

May 3, 2021

Via e-mail

Maura Twomey
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Re: GHG Inventory Methodology and VMT

Dear Ms. Twomey:

Thank you for your April 27, 2012 letter responding to LandWatch's concerns about the GHG inventories that AMBAG has provided to local jurisdictions. After discussing your response with Ben Gould, EcoDataLab, who serves as LandWatch's climate consultant, we believe that the AMBAG GHG inventories are legally and technically inadequate for developing climate action plans because they are "in-boundary" estimates that include only the emissions generated by vehicles traveling on local streets within the jurisdiction. As such, the inventories fail to account for emissions that are generated outside the jurisdiction's boundaries as a result of activities undertaken, supported, or permitted by that jurisdiction.

We respectfully request that AMBAG use its influence and technical resources to encourage the County of Monterey and the cities in Monterey County to base their climate action plans on accurate data and consistently generated inventories of transportation emissions that include a fair share of the emissions attributable to trip origination or attraction in each jurisdiction. We want to make sure that all transportation emissions are accounted for and that they are allocated to the jurisdictions that can mitigate them. We want also to ensure that climate action plans comply with the California Environmental Quality Act ("CEQA"), as described below. If local governments fail to follow this advice, they risk investing significant public funds in climate action plans that will fail to pass legal muster.

Your letter characterizes the GHG inventories AMBAG has prepared for individual jurisdictions as a "no cost . . . tool to start the conversation about GHG emissions," a "first look at GHG emissions," and a "starting point for the GHG emissions analysis."

You suggest that jurisdictions “typically update the GHG inventories,” often “making changes in methodologies and data sources, such as using a trip based VMT approach to calculate transportation emissions.” However, at least one city (Gonzales) relied on the AMBAG-provided transportation GHG inventory to prepare its climate action plan without updating that inventory to include transportation emissions outside of its boundaries.¹ We understand that the cities of Salinas and Carmel and Monterey County are now beginning preparation of climate action plans.

Accordingly, we ask that AMBAG advise these local jurisdictions that they should not rely on the “in-boundary” transportation emission estimates provided by AMBAG for their climate action plans for several reasons. First, these “first look” inventories are neither recommended nor adequate for climate action planning because they fail to reflect local jurisdictions’ control over emissions outside their boundaries. Second, reliance on these preliminary inventories will not result in climate action plans that are CEQA-compliant, defeating a principal purpose of these climate action plans. Third, some of these preliminary inventories reflect a steep decline in transportation GHG emissions between 2014 and 2015 that did not actually occur but is merely the result of a change in the Highway Performance Monitoring System’s method to determine roadway lengths.

A. The “in-boundaries” approach to GHG inventories used by AMBAG for local GHG inventories is not recommended by the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions because it fails to account for a local government’s control over transportation emissions outside its boundaries. Protocol-complaint inventories *must* use the recommended origin-destination method if a model is available.

The critical consequence of an “in-boundary” approach to a GHG inventory is that cities using it would have no accountability for, and no incentives to mitigate, transportation GHG emissions generated as a consequence of local government decisions that affect vehicle miles traveled, e.g., land use decisions that affect the jobs/housing balance and decisions about circulation policies. As explained in the U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions (“Protocol”), local governments “have a larger influence over passenger vehicle GHG emissions than any other level of government:”

Local governments have control over several policy areas that can influence individual travel choices and GHG emissions. First, unlike other economic sectors where the point of emission typically occurs on private property, greenhouse gases from passenger vehicles are primarily emitted on publicly owned transportation rights-of-way. State and local governments own, configure, maintain, and set policies that govern the use of these rights-of-way and influence travel behavior. Secondly, local government authority over land use controls the

¹ City of Gonzales, Gonzales Climate Action Plan, August 20, 2018, available at <https://gonzalesca.gov/sites/default/files/2018-11/Adopted%202018%20Gonzales%20CAP%20Update.pdf>.

density, type of activity, and distribution of certain activities within a community. A passenger vehicle trip is one of the transportation modes individuals can use to connect between these activities and local governments can influence the total number and length of passenger vehicle trips. Third, as an extension of their land use authority, local governments have regulatory control over privately provided off-street parking in new developments. This allows local governments to exert considerable influence over vehicle activity, as each passenger vehicle trip segment begins and ends in a parking space.²

The Protocol distinguishes the "in-boundary GHG emission sources" approach (used in the AMBAG GHG inventories) from the "activities resulting in GHG emissions" approach that uses a demand-based origin-destination model.³ Your letter states that the AMBAG GHG inventories "comply with" the Protocol. However, the Protocol states that where multiple accounting methods are provided, the "[r]ecommended accounting methods are indicated and **must be followed whenever possible for an inventory to be considered Protocol-compliant.**"⁴

The Protocol recommends using the activities-based origin-destination method, not the "in-boundary" method used in the inventories provided to local jurisdictions by AMBAG:

The recommended method (TR.1.A) presented in this guidance recognizes that local governments possess the authority to influence GHG emissions from passenger vehicle trips **both inside and outside of a community's geographic boundaries**. This method also recognizes that local governments cannot influence all passenger vehicle GHG emissions within their boundaries. As such, **the recommended origin-destination method (using a demand-based model) better captures a local government's ability to affect passenger vehicle emissions than the alternate method (TR.1.B) to calculate in-boundary emissions**, which ICLEI USA has included in past guidance, including Clean Air and Climate Protection (CACP) Software.⁵

² ICLEI – Local Governments for Sustainability USA, U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions, Version 1.2, July 2019, Appendix D: Transportation and Other Mobile Emission Activities and Sources, July 2013, p. 7, footnote omitted, available at <https://icleiusa.org/us-community-protocol/>.

³ ICLEI – Local Governments for Sustainability USA, U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions, Version 1.2, July 2019, pp. 14-17, available at <https://icleiusa.org/us-community-protocol/>.

⁴ *Id.*, pp. 34-35, emphasis added.

⁵ ICLEI – Local Governments for Sustainability USA, U.S. Community Protocol for Accounting and Reporting of Greenhouse Gas Emissions, Version 1.2, July 2019, Appendix D: Transportation and Other Mobile Emission Activities and Sources, July 2013, p. 8.

The in-boundary method that was “included in past guidance” is no longer recommended.

It is in fact possible for AMBAG to provide, or for local jurisdictions to develop, GHG inventories using the Protocol’s recommended origin-destination method. AMBAG maintains a regional origin-destination travel demand model, makes that model available without charge to local jurisdictions and consultants, and uses it to prepare its own Metropolitan Transportation Plan and Sustainable Communities Strategy. Because it is possible to implement the Protocol’s preferred origin-destination method using this AMBAG model, any inventory that fails to use the preferred method would not be considered Protocol-compliant.

B. The “in-boundary” GHG inventory will not support a CEQA-compliance climate action plan because CEQA does not permit an agency to ignore environmental effects of vehicle trips outside its boundaries that are attributable to an agency’s actions.

A principal reason to prepare a climate action plan is to streamline CEQA review of future projects. In environmental review of future projects, an agency may rely on a formally-adopted, environmentally reviewed climate action plan to “determine that a project’s incremental contribution to a cumulative effect is not cumulatively considerable if the project complies with the requirements” of such a plan. (CEQA Guidelines, § 15183.5(b).) However, that climate action plan must actually assess and mitigate GHG emissions from the specific actions or categories of actions that the agency may wish to permit in the future. And that climate action plan must itself be reviewed under CEQA.

A climate action plan that considers only in-boundary GHG emissions will not pass muster under CEQA because an agency may not ignore an activity’s environmental effects outside the agency’s jurisdiction. In *City of Marina v. Board of Trustees of California State University* (2006) 39 Cal.4th 341, 360 the California Supreme Court specifically held an agency must assess and mitigate the effects of project-caused vehicle trips outside its own jurisdiction:

CEQA requires a public agency to mitigate or avoid its projects’ significant effects not just on the agency’s own property but “*on the environment*” (“[Pub. Resources Code, § 21002.1, subd. \(b\)](#)”, italics added), with “environment” defined for these purposes as “the physical conditions which exist *within the area which will be affected by a proposed project*” (*id.*, § 21060.5, italics added).

Similarly, in *American Canyon Community United for Responsible Growth v. City of American Canyon* (2006) 145 Cal.App.4th 1062, 1082, the Court held that an agency may not ignore the “extraterritorial environmental effects of any project it intends to carry out or approve.” And in *Friends of Oroville v. City of Oroville* (2013) 219 Cal.App.4th 832, 843-844, the Court set aside a GHG impact analysis because the agency failed to determine the project’s incremental transportation emissions, which would have

required determination of baseline “out-of-town trips for the City’s residents” and post-project “round trips to it of up to 40 miles from neighboring communities.”

Because the traffic generated by each local jurisdiction’s activities, permits, and policies will include trips outside that jurisdiction, a CEQA-complaint climate action plan must assess and mitigate extra-territorial emissions from those vehicle trips. AMBAG should caution local agencies not to commit their planning resources to a climate action plan based on an in-boundary transportation emission inventory.

C. HPMS methodology changes.

Finally, we ask that AMBAG clearly warn local agencies not to rely on inventories that embody anomalies in data from the Highway Performance Monitoring System (“HPMS”). As we explained in our April 13 letter, the HPMS methodology changed in 2015. This change resulted in dramatic shifts in some local VMT estimates. For example, in 2014, HPMS estimated Carmel’s daily VMT at 85,400; in 2015, HPMS pegged it at 47,250. Clearly, Carmel’s VMT did not fall by 46% in one year; nevertheless, AMBAG’s own GHG inventory for Carmel says “The transportation sector emissions decreased by 50 percent from 2005 to 2018. During this period there was a decrease in Vehicle Miles Travelled (VMT) on local roads in Carmel.” Virtually all of the change between 2005 and 2018 is attributable to the 2015 methodology change.

We suggested that if AMBAG is going to continue to rely upon HPMS and a local streets approach for GHG inventories, that it scale the HPMS data prior to 2015 to be consistent 2015 levels in order to address the dramatic step change in VMT estimates that occurred. Failing to do so can lead cities to incorrectly evaluate their baseline year and the effects of any policies they may have adopted in the intervening time. For instance, due to this change in how VMT was estimated, Carmel appears to now be 42% below its 2005 baseline, despite the fact that VMT has not, in fact, changed nearly as substantially as reported. This can lead to cities failing to adopt necessary climate action policies and smart land use approaches to reduce VMT.

Your response to this point was to suggest that it is “extremely difficult to disentangle the extent to which any methodological artifact contributes to an observed change in GHG emissions and attempts to correct a perceived issue often leads to the creation of further inconsistencies.” We understand by this that AMBAG may not itself be willing to disentangle the clear error in reported emissions. We ask only that AMBAG not perpetuate the error and that it warn the local agencies of this problem.

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We very much appreciate your willingness to exchange views with us on these issues. We look forward to working with AMBAG and the local jurisdictions in climate action planning and the forthcoming Sustainable Communities Strategy.

Yours sincerely,

M. R. WOLFE & ASSOCIATES, P.C.



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JHF:hs

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