State of California
AIR RESOURCES BOARD

DRAFT
CEQA Functional Equivalent Document
SCH# 2010081021

FOR PROPOSED

REGIONAL GREENHOUSE GAS EMISSION REDUCTION TARGETS FOR AUTOMOBILES AND LIGHT TRUCKS PURSUANT TO SENATE BILL 375

Date of Release: **August 9, 2010**
Scheduled for Consideration: **September 23, 2010**

Electronic copies of this document can be found on ARB's website at http://www.arb.ca.gov/cc/sb375/sb375.htm. Alternatively, paper copies may be obtained from the Public Information Office, Air Resources Board, 1001 I Street, Visitors and Environmental Services Center, 1st Floor, Sacramento, California 95814, (916) 322-2990.

If you need this document in an alternate format (i.e. Braille, large print) or another language, please contact Ms. Lezlie Kimura Szeto at (916) 322-1504. TTY/TDD/Speech to Speech users may dial 711 for the California Relay Service.

Comments

This report will be considered at a meeting of the Board, which will commence on September 23, 2010. Interested members of the public may present comments orally or in writing at the meeting.

Comments may also be submitted by postal mail or by electronic submittal before the meeting. To be considered by the Board, written comment submissions on the Functional Equivalent Document that are not physically submitted at the meeting must be received no later than 5:00 P.M., September 22, 2010, and addressed to the following:

Postal mail: Clerk of the Board, Air Resources Board
1001 I Street, Sacramento, California 95814

Electronic submittal: http://www.arb.ca.gov/lispub/comm/bclist.php

Please note that for electronic submittal, the webpage provided above has a link for comments on the CEQA Functional Equivalent Document, as well as a separate link for commenting on the Staff Report and proposed targets.

For commenting on the Functional Equivalent Document:
The link is titled "ceqa2010".

The Board requests, but does not require 20 copies of any written submission. Also, ARB requests that written and e-mail statements be filed at least 10 days prior to the meeting so that ARB staff and Board members have time to fully consider each comment.

Please note that under the California Public Records Act (Government Code section 6250 et seq.), your written and oral comments, attachments, and associated contact information (e.g., your address, phone, email, etc.) become part of the public record and can be released to the public upon request. Additionally, this information may become available via Google, Yahoo, and any other search engines.

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I. Introduction and Background

The California Environmental Quality Act (CEQA) and Air Resources Board (ARB) policy require an analysis to determine the potentially adverse environmental impacts of proposed projects. This document presents a proposed determination that the establishment of regional greenhouse gas reduction targets (Regional Targets) for passenger vehicles (automobiles and light-duty trucks) and subsequent actions by Metropolitan Planning Organizations (MPOs) to implement policies that achieve those targets may have adverse impacts on the environment. However, we cannot speculate at this time what those specific impacts may be because the manner of implementation of Regional Targets will be at the discretion of MPOs. Further, the overall effect of setting Regional Targets will be beneficial for the environment.

California Public Resources Code §21080.5 allows public agencies with regulatory programs to prepare a plan or other written document in lieu of an environmental impact report once the Secretary of the Resources Agency has certified the regulatory program. The California Secretary for Resources has determined that ARB meets the criteria for a Certified State Regulatory Program (Title 14, California Code of Regulations (CCR) §15251(d)). This certification allows ARB to adopt rules and plans used in ARB's regulatory program without preparing formal CEQA documents such as Initial Studies, Notices of Preparation, Negative Declarations or Environmental Impact Reports (EIRs). As a certified agency, however, ARB is required to prepare a substitute document subject to other provisions of CEQA, such as avoiding significant adverse effects on the environment where feasible. This document considers environmental impacts associated with the proposed action, including cumulative impacts.

CEQA requires a certified agency to provide a description of the proposed action and include one of the following in its environmental document: 1) alternatives to the activity and mitigation measures to avoid or reduce any significant or potentially significant adverse impacts that the project might have on the environment; or 2) a statement that the agency's review of the project has determined the project would not have any significant or potentially significant adverse impacts on the environment, and therefore no alternatives or mitigation measures are proposed (CEQA Guidelines §15252).

ARB is required to set Regional Targets as a first step to achieve the ultimate goal of Senate Bill 375 (Steinberg, Chapter 728, Statutes of 2008) which is to reduce greenhouse gas emissions by reducing passenger vehicle travel. This action is intended to be part of a larger statewide effort to reduce the greenhouse gas emissions that lead to global climate change and to encourage sustainable development. However, because SB 375 was designed to allow regions to independently determine how they will achieve Regional Targets, ARB staff acknowledges there may be a potential for significant adverse impacts on the environment, depending upon the compliance path chosen by each region.

Based on the numerous policies that MPOs may employ to achieve targets and the possibility of varying intensities of deployment of each policy by the regions, there are an infinite number of compliance paths available to the 18 affected regions. Speculation on the adverse impacts within each region associated with those as yet unknown compliance paths is not reasonable at this time; region-specific analyses will be necessary when each MPO prepares either its Sustainable Communities Strategy (SCS) as part of its Regional Transportation Plan (RTP), or its Alternative Planning Strategy.

II. Proposed Project Description: Setting Regional Greenhouse Gas Emission Reduction Targets

SB 375 aligns regional land use, transportation, housing, and greenhouse gas reduction planning efforts. SB 375 requires ARB to set regional greenhouse gas emission reduction targets for passenger vehicles and light trucks for 2020 and 2035 (GC § 65080(b)(2)(A)). The targets are for the 18 MPOs in California. MPOs must develop an element (an SCS) as part of their RTPs to demonstrate how they will achieve the targets, if it is feasible to do so. If it is not feasible for the MPO to achieve its target through an SCS, then the MPO must prepare an Alternative Planning Strategy (APS) which is independent of the RTP.

Prior to setting targets for a region, ARB is required to exchange technical information with each MPO and the affected air districts. GC § 65080(b)(2)(A)(ii). In establishing the Regional Targets, ARB must take into account greenhouse gas emission reductions to be achieved by improved vehicle emission standards, changes in the carbon-intensity of fuels, and other ARB-approved measures that will reduce greenhouse gas emissions in affected regions. GC § 65080(b)(2)(A)(iii). As these factors may change, ARB may revise the Regional Targets every four years, and at a minimum, must update them every eight years. GC § 65080(b)(2)(A)(iv).

The Regional Targets may be expressed in gross tons, tons per capita, tons per household, or in any other metric deemed appropriate by ARB. As discussed more fully in the Staff Report, ARB staff proposes a percent reduction per capita metric for targets. Additionally, each MPO may recommend a target for its region. GC § 65080(b)(2)(A)(v).

Under this framework and based on the data and analysis prepared by the MPOs, ARB staff is recommending the Board adopt the following percent per-capita reduction targets, which together are the Preferred Alternative. The proposed Regional Targets are discussed in detail in the ARB staff report dated August 9, 2010 and posted on the ARB website at http://www.arb.ca.gov/cc/sb375/sb375.htm.

Proposed Greenhouse Gas Reduction Targets for 2020 and 2035
(Percent Change in Per Capita Emissions Relative to 2005)

MPO Regions	2020 (in %)	2035 (in %)
SCAG	-8	-13
MTC	-7	-15
SANDAG	-7	-13
SACOG	-7	-16
8 San Joaquin Valley MPOs[1]	-5	-10
6 Remaining MPOs[2]		
TMPO (Tahoe)	-7	+6
SCRTPA (Shasta)	0	0
BCAG (Butte)	-1	-1
SLOCOG (San Luis Obispo)	-8	-8
SBCAG (Santa Barbara)	+6	+4
AMBAG (Monterey Bay)	+13	+14

The metric for the proposed targets is a percent reduction per capita as compared to a 2005 base year. As part of the Regional Targets Advisory Committee's (RTAC) discussions and later technical discussions with MPOs, this metric was recommended by the RTAC and confirmed through later discussions with the MPOs as a preferred metric because it takes into account several factors.

The proposed metric directly addresses growth rate differences between MPO regions. Addressing growth rate differences between the MPO regions is important given that growth rates are expected to affect the magnitude of change that any given region can achieve with land use and transportation strategies. The per capita metric ensures that both fast and slow growth regions take reasonable advantage of any established transit systems and infill opportunity sites to reduce the region's overall regional greenhouse gas emissions.

The proposed metric also gives regions some "credit" for early actions taken to reduce greenhouse gas emissions since 2005. The per capita metric gives regions that have taken early actions and, as a result have a low level of greenhouse gas emissions per person, responsibility for a lower total reduction

[1] These are placeholder targets for the 8 San Joaquin Valley MPOs, with recognition of model improvements and scenario development efforts. ARB staff will reassess the Valley's progress in 2012.

[2] ARB staff proposes 2020 and 2035 targets that reflect each region's currently projected per capita change from 2005 in greenhouse gas emissions. ARB's target update in 2014 will result in greater emission reductions as a result of better tools to reflect the region's current and projected future land development and transportation infrastructure strategies, and additional time to advance sustainable communities efforts within the regions.

compared to regions that start with a higher level of greenhouse gas emissions per person.

The remainder of this Section II describes the proposed project in context, including significant steps remaining before local or regional environmental analysis can be performed.

A. Steps in SB 375 Implementation

While Regional Targets are the focus of this analysis, their establishment is only the first step among many to implement the planning process described in SB 375 to reduce emissions from passenger vehicle travel.

California's Climate Change Scoping Plan, adopted in December 2008, is the overarching framework for meeting the greenhouse gas emissions reduction goal of the Global Warming Solutions Act of 2006 (AB 32): Return to 1990 emissions levels by 2020. The comprehensive Scoping Plan proposes actions to reduce emissions from major sources, including establishment of Regional Targets for reductions from land use and transportation. The Scoping Plan refers specifically to SB 375 as the process for reducing greenhouse gas emissions through more sustainable land use and transportation planning.

Creating and implementing the plans envisioned by SB 375 involves three steps or phases. The first phase required ARB to convene a Regional Targets Advisory Committee (RTAC) to recommend factors and methods ARB should use to set Regional Targets. This phase was completed in September of 2009. The second phase is for ARB to set Regional Targets, the environmental impacts of which are described in this document. The third phase will be the development of Sustainable Communities Strategies (SCS) and possibly Alternative Planning Strategies (APS) by each MPO to meet Regional Targets in the next update of their Regional Transportation Plan (RTP).

The third phase will require independent analysis by each MPO to determine if there are any potentially significant impacts to the environment resulting from their unique approach, or compliance path, to meeting their area's Regional Target.

B. Regional Transportation Planning Process

SB 375 requires consideration of alternative land use and transportation patterns through pre-existing state and federal planning processes. SB 375 also strengthens the linkage between the Regional Housing Need Allocation (RHNA) process required by State Housing Element Law and the RTP development and adoption process. The development of an RTP requires adherence to local ordinances, state statutes, regulations, and guidelines, as well as federal law. RTPs must take into account local population, growth projections, and local general plans, among other factors.

RTPs are approved by an MPO's board, together with the certification of a CEQA environmental document for the RTP (typically an Environmental Impact Report or EIR) and a transportation conformity determination that ensures the region is on track to meet federal air quality requirements. The documents are then transmitted to the Federal Highway Administration, Federal Transit Administration, and U.S. Environmental Protection Agency for joint consideration. The RTP serves as one of the key documents used by the federal government to identify and fund transportation projects, programs, and services in a region.

Adoption of RTP planning documents as well as the projects listed in them are considered to be projects for purposes of CEQA. To comply with CEQA, MPOs, acting as lead agencies, typically initiate an Initial Study or an equivalent environmental assessment. Based on that work, an environmental document, often an Environmental Impact Report (EIR), is completed. These reports require MPOs to examine the environmental effects of the RTP (i.e. broad policy alternatives, program wide mitigation, growth inducing impacts, and cumulative impacts). After RTP adoption, additional CEQA documents are prepared as needed to address any impacts of individual projects contained within an RTP.

C. Role of MPOs and ARB

Once the Regional Targets are set by ARB, SB 375 requires MPOs to integrate their region's greenhouse gas emission reduction target for automobiles and light-duty trucks into their next RTP development process. Under federal and state law, each of the 18 California MPOs are required to develop an RTP. SB 375 adds a new state requirement to include an SCS, which will contain an underlying land use plan for the RTP tied to the regional transportation system resulting in greenhouse gas emission reductions. The SCS constitutes a fourth element of the RTP, in addition to the three existing elements (policy, financial, and action) that are required in a region's long range RTP.

Since the SCS is part of the RTP, it must also comply with all applicable state and federal requirements, including financial constraint and the use of latest planning assumptions.

SB 375 requires the MPO to prepare an APS only if it cannot feasibly achieve its Regional Target through an SCS. The APS is a separate document from the RTP and is not required to meet federal and state requirements for RTPs, however, the APS may be adopted concurrently with the RTP.

Finally, SB 375 sets out a very limited role for ARB in determining how and whether the Regional Targets will be achieved. Specifically, after establishing targets, ARB's role is to comment on the methodology to be used by each MPO for measuring GHG emissions and then to accept or reject the MPO's determination that their SCS or APS would achieve the targets, if implemented.

Thus, the policy choices relating to how the MPO will meet the targets are left to the discretion of the MPO.

D. General Statewide Impact of Target Setting

The purpose of setting Regional Targets is to implement one of numerous measures to reduce the severe environmental damage caused by greenhouse gas emissions. The Regional Targets will encourage regional planning agencies to deliberately plan in a manner that reduces greenhouse gas emissions from passenger vehicles and light trucks, which will have the added environmental and health benefits of reducing other associated air pollutants from tailpipe emissions. While it is not feasible to predict the nature or extent of localized impacts of individual measures or strategies regions will employ to meet Regional Targets, the overarching statewide impacts of targets we can reasonably conclude will benefit California. This is because the proposed targets would result in a reduction of greenhouse gas emissions of over three million metric tons of CO2 per year (MMTCO2/year) in 2020, and 15 MMTCO2/year in 2035.

SB 375 represents a shift toward planning principles that improve the quality of communities, increase transportation choices of residents, and reduce the frequency and distances Californians drive. Employing these principles in future transportation plans and a growing number of local general and climate action plans will reduce the State's levels of greenhouse gas and other emissions and benefit the public's health and environment.

III. Project Impacts Analysis – Preferred Alternative Levels

A. Incorporation of the Climate Change Scoping Plan Functional Equivalent Document by Reference in Lieu of Tiering

ARB incorporates by reference Appendix J of the Climate Change Scoping Plan (State Clearinghouse Number 2008102060). The programmatic analysis contained in the 2008 Climate Change Scoping Plan Functional Equivalency Document (FED) provides one basis for this environmental analysis. However, ARB staff prepared this analysis as a stand-alone document, rather than a second-tier document based on the Scoping Plan FED.

The establishment of Regional Targets was identified as Measure T-3 in the Climate Change Scoping Plan. The Scoping Plan identified the potential for the Regional Target measure to have a potentially significant impact on: 1) Land Use and Planning; 2) Transportation and Traffic (Appendix J-56, -63); and 3) Public Health and Safety (Appendix J-72). However, the Scoping Plan environmental analysis of these issues concludes that the Regional Target measure would have potentially beneficial impacts on the environment, rather than adverse impacts.

B. Analytical Approach

CEQA discourages forecasting and speculation about potential environmental impacts (CEQA Guidelines §15144 and §15145), though performing an environmental analysis necessarily involves some degree of forecasting. While foreseeing the unforeseeable is not possible, an agency must use its best efforts to find out and disclose all that it reasonably can. Further, if after thorough investigation, a lead agency finds that a particular impact is too speculative for evaluation, the agency should note its conclusion and terminate discussion of the impact.

In evaluating Regional Targets it was necessary to rely upon target-setting scenarios submitted by the MPOs. These scenarios do not represent draft SCS or APS documents, which will be developed by the MPOs over the coming months and years. However, MPO scenarios constitute the best available results of region-specific modeled analysis of policies that may be employed to meet targets, and therefore serve as critical input to ARB staff's analysis of Regional Targets.

In the regional planning process, MPOs will have the exclusive authority to determine whether, and by what means, they will achieve the targets set for them by ARB. MPOs will prepare future SCSs or APSs to demonstrate greenhouse gas reductions consistent with the Regional Targets. Forecasting or speculating about what those RTPs will look like and whether they may cause adverse impacts in any particular region is not possible at this time, and will need to be analyzed and discussed in detail by the MPOs through an established process that involves preparation of EIRs for the RTPs. However, ARB staff's best efforts have resulted in proposed determinations regarding general categories of impacts that could occur in one or more MPO region, depending on their chosen strategies to meet their Regional Target. These impacts are described in Section III.E.

C. Regional and Local Planning Decision Autonomy

While each MPO will need to determine how to meet their Regional Targets, ARB staff acknowledges that meeting Regional Targets may not be possible within an adopted RTP. For example, many emission reduction measures may be beyond the MPO's capacity to fund or authority to implement and therefore cannot be included in an SCS. Additionally, the California Constitution and planning statute clearly indicate that any proposed land use measures in a SCS or APS are solely within a local government's, and not an MPO's discretion to implement (Cal. Const. Art. 11 § 7, GC § 65080(b)(2)(K)). SB 375 contains specific provisions clarifying that neither an SCS nor an APS regulates the use of land. City and county land use policies and regulations are not required to be consistent with the regional transportation plan or APS. (GC § 65080(b)(2)(J))

For these reasons it is crucial for regional planning documents as well as local government planning documents that may implement the Regional Targets, to undergo independent environmental analyses based on the particular proposed action(s) by the MPO, city, or county. Each of these agencies must comply with a body of laws, regulations, and other guidance prior to making decisions, each of which must undergo independent environmental review.

D. Possible Regional Target Compliance Measures

The following is a sampling of the many policies that regions may consider as part of their SCS or APS to reduce greenhouse gases from passenger vehicle travel. The list is based on ARB review of existing academic and practitioner resources and has been shared with the MPOs. Sources for the above list of policies include reports and publications from federal, state, regional and local government agencies and organizations. (See Appendix D: References in the August 9, 2010 Staff Report.) It is not intended to be exhaustive or binding on the MPOs, but is presented to illustrate the numerous and varied compliance options each MPO may choose to employ when developing a region specific strategy to meet their target.

<u>Land Use Policies</u>

Density

- Increase infill and development in areas with existing infrastructure
- Increase opportunities for redevelopment/reuse (e.g., brownfields)
- Increase residential/commercial density near transit (e.g., transit oriented developments)
- Increase use of compact building design in new and existing developments

Diversity

- Increase mixed use development (e.g., residential and commercial uses in infill, reuse/redevelopment or greenfield projects)
- Increase transit oriented development

Design

- Improve connectivity of streets and pedestrian network (e.g., through streets)
- Improve neighborhood and site design (e.g., traffic calming, beautification)

Distance to Transit

- Increase residential/commercial density near transit (e.g., transit oriented development)
- Make developments transit ready

Housing
- Increase local housing for local workforce (e.g., jobs-housing fit, jobs-housing balance)
- Integrate affordable and market rate housing
- Improve accessibility of housing to transit

Open Space and Agricultural Land Conservation
- Reduce pressure on greenfields by directing growth to existing developed areas
- Adopt mechanisms to protect key natural resources

Location of Development
- Locate major regional activity centers near existing development (e.g., “destinations”)
- Locate schools in neighborhoods that house the student population or maximize access by alternate modes
- Implement other location-related policies

Incentives
- Provide financial incentives (e.g., grants, tax credits) for non-transportation investments like housing, parks, and storm water management
- Provide regulatory relief (e.g., expedited permit processing)
- Provide recognition programs

<u>Transportation Policies</u>

Transit Facilities and Service
- Expand transit network
- Improve transit facilities (e.g., safety)
- Reduce passenger travel time (e.g., more frequent headways)
- Adopt competitive fare structure

Pedestrian Infrastructure and Environment
- Improve pedestrian facilities and infrastructure
- Improve pedestrian environment (e.g., beautification, access)
- Implement “safe routes to schools” program

Bike Infrastructure and Environment
- Improve bicycle facilities and infrastructure
- Improve cyclist environment (e.g., safety, access)
- Implement “safe routes to schools” program

Interconnectivity Among Alternative Modes
- Improve linkages between modes of travel
- Use Intelligent Transportation System technologies (e.g., “smart card”)

Road Quality and Service
- Rehabilitate and maintain pavement
- Use transportation system management (e.g., congestion management)

Parking Management
- Implement effective pricing
- Alter parking requirements and types of supply (e.g., maximum parking, shared parking)

- Improve circulation efficiency through information (e.g., signage)

Employer-Based Commute Trip Reduction

- Encourage telecommuting and flexible/alternative work schedules
- Implement and coordinate use of employee vehicle sharing programs and alternative modes (e.g., incentives for carpool, bike, transit, vanpool use)
- Improve employer parking management (e.g., employee parking “cash out”, unbundling parking cost from property cost)

Other Trip Reduction (Commute and Other)

- Implement vehicle sharing programs (e.g., car sharing, bike sharing, park and ride lots)
- Provide local shuttles

<u>Pricing Policies</u>

Parking Pricing

- Implement metered pricing
- Implement parking "cash-out" program

Road User Pricing

- Implement congestion pricing
- Implement High Occupancy Toll (HOT) lanes
- Implement area or cordon pricing
- Implement distance-based (VMT) pricing

Fuel Tax

Additional measures or policies for transportation system management and demand management include:

<u>System Development</u>

- Eliminate or reduce highway and arterial projects that result in additional “general purpose” lane miles
- Expand regional park and ride facilities
- Implement regional bicycle facilities and infrastructure
- Expand high occupancy toll (HOT lanes) system
- Implement traffic signal coordination
- Queue jumps/Bus priority at intersections
- Provide real time transit information
- Speed limit reductions to 55 MPH
- Ramp metering
- Incident management system
- Freeway travelers information system
- Anti-idling traffic codes for commercial vehicles
- Enhance vehicle inspection and maintenance programs
- Operation improvements to relieve bottlenecks

Demand Management

- Eco driver education
- Student carpool programs
- Staggered school class schedules
- On-site child care facilities
- Pay-as-you-drive insurance

E. Potential Environmental Impacts

CEQA and ARB regulations require ARB's functional equivalent document to describe both potentially beneficial and potentially adverse effects of adopting the proposed targets (the Preferred Alternative). The following is a discussion of potential beneficial impacts, project-level adverse impacts, growth inducing impacts, and cumulative impacts. Mitigation measures which could reduce or minimize the potential significant adverse impacts are also discussed in this section.

Beneficial Impacts

Many experts in the fields of land use, transportation, public health and environment have identified the potential for emission-reducing sustainable communities strategies to result in a number of additional benefits, or co-benefits. The implementation of Regional Targets, and the resulting changes in development patterns, may result in a variety of environmental, economic and social benefits. ARB staff agrees that the following list of potential co-benefits, excerpted from the September 29, 2009 RTAC report, provides a concise summary of potential co-benefits of the proposed project:

> "Communities that are well designed and supported by a range of transportation options will significantly reduce greenhouse gas emissions and contribute towards climate change solutions. In addition, many other advantages can result including increased mobility, economic benefits, reduced air and water pollution, and healthier, more equitable and sustainable communities. The Committee recommends that MPOs identify, quantify to the extent possible, and highlight these co-benefits throughout the SB 375 target setting and implementation processes. Co-benefits include the following:
>
> *Increased Mobility*
>
> - Congestion Relief – Fewer cars on the road results in less congestion, which has a number of benefits and helps to improve quality of life.
> - More Transportation Choices – Greater investment in a balanced transportation system and transit-oriented developments can provide increased use of public transportation, and sustainable, healthy transportation options such as walking and bicycle riding.

- Reduced Commute Time and Increased Productivity – Homes closer to job centers can reduce commute time and distance, especially if other modes of transportation are available. People can save time by not sitting in traffic commuting. Public transit provides the opportunity for relaxing or getting work done. Mixed use communities also mean more opportunities to shop and access daily needs near home, saving additional travel time.

Economic Benefits

- Savings – Taking public transit and driving less can save individuals money for fuel costs. Infrastructure/operating costs for transit can also decrease when such costs are spread among an increased number of riders.
- Taxpayer Savings – Services such as maintaining sewer systems, and police and fire services can be more efficient and cost less if they cover more people in less space.
- Neighborhood Economic Development – Increasing density puts more residents within walking distance of neighborhood businesses, providing opportunities for neighborhood economic development.
- Lower up-front infrastructure costs for roads, parking structures, and lower associated environmental impacts.

Reduced Air and Water Pollution

- Less Air Pollution – Reducing the number and length of car and truck trips means less pollution that directly or indirectly creates summertime smog and particulate pollution. Harmful pollution that can cause cancer and other health problems are greatly reduced.
- Improved Water Supply and Quality – Compact development can reduce water use and put less strain on sewer systems. Water quality can also be improved because run off can be filtered by natural lands instead of paved surfaces.

Conservation of Open Space, Farm Land and Forest Land

- The Committee also recognizes there are greenhouse gas benefits inherent in conserving land-based resources including farm and forest land. They play a vital role in California's agricultural economy and maintaining biological health and diversity in the state. These resources also are capable of sequestering carbon in plant and tree matter as well as in soil.
- Urban parks can provide a great opportunity to enhance the aesthetic quality and function of urban neighborhoods. Urban parks, stream corridors, and trails strategically located can encourage non-motorized modes of transportation. When located in urban areas that people can walk or bicycle to, small parks can

obviate the need for automobile trips to other parts of the city to satisfy everyday recreational needs.

Healthier, More Equitable and Sustainable Communities

- More Opportunities for Active Lifestyles – Increased walking and bicycle riding can contribute to cardiovascular fitness and weight control, both of which can make people healthier and increase quality of life. Increased physical activity can reduce a number of chronic health risks such as obesity, diabetes, heart disease, cancer and depression.
- Less Dependence on Foreign Oil – Using alternative means of transportation and alternative forms of energy and fuel will reduce our dependence on foreign oil, which can help add to national security and economic stability.
- Improved Safety – Thriving, walkable neighborhoods mean more people on the street, helping to improve safety and discourage unlawful activity.
- Greater Housing Choices – Communities can be designed to include a mix of housing options, which can better meet a growing market demand for a variety of housing types. Recent studies indicate that homebuyers are willing to pay a premium to live in a walkable community.
- Preservation of Farmland, Habitat and Open Space – Dense, mixed-use communities can encourage infill and Brownfield redevelopment, thereby preserving open space, farmland and wildlife habitats.
- More Equitable Communities – Social equity issues can be partially addressed by improving local access and transportation to nutritious foods and health care services that are often out of reach in low income communities and communities of color."

<u>Project-Level Adverse Impacts</u>

While various combinations of the measures listed and referenced above in Section III.D. should have the effect of reducing greenhouse gas emissions and creating some combination of the above-listed co-benefits from the regions' transportation systems, there may be potential adverse consequences from implementing these measures. ARB cannot anticipate what development policies, if any, will be adopted and implemented at the regional or local level.

MPOs will need to take these potential impacts into account when developing RTPs, and local government agencies will need to take these into account when approving subsequent site-specific projects in furtherance of the RTPs.

The nature and extent of any of the following potential impacts is difficult to predict. There are numerous and varied compliance options available to meet

Regional Targets. In addition, ARB is not able to speculate about the nature of the SCSs or APSs that may be developed and implemented by the 18 regions. Therefore, the list of impacts below is speculative, at best. However, if one of the purposes of SB 375 is to encourage more compact, mixed-use, urban infill and redevelopment activity along transportation corridors, then it is reasonable to assume that some of the following impacts may occur, although the extent of the impacts and the specific locations where the impacts will occur cannot be predicted.

Use of individual measures or combinations of measures in an SCS or APS may lead to development activity (projects) that could have the following significant adverse impacts:

Air Quality
Placement of sensitive receptors close to high traffic areas where exposure to criteria air pollutants is increased, could create potential health hazards in localized areas. This could occur if new housing and other sensitive receptors, such as schools, are developed close to transportation corridors such as roads and freeways.

Traffic Congestion
Increased traffic congestion in localized areas or on individual roadways could occur as a result of additional residential and/or commercial development in existing urbanized areas where the road and transit systems are not adequate to handle the increased amount of vehicle traffic.

Population Growth
Substantial population growth in localized areas or communities could occur where new infill development or redevelopment is approved at greater densities or concentrations within existing urban centers, existing neighborhoods, or along major transit routes.

Displacement of Residents
Displacement of existing residents and/or businesses due to redevelopment could occur in situations where existing residential and/or commercial properties will be replaced with new infill development.

Utilities and Services
Requirement for new, expanded or altered utility and service systems to accommodate increased concentration of development (i.e. increased density) could occur in situations where the capacity of existing infrastructure (roads, sewers, water lines, power lines) in existing developed areas must be expanded or rehabilitated as a result of increased levels of residential and non-residential development.

Noise
Increased noise pollution in areas surrounding new development or redevelopment sites could occur as a result of urban infill development that places sensitive receptors (homes, schools, parks) in close proximity to noise from adjacent transportation corridors, commercial centers, or other noise generators.

Light and Glare
Increased light pollution in areas surrounding new development or redevelopment sites could occur as a result of intensified development and infill development that places sensitive receptors (homes, schools) in close proximity to uses that require night-time lighting such as transit stops, sports fields, and commercial signage.

Aesthetic/Visual Effects
Changes could occur in the visual character or aesthetics of areas in or adjacent to new development or redevelopment sites. New development or redevelopment may involve increased building heights and reduced setbacks between buildings, changing the visual character of a neighborhood and potentially obstructing views.

Growth-Inducing Impacts

Growth inducement occurs when an activity removes an obstacle to growth or accelerates normal rates of growth. The proposed project will not have a growth inducing impact because it will not influence the amount or rate of population growth in the State. SB 375 anticipates that the State's population will grow and encourages regions to develop plans for accommodating that growth. The proposed project will have no effect on demographics, population growth rates, or external factors such as immigration policy that might influence the rate of growth in the State. Population projections used for SCS planning will be based on regional forecasts and state projections.

SB 375 is intended to reduce greenhouse gas emissions as a result of better coordinated transportation and land use planning that generally commits fewer petroleum and other resources to accommodate a given level of population growth. There should be no net increase or decrease in overall growth resulting from the proposed project; instead the proposed project calls for an incremental decrease in per capita greenhouse gas emissions, even as the State's population increases.

Cumulative Impacts

The only identifiable cumulative impact of the proposed project that is not speculative is the change in greenhouse gas emissions from business as usual.

As discussed above, this is a positive impact in that greenhouse gas emissions are expected to be reduced from business-as-usual levels.

Using the data provided by the MPOs over the past four months, the proposed targets would result in a reduction of greenhouse gas emissions of over three million metric tons of CO2 per year (MMTCO2/year) in 2020, and 15 MMTCO2/year in 2035. When these reductions are applied to the most recent statewide 2020 emissions forecast, the emissions target for passenger vehicles in California's 2008 Climate Change Scoping Plan is met.

Given the numerous potential compliance measures that may or may not be combined in myriad ways within individual regions, quantification or even a qualitative discussion of the cumulative impacts of potential adverse impacts identified above for any single region are even less certain than the already speculative individual impacts identified and therefore cannot be estimated at this time.

Potential Mitigation Measures

Future actions that may be taken by regional and local agencies to implement the Regional Targets will be subject to local control and these actions will be required to undergo independent CEQA review, at which time the potential for adverse impacts and appropriate mitigation measures will be analyzed and implemented.

The following are general mitigation strategies that could be employed to mitigate the potential adverse impacts identified in section III.E. above. ARB does not have the authority to implement any of the following mitigation measures, as these measures are the responsibility and within the control of regional and local agencies that may act later to implement the Regional Targets through adoption of regional and local plans (see Section II.A.-C. above). In addition, the selection of appropriate mitigation measures must be made by the regional or local agency in the context of the particular action being proposed.

This following is not intended to be a comprehensive list of potential mitigation measures. Each regional and local agency that proposes to implement the Regional Targets in an SCS, APS, or local plan or project must determine on a case by case basis, the necessity and feasibility of mitigation measures that are appropriate to a specific later action being taken.

Air Quality

The potential exposure for residents is place-specific and varies due to regional characteristics and the intensity of vehicle emissions from roadways. Exposure to air pollutants for residents living in close proximity to freeways and arterial roadways can be reduced through consideration of project location, appropriate site design and building design, including: sensitive placement of residential buildings on the development site, use of natural and manmade buffers (e.g.,

vegetation, soundwalls), and where feasible, constructing transportation corridors below grade; and through use of appropriate indoor air filters, placement of buildings as far away from roadways as possible, designing building air intakes to be downwind and away from roadways, and limiting the number of openable windows on sides of buildings facing busy roadways. Site and building design should be considered in the context of a broader regional strategy for air pollution control measures.

Traffic Congestion
Adopt and implement trip reduction and traffic calming measures in areas with high vehicular traffic. Reduce traffic congestion through implementation of parking management programs, provision of adequate bike and pedestrian facilities, and establishment or expansion of transit opportunities. Conduct project-specific traffic analyses where warranted and require appropriate mitigation measures as a condition of permit approval. Local traffic mitigation should be considered in the context of a broader regional strategy for transportation and traffic management.

Population Growth
Adopt and implement local land use and zoning policies that establish building density or population density standards for neighborhoods, including designation of high density areas suitable for compact urban development. Plan for areas within existing communities where growth can be accommodated with appropriate supporting infrastructure, including public services and transportation access.

Displacement of Residents
Adopt and implement local regulations to provide replacement housing within the community for residents who are displaced as a result of redevelopment projects. Comply with all state and federal laws and regulations providing relocation benefits and services. Require development projects to include affordable housing units within the project that may be occupied by displaced residents.

Utilities and Services
Adopt and implement location-specific utility master plans and infrastructure plans to plan for increased capacity of sewer, water, and storm drainage facilities in existing urban areas that are planned for new growth, consistent with local land use policies. Adopt appropriate financing mechanisms to ensure that new development pays its fair share toward the provision of required public services such as fire and police protection.

Noise Pollution
Adopt and implement local noise standards and noise control measures, including limits on decibel levels and/or performance standards for indoor and outdoor noise levels. Project design should ensure that stationary noise sources are placed as far as possible from sensitive receptors to meet local noise

standards. Adopt and implement building acoustical insulation standards where setbacks and sound barriers do not sufficiently reduce indoor noise levels. Limit hours of operation of construction activities and other noise-generating activities to mitigate impacts on residents and other sensitive receptors. Conduct project-specific noise evaluations where warranted and require appropriate noise mitigation as a condition of permit approval.

Light and Glare
Adopt and implement local design guidelines, lighting standards, site development standards and building standards to minimize light and glare impacts on sensitive receptors. Regulate the type and placement of street lighting, parking lot lighting, building exterior lighting, reflective building materials, lighted outdoor signage, and lighting used in landscaping, to ensure sensitive receptors are protected. Conduct project-specific light and glare evaluations where warranted and impose appropriate mitigation measures as a condition of permit approval.

Aesthetic/Visual
Adopt and implement local design guidelines and other policies and regulations that protect scenic views and avoid visual intrusions through both site design and building design. Design buildings and other structures to minimize contrast in scale, massing, color and grading between the project and surrounding areas. Make use of natural landscaping as a screen or to soften contrast. Relocate or avoid development that may impact state and locally designated scenic highways and vistas. Conduct project-specific aesthetic/visual evaluations where warranted and impose appropriate mitigation measures as a condition of permit approval.

Unavoidable Adverse Impacts

It is too speculative to determine whether these or other mitigation measures will be available or effective in reducing potential site-specific impacts to a less than significant level, without knowing the specific characteristics of the future actions that might be taken by other agencies. While it is likely that future actions by regional and local agencies will be governed by their own regulations, development standards, and environmental performance measures which will serve to mitigate the impacts of any given future action, ARB does not have a basis for concluding that any future adverse impacts will be adequately mitigated.

In the absence of evidence to support a finding that any potential future impact will be mitigated to a less-than-significant level, ARB staff concludes that there may be unavoidable potential impacts of Regional Target setting, as a result of future implementing actions by regional and local agencies. This conclusion is not intended to pre-determine any environmental determinations that must be made in the future by regional or local agencies on a case-by-case basis. These

future determinations must be made in the context of the particular action (project) that is being considered for approval.

IV. Project Alternatives

CEQA and ARB regulations require ARB's functional equivalent document to describe and evaluate a range of reasonable alternatives to a proposed project that would feasibly attain most of the basic objectives of the proposed project but would avoid or substantially lessen any of the significant adverse impacts of the proposed project (CEQA Guidelines §15126.6(a), 17 CCR § 60006). The range of alternatives required in an EIR is governed by the "rule of reason" that the EIR set forth only those alternatives necessary to permit a reasoned choice. An EIR need not consider an alternative whose effect cannot be reasonably ascertained and whose implementation is remote and speculative (CEQA Guidelines §15126.6(f)(3)).

ARB analyzed five possible alternatives to the proposed project:

- No project (Alternative 1)
- Increase proposed targets substantially (Alternative 2)
- Decrease proposed targets substantially (Alternative 3)
- Use an absolute emissions metric instead of a per capita reduction metric (Alternative 4)
- Use a vehicle miles traveled metric instead of a per capita reduction metric (Alternative 5)

A. Alternative 1 – No Project

ARB staff acknowledges that MPOs and local governments throughout the State are already independently improving and integrating transportation and land use practices consistent with the intent of SB 375. Setting Regional Targets is designed to foster these pre-existing planning efforts by setting ambitious achievable targets for each region. Without Regional Targets, future land use and transportation decisions will continue to promote change but are likely to take longer in overcoming current business as usual practices because:

- Local governments and developers will not be able to utilize CEQA streamlining incentives available from SB 375;
- It will be more difficult to leverage grants and other funding sources without being able to quantify data and staffing needs necessary to minimize environmental impacts due to growth; and
- Without targets collaboration and communication between MPOs is less likely as they develop and refine lower-impact planning strategies.

Without Regional Targets, it is likely that statewide planning improvement efforts will advance at a slower pace than with Regional Targets. This could result in regional transportation plans that do not minimize greenhouse gas related

environmental impacts and, due to population growth and the vehicle miles travelled associated with it, erode gains made by other greenhouse gas reduction measures such as introducing cleaner vehicles and fuels to California. For these reasons, ARB staff has concluded that Alternative One has greater adverse environmental impact than the proposed project and should not be pursued.

Under CEQA, the alternatives are required to feasibly obtain most of the basic objectives of the proposed project. For this reason, it is important to note that SB 375 requires ARB to prepare and approve regional greenhouse passenger vehicle emission reduction targets for the State's 18 MPOs (GC § 65080(b)(2)(A)). If targets were not adopted (i.e., the "No Project" alternative) ARB would fail to fulfill the legal mandates specified in SB 375. While a No Project alternative might reduce at least some of the identified potential adverse impacts, it would be outweighed by foregone greenhouse gas emission reductions and would not meet the statutorily mandated target-setting objectives of the proposed project.

B. Alternative 2 – Increase Proposed Targets Substantially

Over the past year and a half ARB staff has worked closely with MPOs and stakeholders in an effort to set the most ambitious achievable Regional Targets. It has been widely acknowledged that if targets are set too high (more ambitious but less achievable) many MPOs would need to use an APS rather than SCS to demonstrate achievement of their targets. By using an APS rather than an SCS it becomes less likely that:

- Extensive and comprehensive environmental review is conducted on the region's plan to meet targets since the APS appears not to need CEQA review;
- Local governments and developers have multiple opportunities to utilize CEQA streamlining incentives and therefore a cost-effective means to construct sustainable projects; and
- Real long-term sustainable planning reforms are able to assist statewide efforts in achieving AB 32 greenhouse gas emission goals to minimize the effects of global climate change.

There are many valid reasons an MPO may need to temporarily rely on an APS for one planning cycle, for example a short-term decrease in funding. This is, however, different than setting targets that ensure the majority of MPOs must rely on an APS over the long term to meet targets.

For these reasons, if targets are substantially increased from proposed levels the actual gains of that increase are far less likely to ever come to fruition. Many or even most MPOs would likely adopt an APS and the status quo development patterns could continue for the foreseeable future because the incentives designed into SB 375 are no longer attainable. In addition, even if Alternative 2

did not trigger substantially more APSs, increased use of the compliance measures identified above for SCSs would likely produce more of the identified potential adverse impacts. Therefore ARB staff has concluded that Alternative Two has greater adverse environmental impact than the proposed project and should not be pursued.

C. Alternative 3 – Decrease Proposed Targets Substantially

Decreasing the target may have equally adverse effects as increasing them. By reducing Regional Targets, it becomes increasingly more likely that each region can adopt an SCS strategy that closely resembles past RTPs making it possible for many projects within an RTP to continue past patterns of leap frog development and sprawl. Since SB 375 provides CEQA streamlining benefits to projects that are consistent with an SCS that meets the region's target, these less sustainable projects will be more easily approved which is counter to the intent of the statute. This alternative is likely to result in:

- Failure to foster further investment and development in regional models, jobs-housing balance and jobs-housing fit, diversity in available housing, and transportation alternatives;
- Maintenance of cost incentives for developers and landowners to convert agricultural and greenfield lands for development, rather than taking advantage of infill opportunities; and
- Erosion of the gains made with improved vehicle technologies and fuels by continuing the trend of growth in vehicle miles traveled (VMT).

We acknowledge that substantially decreased targets could in theory reduce the number and severity of potential adverse impacts identified above for the proposed project. However, as described here for Alternative 3, substantially decreased targets would not only undermine the fundamental statutory objectives for target-setting but might actually worsen the existing baseline situation by allowing CEQA streamlining for business-as-usual developments, and potentially causing other environmental impacts associated with sprawl development (such as loss of wildlife habitat and agricultural lands). For these reasons ARB staff concludes that Alternative Three has greater adverse environmental impact than the proposed project and should not be pursued.

D. Alternative 4 – Use a Total Emissions Metric Rather Than a Percent Reduction Per Capita Metric for Proposed Targets

SB 375 gives ARB discretion to use any metric it deems appropriate. The rationale for the per capita reduction target is explained in the description of the proposed project. The Regional Targets could be expressed as a reduction in the total amount of greenhouse gas emissions, in million metric tons, that must be achieved by each region, by the years 2020 and 2035. This would involve

converting the percent per capita reduction targets to total million metric tons of greenhouse gas emissions that must be reduced.

Using this alternative metric would not have the advantages of the percent per capita reduction metric which is proposed. The per capita metric is a relative metric. The benefit of this is that as the assumptions for 2005 change, making the 2005 emission levels higher or lower, the target increases or decreases appropriately. An absolute metric, as represented by this alternative, does not adjust to changing assumptions, and therefore may require an excess of emission reductions (if 2005 emissions decrease) or too few emission reductions (if 2005 emissions increase). At the same time, the absolute emission reduction metric ensures that overall emissions are decreasing, but not necessarily equitably across regions. Some regions may not experience the population growth that they expect, in which case they would be obligated to reducing an absolute amount of emissions with no growth to accomplish it. Other regions may grow faster than anticipated at the time that the absolute target was set, thereby making it easier to achieve the target as compared to the slower growth regions.

The total emissions target has the disadvantage of not being responsive to changing assumptions, especially in population growth, and it may handicap regions that are slow-growing while being easier to achieve for fast growth regions. Alternative Four does not provide the ability to address growth rate differences among the regions and could result in unfairly distributed emission reduction burdens if assumptions were to change after the targets are set. For these reasons, ARB staff concludes that Alternative Four is less desirable than the proposed project and should not be pursued.

E. Alternative 5 – Use a Vehicle Miles Traveled (VMT) Metric Rather Than An Emission Metric for Proposed Targets

SB 375 gives ARB discretion to use any metric it deems appropriate. The statute requires the target to result in a reduction of greenhouse gas emissions, not VMT. While there is a correlation between emissions and VMT, they are not necessarily interchangeable or directly related. By setting a VMT reduction metric, there is no guarantee that consistent and progressive reductions in greenhouse gas emissions will occur. Using a VMT metric may therefore interfere with meeting the statutory mandate to reduce emissions.

Staff concluded a greenhouse gas emissions metric was preferable to a VMT metric due to its simplicity. Over the past several years the public, through various forms of the media, has become increasingly aware of the potential effects of global climate change. The costs and benefits associated with implementation efforts to reduce the effects of global climate change have been expressed in emissions levels. This metric has also been used in state and federal policy discussions. Therefore, while staff will continue to collect

information related to vehicle miles traveled the proposed metric should be expressed as emissions levels.

For these reasons, ARB staff concludes that Alternative Five is less desirable and may have greater environmental impact than the proposed project and should not be pursued.

F. Rationale for Selecting the Preferred Alternative (Proposed Regional Targets)

The purpose of alternatives is to identify ways to avoid or reduce the potential adverse impacts of the proposed project, but still allow most of the project objectives to be met. While it is difficult to say with certainty what the particular adverse impacts of the proposed project would be, for the reasons explained in this document, it is similarly difficult to predict whether any of these alternatives would result in better environmental outcomes than the proposed project. However, based on the analysis above, several of the alternatives have the potential to result in greater adverse effects as compared to the proposed project. Others do not meet the basic project objectives.

- Alternative 1 does not meet project objectives and could result in greater environmental impacts because there would be no state goals for reducing emissions.
- Alternatives 2 and 3 could result in greater environmental impacts as compared to the proposed project.
- Alternative 4 is not responsive to changes in planning assumptions and could result in unfair distribution of burden for reducing emissions.
- Alternative 5 may not meet project objectives because a VMT metric may not translate directly into desired emission reductions.

Setting Regional Targets requires a balance between setting goals that are high enough to motivate a departure from business-as-usual planning and development, but not so high as to be out of reach of the regions and local governments. Setting targets too high negates the potential to reduce statewide emissions levels through reduced passenger vehicle travel. Setting targets too low leads to a similar outcome. This is why after months of extensive consultation with academic experts, MPOs, state agencies, local governments, and the public, staff concludes that the proposed Regional Targets are the most ambitious and achievable based on information available at this time, and result in the greatest environmental benefit, as compared to the alternatives described above. The proposed Regional Targets will foster the most change by challenging each region yet allowing them to be able to achieve the targets and take advantage of SB 375 incentives.

V. Conclusion

ARB staff has concluded that the subsequent actions of MPOs after ARB establishes Regional Targets may have adverse impacts on the environment. However, we cannot speculate at this time what those specific impacts may be, due to lack of sufficient information about the mix, location, and nature of those subsequent actions.

While there is a potential for adverse impacts based on subsequent regional and local decisions, the net benefit to the environment from minimizing long-term transportation-related greenhouse gas emissions is potentially substantial. SB 375 is designed to institutionalize an alternative approach to planning for new growth, at the state, regional and local levels. Over time, this approach will result in minimizing the impact of California's transportation-related greenhouse gas emissions. The cumulative impact of greenhouse gas reductions from SB 375 combined with reductions from sources both within and outside of California is intended to reduce the substantial environmental impacts of climate change.

In addition, ARB staff considered several alternatives to the proposed Regional Targets and concluded that the proposed project is preferred for minimizing adverse impacts to the environment while meeting the intent of SB 375 to achieve greenhouse gas reductions from the land use and transportation sector. This determination was reached only after staff:

- Consulted the Climate Change Scoping Plan Functional Equivalent Document;
- Thoroughly reviewed MPO RTPS, data, and scenario submittals;
- Determined that ARB cannot predict what land use, transportation, and other policy measures will be implemented by MPOs to achieve the regional targets in future RTP planning cycles;
- Recognized that each individual SCS would have to undergo a substantial environmental review as part of the RTP adoption process; and
- Concluded ARB's proposed action cannot interfere with local government land use decisions (Cal. Const. Art. 11 § 7, GC § 65080(b)(2)(K).

A 45-day public review period of this Functional Equivalent Document is provided pursuant to CEQA. ARB will respond to all significant environmental concerns raised by the public during this comment period or at the ARB Board Hearing prior to taking final action to establish Regional Targets.