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May 2, 2007

By Telecopy and E-mail

Tanisha Taylor
Transportation Planning and Programming
San Joaquin Council of Governments
555 East Webster Avenue
Stockton, CA 95202

RE: Draft Environmental Impact Report For the 2007 San Joaquin County Regional Transportation Plan

Dear Ms. Taylor:

The Attorney General submits these comments to the San Joaquin Council of Governments ("Council") on the Draft Environmental Impact Report For the 2007 San Joaquin County Regional Transportation Plan ("Regional Plan"). The Attorney General provides these comments pursuant to his independent power and duty to protect the natural resources of the State from pollution, impairment, or destruction in furtherance of the public interest. (See Cal. Const., art. V, § 13; Cal. Gov. Code, §§ 12511, 12600-12; *D'Amico v. Board of Medical Examiners*, 11 Cal.3d 1, 14-15 (1974)). These comments are made on behalf of the Attorney General and not on behalf of any other California agency or office.

Under the California Environmental Quality Act, Public Resources Code § 21000, et seq. ("CEQA"), the Council has an obligation to consider global warming impacts of the Regional Plan in the EIR. The projects and priorities identified in the Regional Plan could result in significant increases in emissions of greenhouse gases that cause global warming, and any increase in such emissions will make it more difficult for the state to achieve the greenhouse gas reductions required by Assembly Bill 32. The final EIR must evaluate the global warming impacts of the projects and priorities adopted in the Regional Plan and discuss feasible alternatives and mitigation measures to avoid or reduce those impacts.

Global Warming in California

The Intergovernmental Panel on Climate Change of the United Nations recently published its finding that overwhelming evidence establishes that global warming is

occurring and is caused by human activity.¹ With respect to impacts in the state, the California Climate Change Center reports that temperatures are expected to rise 4.7 to 10.5°F by the end of the century.² These increases would have serious consequences, including substantial loss of snow-pack, an increase of as much as 55% in the risk of large wildfires, and reductions in the quality and quantity of agricultural products.³ Additionally, the report predicts increased stress on the state's vital resources and natural landscapes.⁴ Global warming will also slow the progress toward attainment of the ozone air quality standard by increasing the number of days that are meteorologically conducive to the formation of ozone.⁵ The draft EIR includes a summary of these impacts, and notes that transportation is responsible for 41% of greenhouse gas ("GHG") emissions in the state. Draft EIR, p. 5-12 to 5-14.

California's Actions to Address Global Warming

On June 1, 2005, Governor Schwarzenegger issued Executive Order S-3-05. The Order recognized California's vulnerability to global warming and the need for implementation of mitigation measures to limit the impacts to the state. This Order set the following GHG emission reduction targets for California: by 2010, reduce GHG emissions to 2000 levels; by 2020, reduce emissions to 1990 levels; by 2050, reduce emissions to 80 percent below 1990 levels.

Assembly Bill 32, the California Global Warming Solutions Act of 2006, codified at Health and Safety Code Section 38500, et seq. ("AB 32"), was signed into law by the Governor on September 27, 2006. The bill demonstrates that the Legislature recognizes the serious threats that global warming poses to California.⁶

To combat these threats, AB 32 requires reduction of the state's GHG emissions to 1990 levels by 2020,⁷ a time well within the 2030 planning horizon of the Regional Plan.

¹ "Climate Change 2007: The Physical Science Basis, Summary For Policymakers" (Fourth Assessment Report of the IPCC, February 2007).

² Amy Lynd Luers, Daniel R. Cayan et. al, *Our Changing Climate: Assessing the Risks to California* (July 2006) at p. 2. The report was prepared by the Climate Change Center at the direction of CalEPA pursuant to its authority under Executive Order S-3-5.

³ *Id.* at pp.2, 10.

⁴ *Ibid.*

⁵ Climate Action Team Report, Executive Summary, p.xii (CalEPA March 2006).

⁶ Health & Safety Code § 38501.

⁷ Health & Safety Code § 38550.

This emissions cap is equal to a 25% reduction from current levels.⁸ The bill directs that by June 30, 2007, the California Air Resources Board ("CARB") shall publish a list of discrete early action GHG emission reduction measures that will be implemented by 2010.⁹ CARB must then adopt comprehensive regulations that will go into effect in 2012 to require the actions necessary to achieve the GHG emissions cap by 2020.¹⁰ The legislation also encourages entities to voluntarily reduce GHG emissions prior to 2012 by offering credits for early voluntary reductions.¹¹

California Environmental Quality Act

CEQA and its implementing Guidelines provide that in any of the following situations, a finding must be made that the project may have a significant effect on the environment:

- (1) A proposed project has the potential to degrade the quality of the environment, curtail the range of the environment, or to achieve short-term, to the disadvantage of long-term, environmental goals.
- (2) The possible effects of a project are individually limited but cumulatively considerable. As used in this paragraph, "cumulatively considerable" means that the incremental effects of an individual project are considerable when viewed in connection with the effects of past projects, the effects of other current projects, and the effects of probable future projects.
- (3) The environmental effects of a project will cause substantial adverse effects on human beings, either directly or indirectly.¹²

As part of the analysis carried out in an EIR, the agency must formulate mitigation measures and examine alternatives to the proposed project. CEQA mandates that public agencies refrain from approving projects with significant environmental effects if there are feasible alternatives or mitigation measures that can substantially lessen or avoid those effects.¹³

⁸ 9/27/2006 Press Release from the Office of the Governor, available at <http://gov.ca.gov/index.php?/print-version/press-release/4111>.

⁹ Health & Safety Code § 38560.5.

¹⁰ Health & Safety Code § 38562.

¹¹ Health & Safety Code §§ 38562(b)(3), 38563.

¹² Public Resources Code § 21083(b); see also Cal.Code Regs., tit. 14 § 15065.

¹³ Public Resources Code § 21081; see also, *Mountain Lion Foundation v. Fish and Game Commission*, 16 Cal.4th 105, 134 (1997).

As the Court of Appeal concluded in *Kings County Farm Bureau v. City of Hanford* (1990) 221 Cal.App.3d 692, 720 [internal quotation omitted]:

"[o]ne of the most important environmental lessons evident from past experience is that environmental damage often occurs incrementally from a variety of small sources. These sources appear insignificant, assuming threatening dimensions only when considered in light of the other sources with which they interact. Perhaps the best example is air pollution, where thousands of relatively small sources of pollution cause a serious environmental health problem. CEQA has responded to this problem of incremental environmental degradation by requiring analysis of cumulative impacts."

The Regional Transportation Plan

The Regional Plan is a long-range regional transportation plan that includes policies and goals to guide transportation decisions and a list of proposed transportation projects needed through 2030. Transportation projects must be contained in, or consistent with, the Regional Plan to qualify for federal or state funding.

Federal law directs that the Regional Plan shall include projects and strategies that will, among other things: "protect and enhance the environment"; "promote energy conservation"; and "improve the quality of life." (23 U.S.C.A. § 134(h)). The Regional Plan also "shall include a discussion of types of potential environmental mitigation activities and potential areas to carry out these activities, including activities that may have the greatest potential to restore and maintain the environmental functions affected by the plan." (23 U.S.C.A. § 134(i)(2)(B)(i)).

The Council predicts that the County's population will increase by approximately 60% by 2030, the time-frame covered by the Regional Plan. Accordingly, a large increase in vehicle miles traveled ("VMT") is also expected (from 17.63 million to 30.86 million VMT per day). The Regional Plan includes new road construction, road widening and other transportation improvements to accommodate these new drivers as well as increased freight traffic. The Regional Plan authorizes expenditure of \$9.9 billion, including approximately \$6.6 billion for mainline highway improvements, interchange projects and regional roadway improvements.¹⁴ Despite the huge extent of these construction projects, the draft EIR does not find that the GHG emissions of the projects could have a significant cumulative impact on global warming, and therefore the draft EIR does not require implementation of feasible mitigation measures to reduce those emissions.

The EIR Must Consider Global Warming Impacts

The Governor's Executive Order and AB 32 inform agencies' obligations under CEQA.

¹⁴This number includes the projects identified as Mainline, Interchanges and Regional Roads in the Regional Plan, at p. 9-6.

The existence of global warming is indisputable; it is causing significant environmental impacts in California and will cause future catastrophic impacts if GHG emissions levels are not substantially reduced; and many incrementally small but cumulatively significant sources of emissions are being approved and permitted every day.

Construction of the \$6.6 billion worth of highway, road and interchange projects authorized in the Regional Plan will result in a significant cumulative contribution to the GHG load from use of off-road construction vehicles, concrete, asphalt, tree removal, and other construction-related activities. Given the huge amount of construction authorized in the Plan, under any reasonable threshold, these GHG emissions must be considered cumulatively significant because of their potential, along with GHG emissions from other construction projects, to prevent the state from achieving the GHG emission reductions required by AB 32. Under CEQA, the Council must use the available information to estimate GHG emissions from construction of the projects authorized in the Regional Plan and must adopt feasible mitigation measures to reduce those emissions.¹⁵ The Council has not quantified the projects' GHG emissions; however, we note that even relatively small emission reductions of 0.1 million metric tons per year (or 100,000 tons) are being pursued by the state to comply with AB 32.¹⁶ Although these reductions are a small fraction of the total GHG reductions required by AB 32, they are important incremental reductions to address the cumulative problem.

In addition to the significant GHG emissions during construction of the projects in the Plan, the EIR must also discuss the significant GHG emissions from the large increase in VMT (from 17.63 million to 30.86 million VMT per day) that is expected during the planning period and consider feasible measures to reduce the GHG emissions from this travel.¹⁷ The draft EIR asserts that the expected increase in VMT results from population and employment growth and is not an impact of the projects in the Regional Plan. Draft EIR, p. 15-7. This determination is not supported by any analysis and the

¹⁵ Emissions from use of off-road vehicles during construction can be evaluated using CARB's OFFROAD Model. www.arb.ca.gov/msei/offroad/offroad.htm

¹⁶ Measures that the state is pursuing that will each reduce emissions by 100,000 tons include: electrification of stationary agricultural engines; alternate chemicals in fire protection systems; transportation refrigeration/electric standby; enforcing the ban on HFC release during service/dismantling of MVACs. ("Proposed Early Actions to Mitigate Climate Change in California" (CARB, April 20, 2007), Table 2, p.7-8).

¹⁷ GHG emissions resulting from the expected increase in VMT can be estimated using various sources, including CARB's "Proposed Methodology to Model Carbon Dioxide Emissions and Estimate Fuel Economy" (2002). www.arb.ca.gov/msei/onroad/downloads/pubs/co2final.pdf and Caltrans' 2006 California Motor Vehicle Stock, Travel and Fuel Forecast (MVSTAFF), www.dot.ca.gov/hq/tsip/otfa/mstab/MVSTAFF.htm

amount of growth that could occur without these projects is unclear. It also ignores the fact that, in large part, the purpose of the projects in the Regional Plan is to provide increased road capacity to accommodate future population and employment growth. If road capacity was not increased, the residential development for the 400,000 predicted new residents would not likely be built, and much of the predicted growth would not likely occur.¹⁸ Moreover, the County has not previously evaluated the global warming impacts of this growth in VMT, and is required to do so under CEQA. The Regional Plan appears to be the first time that the County is committing itself to this level of growth, since it has not yet done so in a General Plan amendment.¹⁹ The first point of commitment to a course of action is the time when CEQA requires analysis of the action's impacts.²⁰ The Council's assertion that the Regional Plan projects are likely to reduce carbon dioxide emissions compared to "no project" neglects both the GHG emissions from increased VMT that will be accommodated by the increased road capacity provided under the Regional Plan as well as the emissions during construction of the \$6.6 billion worth of road improvements discussed above.

The Council's assertion that GHG emissions in San Joaquin County are not "cumulatively considerable" because they contribute only a relatively small percentage to a very large environmental problem has been rejected by the courts.²¹ The draft EIR

¹⁸See *City of Davis v. Coleman* (9th Cir. 1975) 521 F.3d 661, 674, where a proposed highway interchange was portrayed as a mere accessory accommodation to inevitable development, but actually was an indispensable prerequisite to rapid development of the area.

¹⁹The draft EIR does not refer to or incorporate any other planning document or environmental impact report that plans for, or addresses the environmental impacts of, residential development to accommodate the population of 1,069,084 in 2030 that the Regional Plan and draft EIR predict. Draft EIR, p. 4-6. The County's General Plan only covers the time period through 2010. The Regional Plan, however, includes increased road capacity to accommodate the projected population of 1,069,084 in 2030. The draft EIR does not adequately address this issue and does not contain sufficient analysis or data to support its conclusion that the Regional Plan is not growth-inducing. Draft EIR, p.15-15.

²⁰Guidelines § 15352 (CEQA applies to "approval" of a project, which is defined as the decision which commits the agency to a definite course of action); *City of Vernon v. Bd. of Harbor Commissioners* (1998) 63 Cal.App.4th 677, 688.

²¹In *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 119-120, the court indicated that the question is not how the effect of the project compares to the preexisting cumulative effect, but whether any additional amount of effect should be considered significant in the context of the existing cumulative effect. The court also noted that the greater the environmental problem, the lower the significance threshold should be. Accord, *Kings County Farm Bureau v. City*

also asserts that, in the absence of guidelines or state standards setting project level significance thresholds, it would be speculative to determine whether the GHG emissions related to transportation in the county represent a considerable contribution to a significant cumulative impact. This is erroneous because even if there is no established threshold in law or regulation, lead agencies are obligated by CEQA to determine significance. Neither CEQA, nor the regulations, authorize reliance on the lack of an agency-adopted standard as the basis for determining that a project's potential cumulative impact is not significant.²² As discussed above, the requirements of AB 32 create a point of reference for determining significance. Because the state is committed to a 25% decrease in GHG emissions, anything that produces a large increase clearly could be an obstacle to complying with AB 32 and should be considered a potentially significant cumulative impact. By declining to determine that the GHG emissions from the projects could have a cumulatively considerable impact on global warming, the Council has attempted to avoid CEQA's requirement to adopt all feasible alternatives and mitigation measures to reduce the project's global warming impacts. This substantially undercuts "[t]he fundamental purpose of CEQA [which] is to ensure that environmental considerations play a significant role in governmental decision making."²³

To ensure that construction of the projects in the Regional Plan do not conflict with or prevent compliance with AB 32's requirement to reduce GHG emissions to 1990 levels, the Council must estimate the GHG emissions from those projects and adopt feasible measures to avoid or reduce those emissions.²⁴ If the proposed transportation projects are carried out without implementing such measures, it will be more difficult for

of Hanford (1990) 221 Cal.App.3d 692, 718.

²²Even if a project complies with a regulatory plan adopted to address a cumulative environmental problem, this cannot automatically support a finding that the cumulative impact of a project is not significant; an agency must still consider the evidence and circumstances and determine if the possible effects of the project, even with compliance the plan, are still cumulatively considerable. *Communities for a Better Environment v. California Resources Agency* (2002) 103 Cal.App.4th 98, 114-116; Cal.Code Regs., tit. 14 § 15064(h)(2)).

²³*Fullerton Joint Union High School Dist. v. State Bd. of Education* (1982) 32 Cal.3d 779, 797.

²⁴There are several models or calculators that local governments can use to evaluate GHG reductions from various actions. See, Center for Clean Air Policy, Transportation Emissions Guidebook, Emissions Calculator (www.ccap.org/safe/guidebook.php); California Energy Commission, The Energy Yardstick: Using PLACE3S to Create More Sustainable Communities (www.energy.ca.gov/places/); and Clean Air and Climate Protection Software - A Joint Project of STAPPA/ALAPCO, ICLEI and the EPA (www.cacpsoftware.org/).

the state to achieve the required statewide GHG reductions and will place a greater burden on other sources of emissions (and may result in greater cost to achieve the required reductions). Moreover, AB 32 includes a provision to give credit for measures that are taken to reduce GHG emissions before the regulations implementing the statute are adopted (the first implementing regulations will be adopted in June 2007).

The Climate Action Team Report to Governor Schwarzenegger and the Legislature (CalEPA March 2006) identifies some possible strategies for regional transportation planning that could achieve significant GHG emission reductions. (Report at p.57.) The first strategy - Measures to Improve Transportation Energy Efficiency and Smart Land Use and Intelligent Transportation - includes: “[i]ncorporating energy efficiency and climate change emissions reduction measures into the policy framework governing land use and transportation, including framework for developing energy element in state transportation and regional planning documents.” (*Id.* at p.58.) It also includes: “[d]iversifying transportation energy infrastructure and advancing measures to slow the rate of vehicle miles traveled growth and excessive reliance on petroleum.” *Id.*²⁵

The second strategy identified by the Climate Action Team is “Smart Land Use and Intelligent Transportation.” (*Id.* at 57.)²⁶ Smart land use strategies “encourage jobs/housing proximity, promote transit oriented development, and encourage high-density residential/commercial development along transit corridors.” (*Id.*) Intelligent Transportation Systems is “the application of advanced technology systems and management strategies to improve operational efficiency of transportation systems and movement of people, goods and services.” (*Id.*) The California Department of Transportation also issued a Climate Action Plan at Caltrans (December 2006) that identifies and discusses these strategies for reducing GHG emissions in the transportation sector.²⁷

While the Regional Plan includes projects to implement some of these strategies, the EIR should address the potential to reduce GHG emissions by increasing implementation of these and other strategies and, where appropriate, they should be added to the Regional Plan.

The Council, of course, has the opportunity and responsibility to identify the specific alternatives and mitigation measures to reduce GHG emissions in the final EIR and in the Regional Plan, and adapt them to local conditions. We have identified some

²⁵The Report predicts GHG reductions from these strategies of 1.8 million metric tons of CO₂ by 2010 and 9 million metric tons by 2020. (*Id.*)

²⁶The Report predicts GHG reductions from these strategies of 5.5 million metric tons of CO₂ by 2010 and 18 million metric tons by 2020. (*Id.*)

²⁷www.dot.ca.gov/docs/ClimateReport.pdf

possibilities below for the Council's consideration.

The Council, for example, should consider in the EIR whether GHG emissions could be reduced by shifting funding from some mainline highway improvements, interchange projects and/or regional roadway improvements to select Tier II (unfunded) transit projects. The proposed Regional Plan includes total expenditures of \$9.9 billion, but only about \$2.2 billion of this amount is for bus, bicycle and pedestrian projects, with an additional \$667 million allocated for freight and passenger rail projects.²⁸ The need for increased public transit is great, as the average commute length for county residents (in 2004) is 60 miles and 65% of trips in automobiles are by persons driving alone.²⁹ The Regional Plan and draft EIR identify existing demand for several transit projects that are not funded, including an ACE commuter rail/BART direct connection (\$20 million) and ACE commuter rail extension to Sacramento (\$54 million), as well as Intelligent Transportation System projects (\$40 million) (Regional Plan, Tables 6-6 and 6-10). Increased funding for replacement buses could also be considered, to accelerate conversion of the SJRTD fleet to hybrid electric or hydrogen fuel cell buses.

Although the draft EIR considers a "Transit/Alternative Modes Emphasis Alternative" it is cast as an "all or nothing" option (including all Tier I and Tier II transit and rail corridor projects) that seems to foreclose local road improvements needed to address congestion. Draft EIR, p.16-13 to 16-15. The draft EIR recognizes the potential of the "Transit" Alternative to reduce GHG emissions and global warming impacts, but declines to evaluate or attempt to quantify those reductions. Rather, the EIR avoids CEQA's requirement to consider feasible alternatives that would reduce GHG emissions by improperly relying on the position that conclusions about significance of this impact are speculative. Thus, the draft EIR fails to consider an adequate range of realistic alternatives because it does not address an alternative that, rather than funding all Tier II transit and rail projects, only re-allocates funding to transit and rail projects that are important to reducing VMT, and therefore reducing GHG emissions. These are serious deficiencies because "[t]he core of an EIR is the mitigation and alternatives sections" and one of its "major functions" is to ensure that all reasonable alternatives are "thoroughly assessed."³⁰

The EIR should discuss, and the Plan should include, a policy to require mitigation of GHG emissions that result during both project construction and over the life of the

²⁸This estimate includes \$40,514,000 for bicycle and pedestrian projects; 2,164,198,000 for bus; and \$667,406,000 for rail (Regional Plan, p. 9-6).

²⁹Draft EIR, p. 12-5. The Regional Plan also indicates that 77% of the workforce drives to work alone. Regional Plan, p. 3-1.

³⁰*Citizens of Goleta Valley v. Board of Supervisors of Santa Barbara County* (1990) 52 Cal.3d 553, 564-65.

project. This is consistent with the Regional Plan's objective to: "Minimize the environmental impacts of implementing the transportation system." Regional Plan, p. 2-10. This could include a requirement that off-road diesel-powered vehicles and equipment (unless it is new) use retrofit emission control devices, such as diesel oxidation catalysts and diesel particulate filters verified by CARB.³¹ Mitigation measures could also include a requirement to use the most energy-efficient building materials and lighting technology. For example, alternative formulations of cement³² and asphalt,³³ that have substantially lower GHG emissions, should be used if they are available. The U.S. Green Building Council publishes LEED standards that may be used to evaluate building materials. The Governor's Executive Order No. S-20-04 (issued July 27, 2004) requires state construction and renovation projects to obtain LEED Silver or higher certification.³⁴

The EIR should consider the impact on GHG levels from loss of carbon sequestration capacity when trees (including those not part of a sensitive, threatened or endangered habitat) are destroyed during construction of the new road and road widening projects. This seems like a strong candidate to be the subject of mitigation, such as a replanting program designed to replace the lost carbon sequestration capacity.

The EIR should consider, as further examples, potential GHG reductions from other mitigation measures, such as high-occupancy vehicle lanes; transit vouchers; incentives for van pooling and ridesharing; parking fees; education regarding trip linking; other

³¹See, www.arb.ca.gov/diesel/verdev/verdev.htm and www.epa.gov/ispd/pdf/emission_0307.pdf This requirement was applied to construction at LAX and O'Hare International Airports. See, www.oharemodernization.org (Sustainable Design Manual, §8.5) and www.laxmasterplan.org/cb_CBA_Exhibits.cfm. (Section X. F.) These devices also reduce public exposure to a known carcinogen and toxic air contaminant, diesel particulate exhaust. See "Digging Up Trouble: Health Risks of Construction Pollution in California" (Union of Concerned Scientists, November 2006).

³²Cement manufacture ranks ninth among the sources of U.S. GHG emissions. EPA, Inventory of U.S. Greenhouse Gas Emissions and Sinks, 1990-2000 (Washington, D.C., April 2002, ES-4, 1-13 and 1-14). Alternative formulations may be available to reduce GHG emissions. Climate Action Report, p.54.

³³"Warm-mix" asphalt technology that significantly reduces GHG emissions is currently being evaluated and may prove to be a feasible alternative road paving material. See, "Warm-Mix Asphalt (WMA) Potentially Can Provide Important Benefits for Paving Contractors, Reduce Fuel Costs and Diminish Green-House Gases" in Construction Equipment, March 1, 2007 (www.constructionequipment.com/article/CA6421459.html).

³⁴For unavoidable GHG emissions, contribution to a GHG mitigation fund should be considered.

transportation demand management measures; retrofitting traffic lights to use LED technology; planting trees; and adoption of additional funding priorities that target spending toward population and employment centers and withhold infrastructure funding from greenfield development at the urban edge. The website of the organization ICLEI/Local Governments for Sustainability (www.iclei.org) describes many actions taken by state and local governments to reduce GHG emissions that could also be appropriate mitigation measures for this project.³⁵

Global warming presents California with one of its greatest challenges. The Council has the opportunity to begin addressing global warming in a constructive manner while educating the public and decision-makers. We urge the Council to begin meeting the challenge with this Regional Plan and environmental impact report.

Thank you for considering these comments.

Sincerely,

/S/

SANDRA GOLDBERG
Deputy Attorney General

For EDMUND G. BROWN JR.
Attorney General

³⁵This website includes information about actions to address climate change underway in 30 California cities or counties. Several of these jurisdictions have adopted comprehensive plans to reduce GHG emissions, such as the Marin County Greenhouse Gas Reduction Plan (October 2006) and the Climate Action Plan for San Francisco (September 2004).