



May 20, 2008

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California Energy Commission
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Dear Mr. Bartholomy and Mr. Weir:

This letter will serve as the Sacramento Area Council of Governments comments on both the May LUSCAT draft document and the Haagen-Smit summary document. We appreciate the opportunity to comment and, in general, commend the state for producing two excellent documents that provide a solid framework for proceeding forward constructively on the portions of AB 32 implementation that relate to land use and transportation.

We are supportive of voluntary regional targets in the transportation sector that are supported by technical and financial assistance to help the regions succeed. There are many elements of these two documents consistent with this approach, including the support for development of further data and modeling tools, the alignment of state funding priorities to help regions and their local member agencies successfully implement smart growth, land use and carbon reducing transportation investments, and the provisions that encourage various state agencies to coordinate their policy objectives to ensure that the state is a consistent model for carbon reducing behavior.

While the two documents as a whole are strongly positive, we want to focus the majority of our comments on the key issue of whether greenhouse gas reduction targets are best set for the local or the regional scale. Both the LUSCAT draft strategy and the Haagen-Smit action document call for the state to set GHG reduction targets. LUSCAT recommends they be set at the regional scale, in close coordination with local governments. Haagen-Smit does not endorse regional or local targets, and the accompanying papers include a proposal from ARB member Dan Sperling for local targets. Both documents mainly address transportation sector savings, including those caused by changed land use patterns. However, both documents also address other savings, including building sector, water, etc. It is essential that the state be clear about when it is addressing transportation savings versus other sectors, in part because the appropriate scale to achieve the savings may differ. Most of our comments focus on the transportation sector, although some observations about the other sectors are included at the end.

Travel patterns and air emissions are affected by actions at many geographic scales: development projects, neighborhood plans, city and county plans, regional plans, and interactions between regional plans. Optimizing actions to reduce carbon emissions

from vehicles will require good choices at all of these scales. What is the right goal for each scale? Where would you start: at the regional level, at the parcel level, or somewhere in between?

There are good reasons why federal law for several decades has required that regional transportation plans be prepared as a condition of receiving federal transportation funds, and that compliance with the Federal Clean Air Act requirements for transportation sector emissions also be established at the regional scale. Economies, including job and housing markets, primarily function at a regional scale. So, too, does the transportation behavior that makes economic and social life possible, with commute and non-commute trips crossing city and county boundaries multiple times a day. The tailpipe emissions that result do not stay within jurisdictional boundaries, but largely accumulate within the physical confines of a much larger air shed.

The type and amount of travel and emissions that occur within a city or county often are strongly affected by the land use patterns and transportation networks of their neighboring jurisdictions. Here are a few simple examples:

- the commute patterns in a city with a big jobs center are affected by whether its neighbors also have an abundance of jobs, housing, or a blend of each;
- the amount of traffic on a four-lane arterial running through an unincorporated area is affected greatly by whether it continues as a four-lane arterial, widens to a six-lane arterial, or narrows to a two-lane collector when it enters the cities on each end;
- the ability of a suburban bedroom community to redress its jobs-housing imbalance (and long-distance commuters) is directly affected by the economic development and land use plans of its neighbors;
- the ability of a city at or near the end of a possible light rail extension line to secure future Light Rail Transit (LRT) service is affected not only by its own willingness to promote transit oriented development, but the willingness of its intermediate neighbors to do the same;
- the economics of an inner city's ability to implement a mixed use, densification policy along a key transportation corridor are affected by how much road capacity along the corridor is used up by long-distance commuters from neighboring jurisdictions. Without cooperation from its neighbors the inner city can not achieve its goal of increased development in these corridors.

The examples are endless. In fact, it would be much easier to make a list of the few examples of travel behavior within a jurisdiction that are not affected by its neighbors. The reality of the regional nature of travel and economic systems precludes the ability of cities and counties to effectively respond to locally set targets.

For decades, regional planning agencies (Metropolitan Planning Agencies – MPOs) have been criticized for not being sufficiently pro-active in recognizing these regional realities in the implementation of their Regional Transportation Plans (RTPs). The claim in the Sacramento region, for instance, was that the RTP was no more than a series of local plans stapled together with a cover on top that labeled it a regional plan. Over the last several years, as congestion, sprawl and air quality have worsened in many areas of the country, MPOs have grown more pro-active in their approach to regional planning. Many have conducted scenario planning exercises. In California, the scenario based plans are known as Blueprints. They are actively encouraged and funded by Caltrans. The Federal Highway Administration and U.S. Environmental

Planning Agency also actively encourage MPOs throughout the country to do regional scenario planning. These regional plans seek first to optimize the travel, air and land use outcome by directly analyzing and addressing the integrated regional nature of these issues: and then translating many of those findings to the city/county, neighborhood and project level for implementation. For the first time in a half-century, some of these plans are showing the possibility of a future that controls the rise in vehicle miles traveled and carbon emissions and reduces urban sprawl. While many of these plans are still in the early stages, they do show a way to a better future if successfully implemented. On the contrary, there are no examples, at least in this country, of projected regional scale savings in VMT and carbon that are derived from a series of local plans stacked end to end.

Establishing transportation sector GHG per household reduction targets for individual cities and counties would, in fact, work against the success of Blueprint plans.

Some examples from the transportation sector illustrate this point.

- Investment in a new light rail line, like the proposed route from downtown Sacramento to the airport, will require hundreds of millions of dollars. The line will reside completely within the city of Sacramento, carry several thousand riders a day, and reduce per capita emissions within the city. In SACOG's RTP, this investment is seen by the 22 cities and six counties as producing a regional benefit. The region's Blueprint calls for the city of Sacramento to build a large portion of the region's higher density development, and this light rail line helps to keep many of the additional trips generated by that development on transit instead of on the roads. In a regional context, the 31-member SACOG Board voted unanimously for an RTP that includes this investment. However, if each city and county were responsible for its own per capita carbon emission target or standard, the city of Sacramento, only one of 28 political jurisdictions in the region, would get to count the carbon benefit, while the entire region would be asked to pay for the infrastructure. The odds of that investment being included in the RTP would be significantly reduced.
- The major transit systems in a metropolitan area are almost always regional in scope. The rail and bus lines of these systems cross city and county boundaries, each drawing its board of directors from multiple jurisdictions. Imagine the complexity and turmoil that would be created by suddenly creating an incentive structure in which each transit board member is motivated to vote on each element of the system depending on whether it creates direct carbon benefits for their jurisdiction, as opposed to voting to optimize system wide carbon benefits.
- One of the key road strategies in SACOG's new RTP is to complete an arterial grid system in the region to put fewer medium distance car trips onto the freeway system and local roads. The outcome is shorter trip distances and improved traffic flow, both of which produce carbon benefits. Imagine a situation in which a city sits in between two other cities. In the middle city, a two-lane road connects on either side to a four-lane arterial. The RTP calls for the middle city to expand its road to four lanes to relieve a bottleneck that encourages cars to head for the nearest freeway on-ramp or through the local street system. If carbon emissions per capita are measured within cities, the middle city they will perceive the road improvement as a burden while their neighbors count the benefits, and an effective option to reduce carbon emissions is taken off the planning table.
- Consider the case of a bridge that connects two cities over a river in the interior of a region. Abundant housing development on one side of the river could provide short commutes to a major jobs center on the other side. Which city would get to count the carbon benefits resulting from the

new bridge? If the carbon accounting system doesn't incentivize both cities to build the bridge, the infill development this critical infrastructure enables could be discouraged. Most likely the houses would end up going to farther out suburbs, increasing the overall regional commute distance.

Many transportation system management and demand reduction strategies also only function well at a regional scale. Securing regional funding and political commitment for these programs would be threatened by a system based on local targets. Some of these strategies include:

- Congestion pricing and parking pricing strategies;
- Intelligent Transportation Systems (ITS); and
- Travel Demand Management initiatives designed to help people find travel alternatives to driving alone can be much more effective by pooling resources at a regional rather than local level. This is particularly true because there is a diminishing marginal cost as more educational and marketing materials are produced.
- Transportation Demand Management (TDM) investments such as carpool promotion programs that often link residents in one jurisdiction with employment destinations in other jurisdictions.

Some challenges that would be created in the land use sector further demonstrate the problems posed by local targets.

- A small city 30 miles from the urban core of a region averages 60 miles of VMT/household/day. Let's say it has a goal of a 10% VMT per household reduction, or 54 miles of VMT/household. It is likely that the only way for it to achieve that goal is to grow—a lot—so that there is enough new compact, mixed-use smart growth to measurably change the average VMT/household from the existing low density pattern. However, many options for new housing development closer to urban centers throughout the region are known, from the Regional Blueprint Plan, to offer an average of 30 miles of VMT/household. If targets are set at the local level, the incentive will be for suboptimal, sprawling development.
- An inner ring suburban city is one of the three major employment centers in a region. It is largely built-out, but following Blueprint principles it has updated its General Plan to include an infill and revitalization strategy that will add medium to high density housing in its downtown and transportation corridors over time, thereby providing more housing to balance with the excess of employment. But it can't add enough housing within its own legal boundary to create a significant reduction in per household carbon emissions. The Blueprint calls for significant amounts of medium density housing to be added in the county, which has a large amount of vacant land right next to the city's jobs center. How does the inner ring suburb create enough growth to drive down per capita carbon emissions, short of creating an annexation controversy with the county?
- Goods movement is a fast increasing source of carbon emissions. The smallest scales for goods movement networks are inter- and intra-regional, certainly not local, and often national and international. Recent goods movement studies in regions throughout the state illustrate that some locations for freight facilities such as distribution centers and inter-modal facilities are optimum than others to optimize regional congestion and emission impacts. But optimizing the regional benefits means that localized impacts are inequitably distributed. Localized greenhouse gas benefits would provide little if any incentive for a local government to construct freight facilities that benefit their regional neighbors.

- Federal RTP and Clean Air Act regulations require the regional planning agency to adopt a growth forecast for at least a 20-year planning horizon, and to allocate the projected growth in jobs and housing to its member cities and counties based on the development pattern that is most likely to occur. This helps to ensure that there is no game playing (i.e., creating nice smart growth maps that travel and air emissions models project will lower emissions, but which in fact have little likelihood of ever being implemented). If per capita GHG reduction targets are assigned to each city and county, how would the MPO ensure that the sum of the city and county growth totals equal the MPOs mandated regional forecast; or that all of its member cities and counties have each created a General Plan map that, is realistic by Federal standards and likely to be implemented?

These examples are neither hypothetical nor atypical. In fact, they are exactly typical of the hundreds of decisions that must be made by regional planning agencies in order to produce a regional transportation plan. Local targets lack the ability to incentivize regional cooperation and will likely undo progress that has been made with recent efforts to bring jurisdictions together in pursuit of regional mobility, quality of life, and environmental goals. Anything new, regulations or incentives, that would re-balkanize the planning and decision-making process, is a step backward. There would be significantly less flexibility in targeting projects with considerable reduction benefits that span multiple jurisdictions. Large capital investments in transit and operational improvements that promise significant carbon reductions, but cross multiple jurisdictions would become more difficult to fund. Unless very significant levels of funding were provided by the state or federal government, it is unlikely that local jurisdictions would be able to fund large capital projects on their own.

The current system of working these issues out through the regional agencies is not perfect, but it is an established system that operates under federal rules and to which all parties are accustomed. It can be built on and improved incrementally with each RTP cycle, such as the addition and continued evolution of Blueprint Planning. Creating a new, parallel system for VMT and other regionally sensitive GHG emissions would, at best, be cumbersome and confusing. It most likely would be counterproductive to good planning. And at its worst it will create a situation in which cities and counties, in order to meet their state GHG reduction targets, will make decisions that preclude the regional agency from meeting federal clean air act requirements for reducing other pollutants. In this event, federal highway funds, the single largest source of outside funding for greenhouse gas efficient development reductions, falls into jeopardy.

To be sure, accountability measures and incentives are needed to ensure that these regional plans are effectively implemented at the local level. Much of the accountability already exists. For transportation investments, the accountability system for the criteria pollutants is pretty direct: all projects receiving federal or state funds or that create a significant air quality impact, are required to be included in the MTP in order to be constructed. For land use, here are some suggested metrics to track whether the local governments are making land use decisions that create GHG impacts consistent with regionally set targets.

- After an RTP is adopted that meets its GHG reduction target, the MPO can calculate and allocate carbon emissions/household to be attained by 2020 (and perhaps 2050) for every jurisdiction in the region. Each allocation will be responsive to the unique role the city or county plays in helping the region to meet its target. Some will show flat carbon emissions/household, some will show minor reductions, others will show significant reductions, and still others may show per capita increases.

But, the point is, individual city and county performance will be designed to enhance its contribution to the lowest feasible regional carbon emission level.

- As a city or county makes land use decisions (everything from a General Plan update to a new community plan or an individual development action) the relationship of those actions can be compared to the likely land use development for that local government in the adopted RTP. Land use, transportation and air emissions modeling can determine whether the local action increases or decreases carbon emissions/household compared to the RTP. This information can be calculated during the land use approval processes to assist local governments in making carbon-conforming land use choices, and it can be summarized for each jurisdiction every four years as the RTP is updated and, presumably, again tested against its GHG target.

In addition to the end result (GHG emissions) a variety of other useful descriptive land use metrics can be prepared for each jurisdiction to compare actual performance to projected performance in the RTP, including: range and density of housing products, jobs-housing balance, and overall growth rate.

Again, this approach does not guarantee perfection. All of the tough policy decisions about carrots versus sticks, rewarding good performers with a leg up in the competition for transportation funding or punishing poor performers by making them ineligible for funding, making the targets voluntary under all circumstances or at some time and in some ways mandatory, remain. But it is so much easier and better to address these difficult issues by building on an existing system that is showing promise of working, than starting over. Logistics alone make state-created targets for several hundred local governments in the state unworkable. The choice would be either to use a fatally flawed one-size-fits-all approach or enter into an effort to calculate individualized targets for each and every city and county, somehow accounting for the numerous inter-jurisdictional carbon emission issues.

On the other hand, a relatively small number of regional agencies represent the large majority of the population of the state. The state should derive some assurance from the prospect that it can work with these agencies to craft credible methods to set four regional targets, and then direct each agency to work to integrate carbon reduction into established relationships and procedures with their member cities and counties. This is the only approach that has promise of delivering real GHG reductions in the transportation and land use sector in time to attain AB 32 carbon reduction goals.

Finally, some thoughts on regional targets for sectors other than transportation. There are a number of carbon reduction co-benefits that often come with regional Blueprints and RTPs, including:

- A higher percentage of attached housing, which takes less heating and cooling energy per square foot than detached housing.
- Smaller yards and less water demand, which saves treatment and pumping energy.
- Shorter infrastructure runs, which saves pumping energy for water and sewer, and uses less embedded energy for roads and pipes.
- More grazing, farm and forest land preservation (over 350 square miles in the SACOG Blueprint alone), which often brings carbon sequestration benefits.
- Mixed-use, higher density developments that flatten peak load demand allowing energy to be served more efficiently and making renewable generation technologies more cost effective.

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The state should be clear about whether the regional targets for transportation and land use address these co-benefits in the calculations or not.

Regional agencies do not, however, typically provide building code, fleet management, water or wastewater treatment plant operations services, or energy generation technology assistance to their member cities and counties. There is nothing to say that they couldn't if their local members asked them to, but it is not common today. So GHG savings from sectors other than transportation should probably be handled, at least primarily, in some other fashion than through the regional planning agencies. Perhaps an option for those local governments that wish to work through their regional agencies to deliver some or all of these other GHG reduction benefits should be included.

Sincerely,

A handwritten signature in black ink, appearing to read "Mike McKeever". The signature is fluid and cursive, with the first name "Mike" being more prominent than the last name "McKeever".

Mike McKeever
Executive Director

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