

July 13, 2009

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County of Sacramento
827 7th Street, Room 220
Sacramento, CA 95814

**SUBJECT: Draft Environmental Impact Report for the
Sacramento County General Plan Update
Control#: 02-GPB- 0105
SMAQMD#: SAC200701173**

Dear Ms. Horizumi:

Thank you for providing the Sacramento Metropolitan Air Quality Management District (District) the opportunity to review Draft Environmental Impact Report (DEIR) for the Sacramento County General Plan Update (GPU). Our comments concern the analyses of the Air Quality, Land Use and Circulation Elements, as well as the Climate Change analysis. Our comments on the Land Use Element analysis suggest urban expansion phasing mitigation measures which can help mitigate impacts for increased automobile vehicle miles traveled (VMT), and associated pollutants, resulting from urban expansion. Our comments on the climate change analysis suggest mitigation measures for the GPU's climate change impacts. Finally, our comments on the Circulation Element analysis address the impacts of roadway widening, and suggest revisions to strengthen the Smart Growth Streets policy document

Air Quality Element Analysis

The Air Quality Element analysis evaluates multiple different land development alternatives for air quality significance in the general areas of impacts to sensitive receptors; construction impacts; naturally occurring asbestos; operational stationary, area and off-road impacts and on-road mobile source emissions impacts. All alternatives evaluated were found significant and unavoidable for on-road mobile source emissions impacts. This finding is inevitable given the scope of the project. Pursuant to our review of the draft analysis in March 2009, this analysis is adequate.

Toxic Air Contaminants

Toxic air contaminants are air pollutants that may cause or contribute to an increase in mortality or in serious illness, or which may pose a present or potential hazard to human health. The DEIR Air Quality Element addresses the effects of these pollutants on sensitive receptors. Sensitive receptors are segments of the population most susceptible to poor air quality such as children, the elderly, and those with compromised immune systems. Land uses where sensitive receptors are most likely to spend time include residential communities, schools and school yards, day care centers, parks and playgrounds, hospitals and medical facilities.

The District commends the County for following the District's board endorsed Recommended Protocol for Evaluating the Location of Sensitive Land Uses Adjacent to Major Roadways (Roadway Protocol) in assessing the potential cancer risk for its most heavily trafficked roadways. The District also commends the County for including our recommended roadway toxics mitigation measures in the DEIR, which include plantings of finely needled vegetation. The County's use of the Roadway Protocol supports our efforts in urging local jurisdictions to consider the risk associated with siting sensitive land uses adjacent to freeways and major roadways, and to mitigate those risks.

SMAQMD recommends the following edits to the Air Quality Element's discussion of toxic air contaminants:

1. Page 51 cites an incorrect link to the District's webpage for the Roadway Protocol. The correct link is <http://www.airquality.org/ceqa/RoadwayProtocol.shtml>.
2. Page 89 contains the statement that roadways with ADT less than 100,000 (urban) and 50,000 (rural) will not result in elevated health risks due to toxic risk impacts. This is not true and we therefore recommend removing this statement from the DEIR.
3. Page 92, first paragraph, first sentence: the District suggests changing "sensitive land uses" to "sensitive receptors".
4. The Roseville Rail Yard cancer risk isopleths maps shown beginning on page 94 are difficult, if not impossible, to read. The District suggests that the County's GIS department create maps that are easily readable in order to better inform the public of the health risks associated with living in the affected area surrounding the Roseville Rail Yard.

SUGGESTED ACTION: The District recommends the revisions enumerated above to the Air Quality Element discussion of toxic air contaminants.

Finally, the Air Quality Section uses the District's 2004 Guide to Air Quality Assessment in Sacramento County to assess air quality impacts. Please note that the District is in the process of updating its CEQA guidance and some of the recommendations contained therein. Examples include Enhanced Fugitive PM Dust Control Practices, and Basic Construction Emission Control Practices. While the updates to our CEQA Guide are still in draft form, the County may wish to use it for assessing the DEIR's air quality impacts or cite it for use with subsequent projects. The CEQA guide updates can be found on our website at <http://www.airquality.org/ceqa/ceqaguideupdate.shtml>.

Land Use Element Analysis

The Land Use Element analysis should fully address the GPU's consistency with the Sacramento Region Blueprint Preferred Scenario, the Metropolitan Transportation Plan 2035 (MTP) and the 2009 Sacramento Metropolitan Area 8-hour Ozone Attainment Plan (State Implementation Plan or SIP). The Land Use Element must be consistent with the MTP, in order to support the District's SIP. The land use and transportation assumptions adopted in the current MTP are the land use and transportation foundations for the region's recently adopted SIP. The SIP is required by the Federal Clean Air Act, and demonstrates how the Sacramento region will meet National Ambient Air Quality Standards (NAAQS). The Sacramento region does not currently meet these standards

and must comply with its SIP to avoid Federal penalties, as well as to protect public health and the environment.

The GPU's housing capacity is not fully consistent with the MTP housing capacity assumption; and therefore, it is not fully consistent with the SIP. The GPU provides for a total housing capacity in the unincorporated County of between 100,000 and 145,000 units by 2030. The MTP capacity assumption is 88,000 units of housing in the unincorporated County by 2035. The GPU provides for more housing capacity than the MTP / SIP baseline assumption. The GPU growth capacity therefore allows for more VMT and associated air quality impacts in the unincorporated County than assumed in the MTP or the SIP – unless these are mitigated in some manner such as phasing development over time.

Land Use Element Densities

The District supports higher housing densities for the Jackson Highway Corridor and Grant Line East New Growth Areas than allowed for in the GPU. The GPU allows for the urbanization of 20,000 acres of land by 2030 in these areas, with assumed housing densities averaging between 5 and 10 dwelling units per net acre. These assumed densities roughly bracket the difference between the regional housing densities for new growth in the Blueprint Base Case Scenario and the Blueprint Preferred Scenario (which represents the adopted SIP land use assumptions).

The District supports average housing densities of *at least* 7 to 10 dwelling units per net acre in the new growth areas. Low density development is not supportive of efficient transit service or pedestrian or bicycle transportation. More compact development has a demonstrated potential to reduce VMT by 20 to 40 percent, relative to low density development¹. This tremendous reduction of VMT results in a commensurate reduction in motor vehicle emissions, and many other significant environmental co-benefits. Housing densities of at least 7 to 10 dwelling units per net acre are easily achievable and can substantially reduce air quality impacts associated with urban expansion.

Providing the housing densities needed to reduce VMT and support transit, pedestrian and bicycle transportation would easily accommodate a holding capacity that is consistent with the SIP, without requiring the urbanization of 20,000 acres of land. A housing capacity that is consistent with the SIP would be most efficiently accommodated using housing densities of at least 7 to 10 dwelling units per net acre.

Expansion Phasing Mitigation Measures

We have demonstrated that the GPU housing capacity is not fully consistent with the MTP, and therefore the SIP. We recommend two urban expansion phasing measures to mitigate for resulting air quality impacts. One measure revises a phasing measure already in the Land Use Element, and the other uses a transportation-related performance factor (see District correspondence to the County on the Notice of Preparation for the DEIR, dated September 5, 2007.) These measures provide for sequential, orderly growth contingent on sufficient development of existing urban areas; and they can help mitigate impacts associated with the GPU's expanded housing capacity and lowered densities.

We recommend that both of these measures be adopted as policies in the GPU Land Use Element. The measures must be used in concert to provide adequate phasing for new growth areas and all

¹ Ewing, Reid, Keith Bartholomew, Steve Winkelman, Jerry Walters and Don Chen. Growing Cooler: The Evidence on Urban Development and Climate Change. (Washington, D.C.: Urban Land Institute, 2008.)

areas within the existing Urban Policy Area. Further, we commend Mitigation Measure LU-2 in the Land Use Element analysis, to strengthen criteria for accepting applications to amend the General Plan Land Use Diagram for areas outside of the Urban Policy Area. Our recommended mitigation measures are as follows:

1. The County shall prepare and implement a phasing plan for urban development that requires that an established VMT performance factor be met prior to phased development into new growth areas. New development must demonstrate consistency with this factor prior to approval. This performance factor shall use an average VMT per person or per household threshold that is consistent with the VMT averages assumed in creating the 2009 Sacramento Metropolitan Area 8-hour Ozone Attainment Plan, and other applicable regulatory documents.
2. Revise Mitigation Measure LU-1 as follows: An urban development phasing plan shall be included in any Specific Plan or other type of master planning proposal for unincorporated Sacramento County. The phases shall be defined by a specific geographic area. Phases slated for earliest urban development shall be located adjacent to existing urban areas that are developed to at least 75% of holding capacity. Phases slated for subsequent later urban development shall be located successively further outward. Each phase shall represent a geographic area that will accommodate no more than 10 years of growth, based on the latest SACOG projections. Development within the phases shall occur sequentially; and residential or commercial development in each subsequent phase shall be prohibited until the prior phase is developed to at least 75% of holding capacity.

These measures can help mitigate impacts associated with the GPU's expanded housing capacity and lowered densities. The first measure requires a VMT performance factor which over time would reduce the VMT per person or per household for unincorporated Sacramento County. Additionally, it addresses the District's concerns regarding consistency with the SIP, by requiring a threshold that is consistent with the SIP. The second measure requires that new development be phased successively outward from existing urban areas; so growth is provided as needed, thereby limiting excessive growth associated with an expanded housing capacity. Additionally, by requiring that existing urban areas be sufficiently developed prior to new growth, it limits the potential for excessively low densities. In concert, these measures provide for sequential, orderly development of both new growth and existing urban areas.

SUGGESTED ACTION: The District recommends the above enumerated measures be adopted as policies in the GPU Land Use Element.

Climate Change

Chapter 12 of the DEIR is devoted to the topic of climate change, including a discussion of the impacts to the project from climate change and the impacts of the project on climate change. Both sets of impacts are determined to be significant and unavoidable and two mitigation measures are included as "all feasible measures." The chapter also presents greenhouse gas (GHG) thresholds of significance for new land use development and discusses Phase One of a Climate Action Plan. The County is to be commended for taking these proactive steps to discuss issues which are evolving on all fronts- regulatory, legislative, legal, and technical. The act of quantitatively determining a GHG threshold of significance is a bold one and the County has taken an interesting approach in its methodology. The District offers the following comments on this chapter and on The Climate Action Plan, Phase One.

Relative to the impact of the General Plan "project" on climate change, the document states the unincorporated County's GHG emissions in 2005 were 6.5 MMT CO₂E/year. Using that figure, the author(s) of the DEIR derive the County's 1990 emissions to be 5.5 MMT CO₂E/yr. The goal of AB32 is to reduce the state's emissions down to 1990 levels by 2020. However, according to the DEIR, by the 2030 build-out of the General Plan, the County's GHG emissions are projected to grow to between 56%- 58% above the 1990 levels, to 12.3 MMT CO₂E to 13.2 MMT CO₂E, depending on which alternative is chosen. Because of this increase, the document determines the impact of the project on climate change is significant.

The document states that future implementation of the state strategies outlined in ARB's Scoping Plan will reduce emissions by an unknown amount. The document also references federal activities which will have an effect as well. Given these unknowns, the County defers to a 15% reduction target which is discussed in the ARB Scoping Plan.² The District recommends an expansion of this section by a few sentences in order to clearly state the County's percentage reduction target. We realize GHG reduction target setting is a new issue and various lead agencies have taken differing approaches. Some lead agencies actually attempt to calculate the reductions which may be achieved by the state regulations and do a "gap analysis" on the reductions which remain, presumably the responsibility of the jurisdiction. The DEIR should clearly state the County's reduction target and explain the rationale for the choice, the fact the County is relying on the Scoping Plan's discussion.

In addition, the County's greenhouse gas reduction target should be one which has the ability to adjust after 2020 to accommodate an escalation in reductions required of the state after 2020. According to the Governor's Executive Order S-3-05, GHG emissions will need to be reduced by 80% by 2050. We understand this Executive Order does not apply to local jurisdictions, however, it previews what may come in the future. Since the General Plan Update covers the years 2005-2030, the GHG reduction target should reflect the fact the target may have to become more aggressive after 2020.

SUGGESTED ACTION: The District realizes the County may adopt a General Plan policy to "reduce greenhouse gas emissions to 1990 levels by 2020." The District recommends the DEIR and perhaps the General Plan itself clearly state the County's GHG reduction target (15%) as well. Any discussion of the reduction target should discuss the fact it may have to be adjusted after 2020.

GHG Mitigation Measures

As mitigation for the significant GHG impact on climate change, the document presents two mitigation measures, CC1 and CC2. The first measure basically states:

CC1 *The following policy will be added to the General Plan: It is "the goal of the County to reduce greenhouse gas emissions to 1990 levels by the year 2020. This shall be achieved through a mix of State and local action."*

With this mitigation measure, the DEIR suggests the addition of an important policy to The County's General Plan. The District supports the inclusion of this policy, which will be one of the few statements about climate change in the whole County's General Plan.

² ARB, "Climate Change: Proposed Scoping Plan", October 2008, pg. 27

This yet-to-be policy reiterates state law: the County will have to comply with the goal to reduce emissions outlined in AB32. The measure states compliance with the policy is the responsibility of both the County and the state. Because of the comingling of governmental entities, there is little "teeth" in this statement. Every government entity needs to be involved in the goal to reduce GHG. The County may not have influence on emission standards for cars, but it will have a great deal of influence on local land use planning.

If the County were to actually adopt a specific reduction target for which it was responsible as a mitigation measure or implementation strategy, there would be more "teeth." As it is currently, there is little County commitment inherent in this proposed policy.

The Draft General Plan itself currently contains only one mention of climate change/GHG. It is in The Air Quality Element. Policy **AQ-22**³ reads: *Reduce greenhouse gas emissions from County operations as well as private development.* This measure should be augmented with a specific reduction goal and reference to AB32. The General Plan also should have a policy related to the County's commitment to adapt to climate change's effects.

The California Air Pollution Control Officers Association (CAPCOA) has just published a set of model policies on greenhouse gases for local governments' General Plans entitled Model Policies for Greenhouse Gases. It is available at www.capcoa.org. It contains sample goals, objectives and sample policies divided up by possible General Plan Elements that could be easily inserted into General Plans. We recommend the County review this document and include applicable policies into the GPU. For example the following policies would add the needed strength to policy in the Air Quality Element of the General Plan:

Reduction Policies

- *The County will establish a Municipal Climate Action Plan which will include measures to reduce GHG emissions from municipal activities by at least 30% by 2020 compared to the "business as usual" municipal emissions (including any reductions required by ARB under AB32.)*
- *The County will, in collaboration with the stakeholders from the community at large, establish a Community Climate Action Plan (CCAP), which will include measures to reduce GHG from community, municipal and business activities by at least 30% by 2020, compared to "business as usual."*⁴

Adaptation Policy

- *Determine Sacramento County specific climate change effects: Participate in research that examines the effects of climate change on human and natural systems in Sacramento County.*

SUGGESTED ACTION: *The District recommends that policies such as Policy AQ-22 in the General Plan Air Quality Element contain reference to AB32, target reductions, and commitments to action regarding adaptation to climate change.*

³ Sacramento County General Plan of 2005-2030, Air Quality Element, pg. 6.

⁴ Model Policies for GHGs in General Plans, CAPCOA, June 2009, pg 71

The second mitigation measure offered by the DEIR, **CC-2**, described as an implementation measure to the "policy required by CC1" and says the County shall include three things as implementation measures:

- A. *The adoption of Phase One of a Climate Action Plan*
- B. *The adoption of Phase Two of a Climate Action Plan within a year*
- C. *The update of the Energy Element of the General Plan with no set date.*

Furthermore, **CC2A** states the County shall adopt a first-phase Climate Action Plan that contains:

- *a GHG inventory, updated every 3 years*
- *a Green Building Program*
- *a future Climate Change Program which includes*
 - o *a fee and reduction targets for new development*
- *a section on targets*

A. Draft Climate Action Plan (CAP), Phase One

The DRAFT Climate Action Plan, Phase One, May 2009 was distributed with the DEIR. A review of it shows it does **not** currently fully meet the requirements of mitigation measure CC2A, listed above. It simply does not contain all the elements the mitigation measure promises it will contain. For example:

- **Green Building Program**

The Climate Action Plan contains information on current goals and actions related to energy use. "Green" components are mentioned in this section but there is no clear discussion of a "Green Building Program." Since this program is called out in the mitigation measure, the program should be presented and well defined in the CAP.

- **Future Climate Change Program**

The Climate Action Plan, Phase One does not reference a future Climate Change Program with fees. Again, since this program is called out in the mitigation measure, the program should be discussed and well defined in the CAP

- **Section on Targets**

Although there is a section entitled "Sacramento County's Emissions Reduction Targets"⁵ in the Climate Action Plan, Phase One, it is not clearly stated what target the County has embraced. There are two references⁶ to a 15% reduction target in ARB's 2008 Scoping Plan, but there is no actual statement that **the County** commits to this goal. The section weakly implies the County is adopting a 15% reduction, but it is never actually stated. Since this is an implementation strategy to the General Plan's goal to reduce GHG, the District recommends that the Climate Action Plan, Phase One actually have clear statements about what GHG reduction targets the County will commit to with justification as to why that target or range of targets is appropriate.

SUGGESTED ACTION: The District recommends that the Climate Action Plan, Phase One be substantially revised to actually contain the elements promised by Mitigation Measure CC2A and that it clearly state a GHG reduction target.

B. The adoption of Phase Two of the Climate Action Plan within a year

⁵ Draft Climate Action Plan, Phase One, pg 2-10

⁶ Draft Climate Action Plan, Phase One, pg ES-2 and pg 2-10

Mitigation measure CC-2 commits to the adoption of a next phase for the Climate Action Plan within a year. The measure states it will include "economic analysis and detailed programs and performance measures." The District believes Phase Two is where the "meat" of the Climate Action Plan will be. The programs and measures chosen will need to be enforceable and need to be ones which will actually reduce the GHG from the entire County, both existing and new development.

The District is concerned that these enforceable programs and measures are not included in the General Plan at this time. The fact that the measures won't be chosen for a year puts off the choice of mitigation until a later time. Usually, putting off mitigation in a CEQA analysis is acceptable when there is a clear commitment to a performance standard and to the types of measures to look at are clearly committed to in the environmental document. In this case, the performance standard has been weakly stated and there is no analysis of the efficiency of the proposed measures. It's difficult to see how much strength is behind this future mitigation. The DEIR has identified a significant greenhouse gas impact but has not yet identified mitigation for it.

SUGGESTED ACTION: The District recommends a reduction target be clearly identified for the future Climate Action Plan, Phase Two and that there be a more comprehensive description of what its programs and measures will achieve.

In addition, the District is concerned that the future mitigation measures in the Climate Action Plan, Phase Two may not be closely aligned with the policies in various elements in the General Plan Update. It appears that the Climate Action Plan, Phase One was written without any coordination with policies in The General Plan. The District believes policies in the General Plan should inform The Climate Action Plan.

The General Plan Update, in fact, gives almost no mention to climate change and greenhouse gases. Many of the policies, however, are ones which will help prevent the creation of GHG. Those policies which indirectly affect the creation of GHG could be consolidated into an Appendix- "Policies that Address Climate Change/GHG" so as to demonstrate that the General Plan, indeed does have climate-friendly policies.

SUGGESTED ACTION: The District recommends that The Climate Action Plan, Phase One and Phase Two be more closely aligned with actual policies in The General Plan Update. In addition, the District recommends there either be a GHG Element to the General Plan or that there be an Appendix to the General Plan which highlights those policies which are supportive to the reduction of GHG.

C. The update of the Energy Element of the General Plan with no set date.

Mitigation Measure CC-2 also commits to an update of the Energy Element of the General Plan. This section is also a future action and is so vaguely worded as to render the commitment almost meaningless. The DEIR should have some discussion of strength of the mitigative effectiveness of this action and a date by when it will be complete.

SUGGESTED ACTION: The District recommends more discussion be included about the intent or impact of the revised Energy Element and that a date be given.

Thresholds of Development/Significance

The DEIR presents a set of "thresholds for development" in Table CC-9. These thresholds are sector-based and the sectors reflect those used in the creation of the County's GHG inventory (i.e. residential, commercial, transportation). The values in the "thresholds" column of the table

represent targets which reflect the County's desired inventory per sector in 2020 (a 15% reduction from current emissions). The values in the "thresholds" column also reflect the assumption that in 2020, GHG emissions will be coming from various sources in exactly the same proportion as they came in 1990. The District has two concerns with the assumptions behind this table:

- a. It is not assured that emissions in 2020 will be generated from sources in the exact same proportion as they are in 1990. For example, perhaps the transportation-related emissions will be less than 55% of total GHG because of the low carbon fuel standard. The District believes there should be some discussion of the validity of that assumption.
- b. It is assumed from the table that a 15% reduction from new development will be adequate to help the County and state reach the goals of AB32. The District believes there should be a discussion of this assumption. Many parties believe that new development should have higher requirements because of how difficult it will be to garner emissions reductions from existing development.

It is presumed applicants will analyze the GHG impacts from their new development projects and will compare their results by sector to these thresholds. The by-sector approach is a new one and will need explanation as it could be confusing. Applicants are more accustomed to having one mass emission number per day (for NOX or ROG) for their projects.

Because of the newness of this approach, the District recommends: 1. The County develop guidance on how proponents should use this table; 2. That the table's sector labels be more descriptive, i.e.- "Residential energy", "Commercial & Industrial energy"; 3. That guidance include whether or not proponents will be able to over-mitigate in one sector while under mitigate in another; 4. That some methodology be provided to allow all sectors' contribution to be expressed in like units.

SUGGESTED ACTION: The District recommends guidance be provided on how proponents are to use the sector-based "thresholds of development." For purposes of the DEIR, the District recommends more explanation be added so that readers understand how the table will be used by new development going forward.

The DEIR is silent about how new development will mitigate their GHG impacts if their projects are found to be "cumulatively considerable" once compared to the County's "Thresholds for Development." SMAQMD draft guidance suggests that projects in this category create a Greenhouse Gas Reduction Plan which would be endorsed by the District and approved by the County. Lists of appropriate mitigation measures have been created by the District, the Attorney General and others. Those measures include project characteristics that reduce VMT and energy use by buildings, among other things. The quantification of those measures is an evolving technology. The District believes the DEIR should make reference to these possible mitigation strategies.

SUGGESTED ACTION: The District recommends the DEIR discusses mitigation strategies for new development projects that are determined to be "cumulatively considerable."

Phasing for New Development – Concern about Leapfrog Development

The General Plan presents a discussion of "New Growth Areas."⁷ Those areas will be able to accommodate up to 47,000 new residential units. The General Plan states in the Land Use section (policy LU4) that the County will "focus investment of public resources on revitalization efforts within existing communities, especially within commercial corridors, while also allowing planning and development to occur within strategic new growth areas." The District is concerned that mechanisms are not in place to assure entitlement and development of the new growth areas will not occur in a leapfrog manner. Far areas of the County seem to be allowed to be entitled years in advance of their development and without regard to an orderly progression of development. In the meantime, the effects of climate change could be shown to be worse than originally believed.

Given the fact that the VMT-related transportation sector contributes the largest portion of the County's GHG inventory (55%)⁸, the District has already suggested two land use mitigation measures to assure that entitlement and development in the New Growth areas not be allowed unless certain VMT-related criteria of careful phasing are met. Refer to pages 3-4 of this letter. They are very important for GHG mitigation as well. These would constitute the Expansion Phasing Mitigation for land use.

It may also be appropriate to explore the use of a GHG/capita metric to be used in addition or in lieu of the VMT related/capita metric. This metric would probably not be the same as the transportation-related "threshold for development" the County proposed for its CEQA process (4.56 MT/capita). That target can be mitigated by project features. The County needs to mitigate the impacts of all development (sprawl and otherwise) that has been approved in the past before it can seriously tackle the issue of climate change. The District is not in a position at this point to call out what that metric would be, but would like to continue discussing the possibility with the County in the next few weeks.

SUGGESTED ACTION: The District recommends the inclusion of the already recommended Expansion Phasing Mitigation Measures in the Land Use mitigation of the DEIR for GHG mitigation purposes. Also, the District recommends further collaboration with the District on the development of a GHG metric which could also help identify when proposed new growth development is "leapfrog."

Circulation Element Analysis

The GPU Circulation Element analysis proposes a smart-growth program as mitigation for reduced roadway level of service (LOS) due to urban expansion. We maintain that the LOS standard is not equitable for all modes of transportation as it measures service for automobiles only; nevertheless a smart-growth program of development that it facilitates non-automobile modes is an effective way of alleviating automobile congestion.

The Circulation Element analysis indicates that this mitigation requirement may be satisfied by adopting the proposed Smart Growth Streets program. The Smart Growth Streets (SGS) policy document, released at the June 22, 2009 Planning Commission hearing, provides language for a policy that is a good start to satisfying the requirement. To provide the full benefits of Smart Growth development in mitigating impacts associated with increased automobile traffic, including LOS and air quality impacts, it must incorporate the following:

⁷ County of Sacramento General Plan, Draft Land Use Element, pg. 27.

⁸ Sacramento County DRAFT Climate Action Plan – Phase One, pg 2-5

1. A clear indication of which roadways the SGS policy applies to. To be most effective, it should apply to all collector, arterial and thoroughfare roadways.
2. A provision that environmental review for projects on these roadways shall evaluate development impacts on all modes of travel, not only automobile travel.
3. Include language requiring Complete Streets throughout SGS designated roadways. Complete Streets are designed and operated to enable safe access for all users. Pedestrians, bicyclists, motorists and bus riders of all ages and abilities are able to safely move along and across a complete street. They include accommodations for all travel modes, including bicycle lanes and separated sidewalks. There are Complete Streets provisions in the Sacramento County Street Improvement Standards, but an SGS policy designed to facilitate multi-modal access must specifically include a requirement for Complete Streets.
4. Include a requirement for striped crosswalks with pedestrian signalization at all roadway intersections. This provision is contained in the Sacramento County Street Improvement Standards, but an SGS policy designed to facilitate multi-modal access must specifically include a requirement for adequate crosswalks.
5. Include connectivity standards. Roadway networks without adequate connectivity do not provide adequate access for non-motorized travelers. Non-motorized travel requires good connectivity because due to its slower speeds (relative to motorized travel), longer than necessary distances between destinations are especially inefficient.

The Institute of Transportation Engineers (ITE) has produced a recommended practice document called Context Sensitive Solutions in Designing Major Urban Thoroughfares for Walkable Communities. This document provides principles to determine connectivity. It recommends expanding the definition of collectors to recognize their role in connecting local origins and destinations to distribute trips efficiently keep short trips off the arterial system and provide a choice of routes for all modes. It recommends building network capacity through a dense, connected multi-modal network rather than through an emphasis on high levels of vehicle capacity on arterials. By emphasizing a diversity of multi-modal routes to destinations, rather than high vehicle capacity on a few larger arterial routes, this approach gives equal access to non-motorized travelers.

Some pre-established, useful connectivity standards include (1) the ratio of intersections divided by the sum of intersections and dead-ends; (2) the number of surface street intersections within a given area as a measure of intersection density and (3) the ratio of direct travel distances to actual travel distances (The Victoria Transportation Policy Institute, www.vtppi.org).

In its document Recommended Guidance for Land Use Emission Reductions, the District recommends block size perimeters of no more than 1,350 feet. Block size may be a good connectivity standard, as smaller block sizes allow for more direct routes between destinations.

6. We commend the language encouraging shared driveways. Shared driveways should be required for new development, and a concerted effort should be made to consolidate driveways for existing development.

7. We commend the measure to encourage shared parking. Any parking for new development should be required to be shared parking. We suggest further measures to reduce impacts of urban growth on parking availability. Possible measures include performance parking pricing, a parking benefit district and unbundling parking from commercial rents. These measures are demonstrated to be cost-effective and efficient in alleviating perceived need for copious parking. More information on these measures is available in The High Cost of Free Parking, by Donald Shoup⁹.
8. Roadways serving local destinations should generally be designed for speeds of no more than 35 miles per hour. The ITE recommended practice document on Context Sensitive Solutions designates 35 miles per hour as a maximum speed for walkable communities. It provides comprehensive parameters for collectors, arterials and thoroughfares that accommodate maximum speeds of 35 miles per hour. Lane widths of more than 11 feet, and roadways of more than 4 – 6 lanes, facilitate increased vehicular speeds and associated collisions. Correspondingly enlarged curb radii, of over 20 feet, facilitate vehicle turning speeds that pose a significant threat to pedestrians crossing at intersections.

Faster speeds are dangerous, and serve no benefit other than to facilitate vehicular travel, which is primarily the role of freeway travel. Minor reductions in vehicular speeds, to accommodate alternative modes improvements, have not to date been shown to result in significant increases in motor vehicle emissions¹⁰. Finally, enlarged roadway widths, based primarily on motor vehicle proportions, are incompatible with pedestrian-scaled development, and compromise its effectiveness in reducing vehicle miles traveled.

SUGGESTED ACTION: The District recommends the revisions enumerated above to the Smart Growth Street policy document.

Roadway Width

Sacramento County staff recommended modifications to the Circulation Element transportation plan at the June 22, 2009 Planning Commission hearing. The modifications generally apply designations to major roadways that reflect their existing width, rather than designations for wider roadways. The Draft GPU applies designations to many major roadways that widen them, for example from collector to arterial; in contrast, the modifications apply designations that reflect the roadways' existing widths, for example applying a collector designation to an existing 2-lane collector roadway.

We support the modifications to maintain existing roadway widths. They will help mitigate air quality impacts associated with increased VMT resulting from the GPU. Roadway expansion is often associated with "induced demand," or the inducement of VMT due to increased roadway capacity¹¹. Induced demand results in increased air quality pollutants and greenhouse gas emissions, associated with increased VMT; it also reduces or even negates the congestion reduction benefits of the road widening.

⁹ Shoup, Donald. The High Cost of Free Parking. American Planning Association, 2005

¹⁰ Planning Dynamics Group. Central City Two-Way Conversion Study. Prepared for the City of Sacramento, California January 2006.

San Francisco Planning Department. San Francisco Bicycle Plan Draft Environmental Impact Report. San Francisco, California November 2008. 790 – 813.

¹¹ Peter Hills (1996), "What is Induced Traffic?" Transportation, Vol. 23, No. 1, pp. 5-16.

Mitigation Measure TC-1 calls for widening portions of White Rock Road, Kiefer Boulevard and Excelsior Road to six-lane thoroughfares, to mitigate for reduced LOS. We have indicated that LOS is not an equitable standard, and maintain that roadway widening induces VMT.

Roadway Widening Process

We recommend measures to require a clear demonstration of need prior to any roadway widening, through a full public participation process. The American Association of State Highway and Transportation Officials (AASHTO) and the Federal Highway Administration (FHWA) have supported a decision-making process for transportation projects called "Context Sensitive Solutions," available at www.contextsensitivesolutions.org. This process involves the creation of shared stakeholder vision to provide a basis for decisions; the demonstration of a comprehensive understanding of land use, social and other contexts for roadway projects ongoing communication and collaboration to achieve consensus and flexibility and creativity to shape effective transportation solutions, while preserving and enhancing community and natural environments. This process is demonstrated effective, and would reduce air quality impacts associated with increased VMT resulting from the GPU.

SUGGESTED ACTION: The District supports establishing a public participation process, consistent with the ITE's Context Sensitive Solutions, to thoroughly evaluate project need prior to any future roadway widening.

Conclusion

District staff thanks the County for the opportunity to present our comments. Please address any questions about these comments to Jeane Borkenhagen for climate change (916-874-4880 | jborkenhagen@airquality.org), Molly Wright (916-874-4886 | mwright@airquality.org) or Rachel DuBose (916-874-4876 | rdubose@airquality.org).

Sincerely,



Larry Greene
Executive Director/Air Pollution Control Officer
Sacramento Metropolitan Air Quality Management District