



## Land Use & Air Quality Update

*The newsletter of the **Sac Metro Air District's** Transportation & Climate Change Division. This edition includes articles on CalEEMod and the GHG Handbook update, missing middle housing, Sac Metro Air District phone numbers, local UHI implementation, and a new team member's biography.*

Visit our Website

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## California Emissions Estimator Model (CalEEMod) Updated



**California Emissions Estimator Model®**

***Local Projects should utilize CalEEMod Version 2020.4.0 to analyze projects released for public review after July 1, 2021***

On June 1, 2021, the California Air Pollution Control Officers Association (CAPCOA) released version 2020.4.0 of the California Emissions Estimator Model (CalEEMod)! Consultants, planners, developers, and air quality staff have been patiently awaiting the release of the updated model. The new version of the model includes the following updates:

- EMFAC2017 emission factors
- Energy efficiency considerations from Title 24 2019
- Updated greenhouse gas intensity factors for utilities
- ITE 10<sup>th</sup> Edition trip generation rates

The Sac Metro Air District recommends using CalEEMod Version 2020.4.0 to analyze projects released for public review after July 1, 2021. You may contact Karen Huss at 279-207-1131, or [khuss@airquality.org](mailto:khuss@airquality.org) if you have questions regarding CalEEMod.

## Draft GHG Handbook Available for Public Review

### Help shape climate-smart California planning

The Draft GHG Handbook is available for public review

Read here: [bit.ly/GHGHandbook](https://bit.ly/GHGHandbook)



The Sac Metro Air District is pleased to announce that the Draft Greenhouse Gas Handbook (GHG Handbook) is now available for public review. This document updates the 2010 CAPCOA Quantifying Greenhouse Gas Mitigation Measures Handbook, which local governments across California use to reduce greenhouse gas (GHG) emissions from new land-use projects as well as climate action plans, general plans, and master plans.

Sac Metro Air District has been leading a project for a comprehensive update of both the GHG Handbook and the California Emissions Estimator Model (CalEEMod) since March 2020. The project aims to develop new GHG mitigation strategies, refresh underlying data, and align the GHG Handbook and CalEEMod with California's latest planning priorities and guidance on climate change, health, and equity.

The Handbook provides factsheets, formulas, and guidance to calculate GHG reductions from over 80 GHG mitigation strategies that can be implemented by land-use projects as well as climate action plans. In addition, the GHG Handbook incorporates climate adaptation and health and equity considerations for the first time. Users can estimate the vulnerabilities of their land-use project to climate hazards and estimate the risk-reduction potential of adaptation strategies. The equity chapter aims to help make both the process and outcomes of land use development more equitable, with recommendations to center planning around community needs and priorities, ensure planning is more inclusive, and support clean air, local jobs, and climate resilience.

This project is funded by a Caltrans SB-1 Adaptation Planning Grant, with additional support from the Bay Area Air Quality Management District and the California Department of Public Health. The project team consists of Sac Metro Air District staff, ICF International, Fehr & Peers, and Sonoma Technologies Inc (STI).

Sac Metro Air District welcomes the public to review and provide feedback on the Draft GHG Handbook. The public review period is open from August 19 to September 16, 2021.

You can download the Draft GHG Handbook at the following link:

<http://www.airquality.org/air-quality-health/climate-change/ghg-handbook-caleemod>

Send all comments to [GHGHandbook@airquality.org](mailto:GHGHandbook@airquality.org) by 5 pm PDT, September 16.

## Local Cities are Addressing Missing Middle Housing

[Missing Middle Housing](#) is a term introduced by architect [Daniel Parolek](#) in 2010 that describes house-scale buildings with multiple units in walkable neighborhoods. Examples include duplexes, fourplexes, bungalow courts, and courtyard buildings. These forms of housing were common in many communities built before 1940, including in neighborhoods with primarily single-family housing. Many of the older areas in communities throughout the Sacramento region include examples of these housing types. Changes in zoning that trended towards single-family housing after the second world war made these housing types more difficult and expensive to construct.



Changing local policies to allow and encourage the development of new Missing Middle Housing could address the region's sustainability and housing supply issues. Missing middle policies can increase the density and variety of housing types in existing single-family housing neighborhoods without creating dramatic changes in neighborhood character.

Local efforts are currently underway to modify zoning codes and other policies to boost this housing type.

The City of Sacramento is including policies in its forthcoming [2040 General Plan](#) to allow a wider variety of housing types. Ultimately, the City looks to allow duplexes, triplexes, and fourplexes by right in traditional single-unit zones (R-1).

The [City of Elk Grove](#) is currently finalizing a report on the economics of missing middle housing. The study was commissioned in 2019, and a [draft report](#) was released in February 2020. It is anticipated that the report's results will influence the comprehensive update the City is making to its zoning code and development standards.



*Multi-unit housing in Folsom*



*Duplex in Galt*



# New Phone Numbers for Sac Metro Air District



*The Sac Metro Air District recently updated its phone system. Please use the staff directory (link below) when trying to reach an individual staff member:*

Sac Metro Air District Staff Directory

## CEQA and Land Use Staff Contact Information

<i>Name</i>	<i>Jurisdiction(s)</i>	<i>New Phone number</i>	<i>Email</i>
Project Review Inbox	<b>ALL</b> -Please direct general notices, Air Quality inquiries, etc., to this email address.	Air District Mainline: (279) 207-1122	ProjectReview@airquality.org
Paul Philley, AICP	<b>Program Supervisor</b> , Regional, State & Federal Projects	(279) 207-1122 ext. 1214	pphilley@airquality.org
Karen Huss	Construction Mitigation, City of Citrus Heights, City of Folsom, City of Galt	(279) 207-1131	khuss@airquality.org
Rachel Dubose	County of Sacramento	(279) 207-1127	rdubose@airquality.org
Joseph Hurley	City of Elk Grove, City of Isleton, City of Rancho Cordova, Bicycle and Pedestrian Programs	(279) 207-1130	jhurley@airquality.org
Molly Wright, AICP	City of Sacramento, Regional Transit	(279)-207-1157	mwright@airquality.org
Shelly Jiang	Climate Change	(279) 207-1132	sjiang@airquality.org

## Be Prepared for Wildfire Season

Wildfire season has returned to California, with smoke from wildfires affecting people in California and beyond. Listed below are some resources for information on best practices for protecting your health during smoke events.

The Federal Center for Disease Control and Prevention (CDC) maintains a [Wildfire Information Website](#) with detailed information on protecting your health when smoke is present. The website includes specific recommendations for [Pregnancy](#), [Children](#), [Asthma](#), [COPD](#), [Heart Disease](#), and [Guidance for Health Professionals](#). The CDC also recommends [specific](#) actions that members of the public can take when wildfire smoke renders a community's air quality unhealthy:

1. Create a [clean room](#), with filtered air, at home
2. If the indoor air quality at home cannot be kept sufficiently clean, shelter in a cleaner air shelter or cleaner air space
3. Spend as little time outdoors as possible. If you must spend time outdoors, wear a fit-tested, NIOSH-approved N95 or P100 respirator

The California Air Resources Board (CARB) maintains a list of certified air-cleaning

devices, continuously updated as devices are approved: <https://ww2.arb.ca.gov/list-carb-certified-air-cleaning-devices>.

For local tips on reducing wood smoke pollution, visit the [Spare the Air Wood Smoke Pollution page](#).

Finally, the [California Smoke Blog](#) has a wealth of information. It is a voluntary effort by city, county, state, tribal, and federal agencies to coordinate and aggregate information for California communities affected by wildfire smoke.

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## Cool Pavement in the Sacramento Region



The Sac Metro Air District continues its work supporting the [Capital Region Urban Heat Island Mitigation Project](#). Staff regularly reviews projects for heat-island impacts and recommends cool-pavement and cool-roof strategies in new development proposals. Highlighted below are two local projects, Elk Grove Old Town Plaza Renovation (recently completed) and the Fair Oaks Water District Corporation Yard Renovation (being planned). Both projects have design features to reduce local and regional Urban Heat Island Effect impacts.

### [City of Elk Grove Old Town Plaza Renovations](#)

The City of Elk Grove has several projects in design and construction within [Old Town Elk Grove](#). The project(s) will include street and sidewalk improvements, and other enhancements to improve access for people walking, bicycling, and improving transit. The project included the renovation of two parking lots. As a model project, the City applied a [Coolseal®](#) water-based asphalt emulsion sealcoat designed to achieve lower surface temperatures with its lighter color and reflectivity. The City has plans to monitor the efficacy of the project by taking temperature readings of the parking lot with the cool pavement treatment and a similar parking lot nearby with standard asphalt. The Sacramento Bee recently featured an [article](#) on the project.

*Thanks to Carrie Whitlock with the City of Elk Grove's City Manager's Office for providing photos and background information on this project.*



*Initial photo above of the parking lot in Elk Grove Old Town (lower right corner) prior to application of cool pavement treatment.*





*Photo of the parking lot featuring the cool pavement treatment.*

### **Fair Oaks Water District Corporation Yard Renovation:**

The [Fair Oaks Water District](#) is seeking [planning approval](#) from the County of Sacramento for a significant renovation to the District's existing Corporation Yard. The proposed project includes cool roofs, cool pavement, and shaded parking areas for the District's maintenance vehicles and other equipment. The project will also feature low-water landscaping and bio-swales to assist with stormwater retention.



*Rendering of shaded parking areas being proposed by the Fair Oaks Water District Corporation Yard Renovation project.*

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## **Newsletter Pause for 2021**

The Sac Metro Air District will be discontinuing the publication of this newsletter for the remainder of 2021. If you have any questions about current activities within the CEQA and Land Use section, please direct your inquiry to the Project Review Inbox (email link provided below), which is monitored by the CEQA and Land Use section staff.

[Project Review Inbox](#)

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## **New Arrival at the Sac Metro Air District**

## Oliverio Baragan



Oliverio Barragan has been appointed as an Air Quality Engineer in the Transportation and Climate Change Division. He will be assisting in the facilitation of incentive programs to reduce emissions from on-road and off-road mobile sources.

Oliverio's journey at the Sac Metro Air District started six years ago when he interned in the CEQA and Land Use section as part of Cristo Rey High School's work-study program. His time at the Sac Metro Air District opened his eyes to the world of environmental justice, engineering, and public health.

With the support and mentorship of people from the Sac Metro Air District, Oliverio became motivated to pursue a career in engineering. Consequently, in 2019, he graduated with a degree in Civil and Environmental Engineering from UC Berkeley with an emphasis on structural and environmental engineering. Soon after, he moved back to Sacramento and received his EIT certification.

Oliverio began his professional career at a truss manufacturing company, where he helped design, review, and optimize roof and floor trusses. He jumped at the opportunity when he heard about an open position at the Sac Metro Air District and readily applied.

Oliverio will resume his journey at the Sac Metro District with hopes to give back to his community and help out overburdened and underrepresented communities that are being exposed to toxic air contaminants. He is excited to help develop and implement plans and programs to serve our communities better and learn as much as possible along the way.

Aside from his professional endeavors, Oliverio enjoys taking long walks and jogs around the Sacramento downtown area, going to movie theaters regularly, and has a fascination for astronomy and stargazing. He also enjoys tutoring high school students in math and science to promote STEM-related careers in disadvantaged communities. Welcome back to the team, Oliverio!

SACRAMENTO METROPOLITAN



## Check out Spare the Air for Updates on Regional Air Quality



Spare the Air