INFORMATION

Agenda Item #11f

October 11, 2016

Subject: **Sustainable Land Use and AB 32 Scoping Plan**

Reporting Period: August-October 2016

Staff Lead: Suzanne Hague, Senior Advisor for Community Development and Planning

Recommended Action:

For information only – no action required.

Background:

The AB 32 Scoping Plan is the State's official plan for achieving the ambitious statewide greenhouse gas reduction targets established in AB 32 (2006) and SB 32 (2016). Executive Order B-30-15 (2015) instructed the CA Air Resource Board (ARB) to update the AB 32 Scoping Plan, the state's official plan for achieving its greenhouse gas (GHG) reduction targets, to include guidance on achieving not only the state's statutory 2050 GHG target of 80% below 1990 levels, but also the 2030 target established in B-30-15, and since codified into law in SB 32, of 40% below 1990 levels.

Modeling by ARB indicates that reductions in VMT are needed, beyond those that will be achieved through continued implementation of SB 375, to achieve the 2030 and 2050 GHG reduction goals.

Update:

SGC has been leading a coordinated, multi-agency initiative to create a stronger role for land use and VMT-reducing transportation strategies in the updated Scoping Plan. These strategies are not only needed to achieve the State's GHG reduction targets, but are also intended to accelerate implementation of equitable, sustainable community development throughout California's diverse communities.

I. Public Workshop and Documents on Potential State Strategies

On September 14, 2016, SGC helped organize and lead a public workshop, sponsored by ARB, which included a half-day discussion of potential land use and transportation strategies to reduce VMT and advance multiple related co-benefits of sustainable communities strategies. Around 200 members of the public participated; about 30 people spoke or provided live comments via the internet. The great majority of comments received were supportive of the general direction of the State in beginning to define a more substantive role for land use and VMT-reducing transportation strategies in the State's overarching climate mitigation strategy.

Two documents were released for public comment in advance of the workshop – attached here:

1. Vibrant Communities and Landscapes: An interagency vision for land use, sponsored by SGC, the Governor's Office of Planning and Research, and all six SGC member agencies. This is intended to inform the Scoping Plan as well as other relevant State-level documents that touch issues of land use.

2. Potential State-Level Strategies for Reducing VMT: Lists several dozen potential strategies the State could employ to advance sustainable, equitable communities and help meet necessary VMT reduction targets per ARB's 2030 and 2050 goals.

The above two documents were open for public comment through September 28, 2016. At the time of preparing this report, all written comments had not yet been reviewed.

SGC has also been working with ARB, in partnership with SGC member agencies, to ensure that the above two documents, and comments received to date, were also incorporated into the first draft of the Scoping Plan chapter on transportation strategies, due to be publicly released in October, 2016. The public draft will also be open for public comment following its release.

II. Technical Assistance on Assessing the Impact of State-Level Land Use and Transportation Strategies on VMT Reduction

Additionally, SGC has sponsored a white paper that examines the potential VMT-reduction impact of potential State-level VMT reduction policies and strategies, including many potential strategies that SGC has been exploring in partnership with ARB for possible inclusion in the AB 32 Scoping Plan update and beyond. Although copious research literature exists on the effectiveness of VMT reduction strategies at the local and regional levels, this work addresses knowledge gaps in projecting and measuring the VMT reduction impact of *State-level* policies and programs.

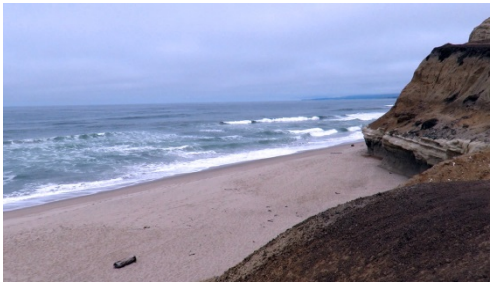
SGC has contracted with two leading academic experts in transportation, land use, and VMT to complete this technical paper: Dr. Susan Handy, Professor in the Department of Environmental Science and Policy and the Director of the Sustainable Transportation Center at the UC Davis, and Dr. Marlon Boarnet, Chair of the Department of Urban Planning and Spatial Analysis at USC.

The final paper will be publicly available in October, 2016 and will inform subsequent development of the Scoping Plan and other State initiatives in this policy area.

III. Regional Stakeholder Meetings on Potential State-Level Land Use and VMT-Reducing Transportation Strategies

SGC is planning to participate in a series of regional convenings, hosted by third parties at the local level, to gather input on the potential State strategies discussed above from the perspective of stakeholders and practitioners in land use, development, transit, active transportation, environmental justice, and sustainable communities. These will take place in October and November, 2016, and will help inform the final draft of the Scoping Plan and subsequent actions to further develop and implement State policies and programs.

September 2016



Vibrant Communities and Landscapes

A Vision for California in 2050

Draft for Comment & Discussion

cdfa CALIFORNIA DEPARTMENT OF FOOD & AGRICULTURE

CHHS

CALIFORNIA STRATEGIC GROWTH COUNCIL

GOVERNOR'S OFFICE OF PLANNING AND RESEARCH STATE OF CALIFORNIA

CALIFORNIA natural resources AGENCY

CalEPA California Environmental Protection Agency

BCSH

CalSTA

FOREWARD

Land use decisions, including development patterns, land conservation and protection, and land management practices, play a critical role in the State's future and achievement of its long-term community health, environmental, and economic goals. This vision, and set of actions included to realize it, is the result of a collaborative dialogue and a shared desire to better consider land use in State climate change programs and other initiatives that support the State's long-term environmental goals.

This document was developed with the recognition that land use decisions are inherently difficult decisions that require consideration of many conflicts and trade-offs, and balancing the needs of many constituencies, including disadvantaged communities, businesses, local agencies, developers, and landowners. This document is not intended to reconcile these issues or to remove them from the domain of local governments. Rather, this document is intended to consider land use in the context of the California's climate change policy and how the State can support actions, at all levels of government, to facilitate development and conservation patterns that help to achieve the State's climate goals.

The collaboration included the following agencies: Business, Consumer Services and Housing Agency, California Environmental Protection Agency, California Natural Resources Agency, California State Transportation Agency, California Health and Human Services Agency, California Department of Food and Agriculture, the Strategic Growth Council, and the Governor's Office of Planning and Research.

We welcome comments and input on this vision.
Comments can be sent to ca.50m@opr.ca.gov

Vibrant Communities and Landscapes

A Vision for California in 2050

California's history and future are built upon its land and its people. The State is home to the most diverse population in the United States, and its landscapes include productive agricultural areas and spectacular natural beauty – from the shoreline to the mountains to the deserts. This natural beauty, alongside world class cities and thriving communities, draws visitors and residents alike to support the State's innovative economy, spur its entrepreneurial spirit, and sustain its creative culture. Together, California's people, communities, and natural resources support its status as the sixth largest economy in the world.

California has long been a leader in protecting the environment. California is committed to reducing its greenhouse gas (GHG) emissions 40 and 80 percent below 1990 levels by 2030 and 2050, respectively. At the same time, the State's population is projected to grow to 50 million residents by 2050. As the State acts to achieve these emission reductions and support future growth, California has the opportunity to realize critical benefits in public health, natural resource, economic, equity, and resiliency outcomes through thoughtful and comprehensive policy implementation. Realizing this potential requires an integrated vision for how the State develops communities, preserves and protects its landscapes, and ensures that all Californians have equitable access to housing, health care, jobs, and opportunity. This document provides a vision for this future that forms a common foundation for actions related to land use across State agencies and programs.

Integrating Conservation and Development

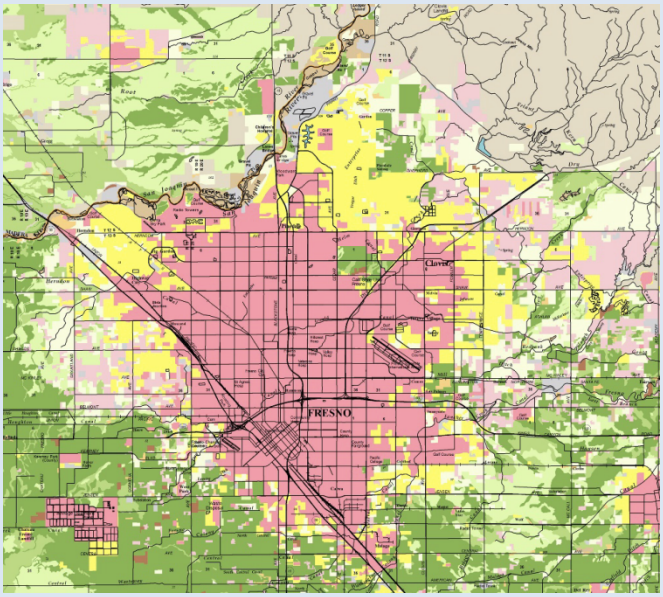


Figure from Department of Conservation. 2015. Farmland Mapping and Monitoring Report.

A comprehensive land use vision considers the sustainable balance between development and conservation in an integrated manner. The picture to the left shows urban growth between 1984 and 2012 in Fresno. Yellow shows the urban land added to the city's footprint over that time. A more infill-oriented development pattern will reduce land converted from agricultural uses or natural states. And, it will also reduce emissions of greenhouse gases and other harmful pollutants, lower infrastructure costs, improve public health through increases in biking and walking opportunities, and leads to numerous other health, economic, and environmental benefits. It also avoids GHG emissions associated with conversion of land.

Vision

As the State works toward its 2030 and 2050 climate change goals, its land base, including natural, working, and developed areas, is recognized as foundational and integral to the State's climate policy, economy, and quality of life. As such, the State plays a meaningful and impactful role in shaping the future communities and landscapes of California. Because of the pivotal role of land use in the State's environmental, economic, health, and related policies, California is taking action to grow in a manner that assures:

- Development and conservation investments and decisions focus on building social equity and supporting thriving and healthy communities with improved access to and supply of affordable housing, transportation alternatives, open space and outdoor recreational opportunities, affordable healthy foods, living-wage jobs, social support, and economic and educational opportunities;
- The land base, including natural, working, and developed areas, is a foundational element of the State's strategy to meet GHG emission reduction targets. This importance is further recognized in other land, energy, and climate change policy documents and decisions, including State, local, and regional planning and investments;
- Land is protected, managed, and developed in a manner that maximizes resilient carbon storage, food security, and other ecological, economic, and health objectives. Natural and working lands are used to build resilience in natural, built, and social systems, and provide buffers against changing climate conditions that will allow for flexible adaptation pathways;
- New development and infrastructure are built primarily in locations with existing infrastructure, services, and amenities (i.e., previously-developed locations), rather than greenfield locations; and
- The value of ecosystem services conferred by natural systems are accounted for and included in State, local, and regional planning and investment decisions, resulting in protection of these services and California's globally significant biodiversity.

Actions

State, local, and regional governments need to work together to achieve this shared vision and to encourage land use and transportation decisions that minimize GHG emissions. While recognizing its focus on urban development and transportation, the State will build on framework and governance structure established by Senate Bill (SB) 375 to achieve deeper GHG emission reductions, and will integrate the protection, conservation, and management of natural and working lands.

A number of current and emerging State planning and policy efforts provide the opportunity to articulate and implement this vision, and provide State leadership through work with local and regional partners. These include the Climate Change Scoping Plan, the Regional Transportation Plan Guidelines, the Sustainable Freight Action Plan, updated General Plan Guidelines, implementation of AB 2087 for regional conservation planning, the State Wildlife Action Plan, the Water Action Plan, and implementation of SB 743 guidelines and other updates to the California Environmental Quality Act.

The State will prioritize the following actions to support regional and local governments and to maximize GHG emission reductions through the conservation and protection of natural and working lands, reductions in vehicle miles traveled, and direct emission reductions associated with compact development patterns:

- **Develop performance metrics for environmental, health, and equity outcomes associated with stronger land use policies:** Working with local and regional governments, the State will develop systems to measure the environmental, health, and equity impacts of land use, infrastructure, and

development policies and programs and will allow all levels of governments to maximize benefits, avoid harm, and measure and track the results. Furthermore, the State will continue to direct resources, infrastructure, services, jobs, training, and technical assistance to communities facing historical disadvantage to improve resource availability, access to services, and quality of life.

- **Establish land conservation targets:** The State will develop quantitative and achievable goals to protect and limit the conversion of the State's most productive farmland, rangeland, and forests, as well as the natural and working lands most critical to preserving California's biodiversity and the ability for Californians to adapt to climate impacts, alongside complementary policies to focus new development in currently developed areas, reduce conflicts among adjacent land uses, and minimize risks to existing land uses and public health and safety.
- **Update regional greenhouse gas reduction targets to achieve 2030 and 2050 greenhouse gas emission reduction targets:** The State will work with local and regional governments to develop stronger GHG emission reduction targets for regional sustainable community strategies under SB 375 and identify opportunities to strengthen implementation success.
- **Develop policies and processes for infrastructure siting that are consistent with the State's conservation, development, and population health goals:** The State will develop supportive policies and tools to help private and public sector partners, including local and regional agencies, to identify sites for infrastructure projects, including renewable energy projects, that are consistent with and support the State's conservation, development, and climate change goals. The State will continue and strengthen policies that facilitate substantial increases in the proportion of investments in transit, active transportation, fix-it-first maintenance of existing infrastructure, and shared mobility infrastructure, as well as increasing and integrating natural and green infrastructure in developed areas, including tree planting, parklets, and other strategies.
- **Explore and develop financing, regulatory, and other tools to support more efficient and more equitable development:** The State will evaluate and develop financing mechanisms, incentives, guidelines, and other tools to substantially accelerate more efficient and equitable development outcomes. This includes: reducing barriers to housing development in infill areas; promoting infill development and necessary infrastructure in existing communities; and implementing strategies to ensure that long-time residents can stay in place as neighborhoods improve.
- **Explore and develop financing, regulatory, and other tools to promote land protection and carbon-oriented land management practices:** The State will examine, evaluate, and develop financial or regulatory compliance incentives to private landowners to promote both permanent and temporary conservation and management for carbon sequestration.
- **Support transportation policies such as priced express lanes, reduced parking requirements for development, and transit commuter incentives that promote infill development and reduce vehicle miles traveled:** The State will implement road user and parking pricing policies, and coordinate these policies with programs to avoid adverse impacts on low-income drivers and with infrastructure investments as described above. Further, the State will invest in technology to improve transportation system efficiency that provide choices that enable people and goods to reach destinations quickly and cleanly.

Benefits of the California 2050 Vision

Research, analysis, and implementation demonstrate the myriad benefits to the State's residents, local and regional governments, and the economy that can result from an integrated approach to land use. These include, among others:

- **Tangible, short- and long-term benefits for disadvantaged communities:** Focusing on infill and compact development patterns and coordinated investments to expand low-cost and low-carbon transportation options encourages investment in existing and underserved communities, reduces

household costs, helps alleviate pollution burdens in the highest-impacted communities, and increases access to economic opportunities.

- **Improved public health:** More compact development patterns, access to parks and green space, and abundant recreational options provide opportunities for active transportation and exercise. Increases in these activities help provide respiratory and cardiovascular health benefits and reduce the burden of chronic diseases such as diabetes, certain types of cancers, and dementia, while improving mental health. Furthermore, an integrated conservation and development strategy will contribute to significant air quality benefits, which improve respiratory and cardiovascular health.
- **Resilience to the impacts of climate change:** Protection of natural systems, expansion of transportation options, and compact development patterns can reduce exposure to the risks of a changing climate, especially in disadvantaged communities. Protected and managed natural systems can mitigate impacts of floods, protect water quality and supply, enhance food security, and protect against other climate impacts. Compact development patterns and integrated transportation and green infrastructure reduce pressures on natural systems and also result in lower water and energy use, both of which contribute to greater resilience.
- **Maintenance of California's global economic leadership:** California's natural resources alongside its urban environments form the very fabric of what attracts businesses and residents to the State and fosters California's leadership in the global economy. Taking an integrated approach to creating attractive living, working, and recreational environments will help the State to remain competitive.
- **Monetary savings for residents, businesses, and governments resulting from lower transportation and energy costs:** More compact development patterns save local municipalities – as well as the State - money by reducing the long-term costs of providing services and infrastructure to low density development. Multi-modal transportation choices enable the efficient movement of people and goods.
- **Promotion of urban-rural connectivity in all regions:** Recognizing the climate change benefits of functioning natural systems and sustainable working lands is necessary for making fully informed land use and resource management decisions, and can serve to drive investment and jobs to rural communities, support urban-rural cohesion, and bolster the economic value of rural lands.
- **Promotion of a sustainable balance between conservation and development across each ecoregion:** Full consideration of conservation and development goals across regions provides an opportunity to integrate economic and community development goals alongside the ecosystem service co-benefits of protecting and managing our natural and working lands and waters.

Potential State-Level Strategies to Advance Sustainable, Equitable Communities and Reduce Vehicle Miles of Travel (VMT) -- for Discussion

Introduction

California must reduce vehicle miles of travel (VMT) – alongside improvements in vehicle and fuel technology – in order to meet our ambitious greenhouse gas (GHG) reduction goals for the transportation sector. Additionally, research and experience demonstrate that VMT-reducing strategies that increase clean, affordable transportation options such as transit, biking, walking and ride sharing, and promote equitable and efficient land uses including infill development, also provide numerous co-benefits, including improved public health outcomes, household cost savings, reduced energy and water consumption, reduced consumption of natural and working lands, and increased access to economic opportunity, as well as the many benefits of cleaner air due to reduced pollution from vehicles. Therefore, ***strategies to reduce VMT are essential to ensuring both environmental quality and a high quality of life for the future of California***.

Measures to reduce VMT are already being implemented or are under development. California's Metropolitan Planning Organizations are developing their second generation of Sustainable Communities Strategies, describing alignments in land use and transportation planning to reduce the need for light duty vehicle travel, under SB 375. The California Transportation Commission is piloting a road charge program that would assess fees for road maintenance based on the number of miles driven, pursuant to SB 1077. The Governor's Office of Planning and Research is developing updates to the CEQA Guidelines to guide the analysis of project-level transportation impacts, pursuant to SB 743. Once the updated Guidelines go into effect, lead agencies will evaluate the VMT associated with new development as part of the project's environmental review, and, if the impact is significant, mitigate those impacts through VMT-reducing measures.

Below is a list of ***potential*** additional strategies that the State could pursue to help achieve further VMT reduction, support local and regional actions already underway, and advance multiple additional goals. ***Each of these strategies would require further study, evaluation, and public comment.*** They are presented here for the purpose of soliciting public discussion and input.

Section I: Tools to Support More Efficient and More Equitable Development

Changes to the built environment – such as increasing density, improving accessibility to transit, and increasing the diversity of land uses within developed areas – have been demonstrated through extensive research to be among the most significant and critical factors in achieving VMT reductions to a degree that is consistent with California's longer-term GHG reduction goals (i.e. 2050 and beyond). As California grows by a projected 10 million new people by 2050, ***where and how new development occurs to accommodate population growth will impact our ability to reduce VMT and achieve our environmental, health, and quality of life goals***. Infill development – development in previously-developed areas – helps facilitate growth that aligns with these goals. However, as has been extensively documented, infill development faces numerous financial and other challenges throughout California. Below are potential strategies that could help increase infill development and achieve the land use changes necessary for longer-term VMT reduction.

A. Infill Development and Land Conservation

Explore:

- Encouraging regional Transfer of Development Rights programs to allow owners of natural and working lands to sell their development rights to developers who can use those rights to add additional density to development projects in preferred infill areas.
- Promoting regional Transit-Oriented Development (TOD) funds that leverage public resources with private-sector investment capital to provide flexible capital for TOD projects.
- Rebates for low-VMT/location-efficient housing, similar to programs that use rebates to encourage adoption of energy-efficient appliances, zero-emission cars, water-efficient yards, or renewable energy installation. For example, the rebate could reimburse residents for a portion of the downpayment for purchasing or renting a qualified home, in exchange for a minimum term of residence.
- Promotion of cross-subsidizing multi-station financing districts along transit corridors to leverage revenues from development in strong-market station areas in order to seed needed infrastructure and development in weaker-market station areas.
- Abatement of residential property tax increases in exchange for property-based improvements in distressed infill areas.
- Ways to promote reduced parking in areas where viable transportation alternatives are present.
- Additional creative financing mechanisms to enhance the viability of priority infill projects.
- Ways to promote and strengthen Urban Growth Boundaries to promote infill development and conservation of natural and working lands by defining and limiting developable land within a metropolitan area according to projected growth needs.

B. Equity

- Explore ways to help ensure that infill and transit-oriented development benefits existing residents and businesses, low-income and disadvantaged communities, and minimizes displacement.
- Integrate equity and anti-displacement policies and strategies into the development of any of the potential strategies listed above.

Section II: Infrastructure Investment that is Consistent with the State's Conservation, Development, and Health Goals

State infrastructure investments shape land use and development patterns, contribute to the accessibility of transportation options and other services, and thus help determine to our ability to advance sustainable, equitable communities and meet our climate goals. Prioritizing infrastructure investments to expand access to quality transportation choices and promote vibrant communities can reduce combined housing-transportation expenses for households and promote economic development, encourage active transportation and have significant related health benefits, and play an essential role in helping to meet the State's GHG reduction goals. Below are several options for identifying and prioritizing projects and investments that align with the State's environmental, economic, and equity goals, including VMT and GHG reduction.

A. Performance Measures and Targets

- Explore development and adoption of additional performance measures and targets to inform the selection of transportation capital projects.

B. Transit

- Support an expanded and integrated transit network.
- Support increased transit capacity and levels of service.
- Support bus rapid transit, and separated rail and bus guideways to offer service that will in many cases be faster than car trips.
- Explore transit pass subsidies or other ways to reduce transit fares, particularly for disadvantaged communities, students, seniors, the disabled, and other transit-dependent users.
- Explore ways to implement transit system improvements that increase the safety, attractiveness, reliability, and convenience of transit.

C. Active Transportation

- Support expansion and improvement of active transportation infrastructure to help meet the California Transportation Plan goal of quadrupling active transportation mode share by 2040.
- Explore ways to implement active transportation system improvements that increase the safety, attractiveness, reliability, and convenience of active transportation.
- Explore ways to expand education on multimodal road safety for bicyclists, pedestrians, and drivers.

D. Shared Mobility

- Explore ways to expand access to car share, bike share, and ride share services.

E. Green Construction Practices

- Explore ways to increase use of lower-carbon construction materials for transportation infrastructure projects.
- Explore ways to increase sustainable landscaping practices for transportation infrastructure projects that contribute to the enhancement of a multi-modal transportation system.

F. Non-Transportation Infrastructure

- Continue to increase and prioritize the location efficiency of State real property investments to encourage State facilities in low-VMT locations.

G. Research

- Continue to study and develop policies around driverless vehicle technology that promote sustainable and equitable land use and reduce VMT.

H. Equity

- Explore ways to help ensure that transportation and other infrastructure investments benefit existing residents and businesses, low-income and disadvantaged communities, and minimize displacement.
- Integrate equity and anti-displacement policies and strategies into the development of any of the potential strategies listed above.

Section III: Pricing Policies

Road and parking pricing policies allow transportation agencies and communities to collect revenues for transportation infrastructure maintenance and improvements that are proportional to the amount that the infrastructure is used. Several extensive studies have found pricing to be among the most impactful long-term VMT and GHG reduction strategies for the transportation sector. When combined with

measures to ensure access to viable transportation alternatives (such as those described in the section above), ***pricing strategies can present cost savings for many drivers, while helping to ensure that infrastructure is appropriately and adequately maintained, and promoting use of transportation alternatives***. Revenues can be used to offset cost burdens for low-income drivers and others that may be disproportionally impacted, and to enhance and expand additional transportation alternatives. Below are several options for further exploring and developing pricing policies.

A. Road Pricing

- Develop additional highway express lanes under the authority of AB 194 that offer access to high-occupancy vehicle lanes to single occupant drivers willing to pay a toll, with related revenue supportive of road maintenance and improving multi-modal travel options on the corridor.
- Continue to pilot and develop mileage-based road pricing strategies as an alternative to the gasoline tax.
- Explore ways to expand access to pay-as-you-drive auto insurance options.
- Study options for implementing Cordon Pricing in high-congestion areas where viable transportation alternatives are available.
- Explore creation of Low-Emission Zones that establish more stringent emission standards for select types of heavy-duty vehicles (e.g. parcel delivery) within designated sensitive residential and congested urban areas and charge fees for select types of heavy-duty vehicles entering the zone that do not meet the established standard.

B. Parking Pricing

- Explore ways to encourage demand-based parking pricing strategies where transportation alternatives are present.

C. Equity

- Ensure that pricing policies and programs include measures to use program revenues to offset cost increases for low-income and disadvantaged communities.
- Prioritize access to voluntary VMT-based pricing options for low-income households that could benefit from potential cost savings.
- Integrate policies and strategies that enhance equity and avoid inequitable cost burdens into the development of any of the potential strategies listed above.

Section IV: Transportation System Efficiency

Maximizing the efficiency of existing transportation infrastructure is key to ensuring the effective movement of people and goods to their destinations and reducing transportation costs. Below are several options for reducing congestion and improving system efficiency that also reduce emissions, VMT, and GHGs and contribute to sustainable, equitable communities.

D. Commute Trips

Explore:

- Promoting teleworking and alternative work schedules.
- Incentives for use of transit and active transportation for commuting.
- Increasing ride sharing to work to help meet the California Transportation Plan goal of increasing carpool vehicles by 15% by 2040.
- Promoting travel to schools via active transportation, ride sharing, and transit.

- Commute trip reduction programs and policies for the State workforce.

E. Eco-Driving

- Explore ways to promote eco-driving education.

F. Transportation Management Systems

- Continue studying and implementing transportation management systems and other technologies to reduce congestion and lower emissions.
- Explore creation of additional high-occupancy vehicle (HOV) and high-occupancy toll (HOT) lanes.

G. Equity

- Where possible, prioritize commute trip reduction incentives, programs, and benefits for low-income workers that could benefit from potential household cost savings.
- Prioritize eco-driving education for low-income drivers who could benefit from potential fuel cost savings, and in areas of high pollution burden that could benefit from emissions reductions.
- Integrate policies and strategies to enhance equity into the development of any of the potential strategies listed above.