Snapshot. The ReCAP Snapshot is meant to supplement, not replace, a jurisdiction's implementation and monitoring program.

WHY DOES THE 2020 GHG EMISSIONS INVENTORY NOT INCLUDE 2020 ON-ROAD TRANSPORTATION DATA?

The Covid-19 pandemic impacted our day-to-day activities in 2020. The 2020 GHG emissions inventory was prepared using the best available data for each emissions category and does not include on-road transportation. The activity data for electricity, natural gas, solid waste, water sectors are based on actual tracked and observed usage for the year and therefore, correctly reflect the changes due to Covid-19. However, for on-road transportation, the activity data is vehicle miles traveled (VMT), a proxy for fuel use. VMT data is derived for each jurisdiction from the SANDAG activity based model (ABM). The most recent SANDAG activity based model, ABM2+, was last calibrated with observed data in 2016 and forecasts 2020 VMT. While transportation historically accounts for the largest share of GHG emissions in an inventory, the VMT forecast does not take into account the impacts of the Covid-19 pandemic and cannot be updated to provide 2020 VMT data for each jurisdiction. In addition, the model cannot be updated for sudden changes in activity in any particular year as it is based on data from a baseline year and projects future years based on land use, population, and housing forecast. Therefore, using the VMT forecast for 2020 with a baseline year of 2016 would be inappropriate as the model cannot reflect the impacts of the pandemic in 2020. Instead, state Caltrans PeMS data provides regional VMT in 2020 from sensors and observations on the freeways which help to estimate the regional change in VMT. Image 1 compares the observed VMT on freeways in the San Diego region for the years 2019, 2020 and 2021. The observed data is only available for freeways and cannot be scaled down to individual jurisdictions which have different configurations of roads. While other sources of data and anecdotal experience show lower VMT in 2020, there is no data for how each jurisdiction's VMT changed during 2020. The Caltrans PeMS data set shows similar VMT trends in 2021 as in 2019 which suggests that lower VMT in 2020 is likely due to the impacts of the Covid-19 pandemic and may not sustain long term.



Source: PeMS, Caltrans. [SANDAG 2020 State of the Commute Report](#)

Table 1: Overview of Data Types Based on GHG Emissions Category

Electricity	Observed
Natural Gas	Observed
Solid Waste	Observed
Water	Observed
Wastewater	Observed
Off-road Transportation*	Modeled
On-road Transportation	Modeled

*Data for off-road transportation emissions comes from California Air Resource Board’s (CARB) OFF-ROAD2021 model. As reported by CARB (email communication on 3/7/2023), this model has been updated to reflect changes where activity deviated from normal during the Covid-19 pandemic, hence it is included in the 2020 state GHG emissions inventory. For categories such as construction, agriculture and the like, statewide off-road fuel use did not reflect a significant deviation from normal during the pandemic, hence no adjustments were made to the categories. Regional and jurisdictional data are downloaded from the state data, therefore the adjustments made by CARB as provided above, are also reflected in local off-road transportation emissions information.

For a more detailed analysis on 2020 greenhouse gas emissions reduction for on-road transportation, see [2021 Regional Plan Appendix D Attachment 2: Senate Bill 375 2020 Greenhouse Gas Reduction Estimate](#).

WHAT IS THE SANDAG TRANSPORTATION MODEL?

The SANDAG transportation model is an “activity-based model,” referred to as an “ABM,” that simulates individual and household transportation decisions that compose their daily travel itinerary. The current SANDAG official model has a base year 2016 and is created using the 2016 household travel behavior survey. People travel outside their home for activities such as work, school, shopping, healthcare, and recreation, and the ABM attempts to predict whether, where, when, and how this travel occurs. The result is a forecasting and alternatives analysis tool that can help gain insight into potential future outcomes of land use growth, transportation network investments, and travel policies.

HOW OFTEN WILL THE ReCAP SNAPSHOTS BE PREPARED? WILL OTHER ACTIVITY DATA BE ADDED?

SANDAG plans to provide an updated ReCAP Snapshot to each jurisdiction every two years. The first edition ReCAP Snapshots were published in November 2019; the 2018 ReCAP Snapshots (published in 2020) serve as the second edition. The 2020 Snapshots (published in 2023) serve as the third edition. As technology advances and data sources and methods evolve, content in these ReCAP Snapshots may change, including methodologies for preparing the GHG emissions inventory and activity data reported.

Prior to development of the 2022 ReCAP snapshot, SANDAG will re-evaluate existing data sources, including but not limited to VMT, energy, and mode shift data to understand if there are alternative data sources that should be used for climate monitoring and GHG emissions inventory.

As data becomes available and additional indicators become more refined and commonplace, future ReCAP Snapshots may also address other topics that are currently not addressed, including emission trends over time, environmental justice, social equity considerations, and climate adaptation and resiliency.

The Climate Action Data Portal is an online resource for climate planning data in the San Diego region. The Climate Action Data Portal builds off the SANDAG Regional Climate Action Planning Framework (ReCAP). The Climate Action Data Portal currently includes VMT data, GHG inventory, and climate activity data for jurisdictions. The [SANDAG Open Data Portal](#), which houses the Climate Action Data Portal, also includes demographic data, GIS data layers, and transportation data.

IS THERE A RECAP SNAPSHOT FOR EACH JURISDICTION IN THE SAN DIEGO REGION?

SANDAG prepared ReCAP Snapshots for 16 of the 19 jurisdictions in the San Diego region. SANDAG has been providing energy efficiency support to local jurisdictions via the Roadmap Program since 2010 and expanded services to include climate action planning in 2016. The Roadmap Program ended in 2020 but SANDAG will continue to provide climate, resiliency, and adaptation support to local governments through its Climate program. The City of San Diego and the County of San Diego Snapshots were not produced since these jurisdictions have other resources and monitoring procedures in place.

More information on the City of San Diego’s CAP is available at:
<https://www.sandiego.gov/sustainability/climate-action-plan>

More information on the County of San Diego’s CAP is available at:
<https://www.sandiegocounty.gov/pds/advance/climateactionplan>