

APPENDIX E SUSTAINABLE AND EQUITABLE COMMUNITIES

**Policy Framework to Advance
Sustainable and Equitable Communities**

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1. Introduction

Californians deserve great places to live – inclusive urban, suburban, and rural communities throughout the many regions of California – that provide a range of affordable housing and transportation options, efficient access to a variety of jobs and services, clean air, opportunities to safely walk and bike, and open space and recreational opportunities. Current and future generations have the right to healthy environments, protected natural and working lands that support carbon sequestration and enhance climate resilience, and reduced overall demand for energy and other natural resources. These are the core characteristics of sustainable and equitable communities, and are achieved, in part, through the combination of more compact development and enhanced transportation options that together reduce individuals' need to drive.

Building more sustainable and equitable communities in this way can help California address two of its greatest challenges. The first is meeting the State's goal to achieve carbon neutrality no later than 2045 to prevent the most adverse impacts of climate change and provide Californians healthier air to breathe. The second challenge is building more inclusive and equitable places that prioritize providing low-income and Black, Indigenous, and People of Color (BIPOC) communities all the necessary opportunities to thrive and repairing the harms caused by decades of discriminatory transportation, land use, and housing policies and practices to people of low-income and BIPOC communities.

The next section of the appendix discusses impactful opportunities California can unlock by moving away from a cars-first model and building communities and infrastructure that enable a wider range of access and mobility choices. The third section of the appendix presents a policy framework across four strategy areas – transportation planning and funding, transportation system management, new mobility, and land use and development – for the State to create more sustainable and equitable communities that reduce driving. Each strategy area includes a vision, objectives, and potential actions developed by CARB and its State government partners, with the intent that the further development and implementation of each action would be subject to additional public processes and collaboration with key stakeholders. The framework of strategies discussed in this document does not and cannot mandate any specific action or create any legal obligations. This planning document provides a menu of critical potential actions and approaches that would need to be further developed through appropriate public processes.

While the State has taken steps in each of these strategy areas, this appendix presents ways to build on that work.

2. The Need for Sustainable and Equitable Communities

Many of California's cities, towns, suburbs, and rural areas were designed and built primarily around car travel, and the legacy of that vision has been codified in public policies, business practices, and cultural expectations. For most communities in California, choices made in the past and bolstered for decades have delivered land use

patterns that place daily needs far from each other along streets designed for high-speed driving. For decades, California has widened highways and roadways in an effort to address traffic congestion. By doing so, it has facilitated more car dependence and, ironically, more congestion, with resulting increases in vehicle miles traveled (VMT) and greenhouse gas (GHG) emissions.

Efforts to advance more sustainable and equitable communities that reduce the need to drive have been ongoing in California for many years, most prominently under the State's 2008 Sustainable Communities and Climate Protection Act or Senate Bill (SB) 375 (Steinberg, Chapter 728, Statutes of 2008), under which Metropolitan Planning Organizations (MPOs) must show coordinated land use and transportation strategies to meet regional passenger vehicle GHG reduction targets. However, as CARB's recent progress report on implementation of SB 375 indicates, individuals are driving more miles per day than ever before, and California is not on track to meet its associated climate goals under SB 375.¹

Beyond reducing driving, far too often in California's history, new highway and major roadway infrastructure displaced BIPOC communities, increased divisions in communities, and intensified noise, traffic, and air pollution in already impacted communities. California can advance inclusive and efficient places to live if it breaks away from an entrenched policy and cultural status quo that has perpetuated car dependence and caused a significant share of California's climate-changing GHG emissions.

2.1 Zero-emission vehicles are not enough to solve the climate crisis.

Contrary to popular belief, zero-emission vehicles (ZEV) alone are not enough to solve the climate crisis. The 2022 Scoping Plan illustrates that despite cleaner vehicles and low-carbon fuels, the path to carbon neutrality by 2045 also depends on reducing per capita VMT (the total passenger vehicle miles driven by an average person in California on any given day). To meet the carbon neutrality goal, the Scoping Plan proposes reducing VMT from 24.6 miles per day in 2019 to 18.4 miles by 2030 (a 25 percent reduction) and to 17.2 miles per day by 2045 (a 30 percent reduction).

Approximately 30 percent of light-duty vehicles on the road in 2045 will still burn fossil fuels even with all new car sales being ZEVs by 2035 through implementation of CARB's Advanced Clean Cars II regulations.² Additionally, driving, regardless of vehicle technology, will also continue to produce particulate emissions from brake and tire wear.

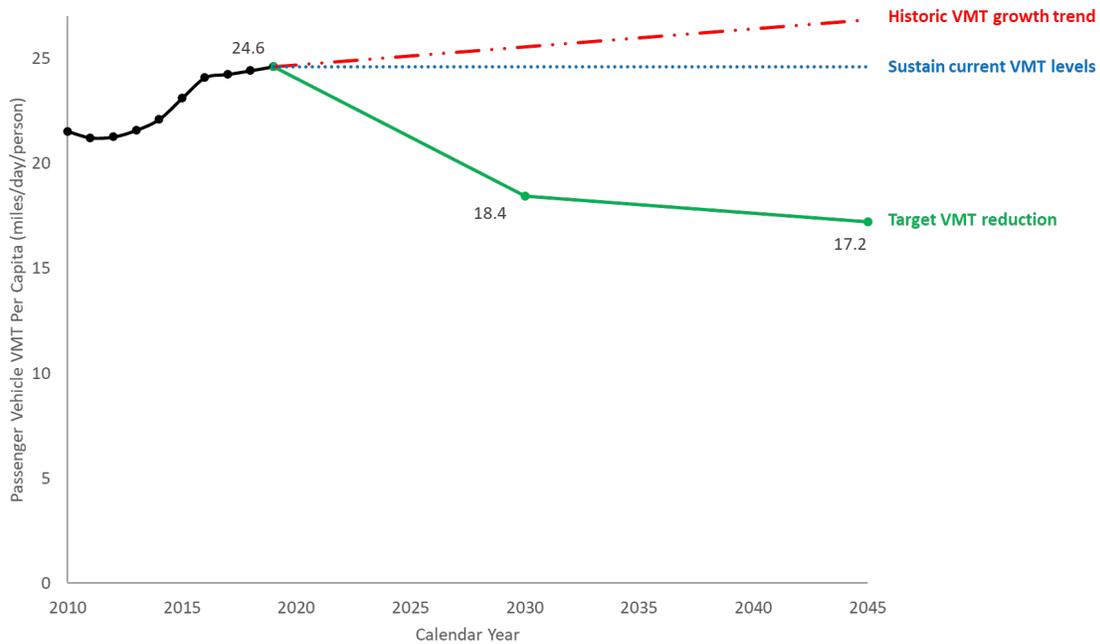
Figure W depicts the reduction in VMT identified by the Scoping Plan as necessary to help achieve the State's GHG reduction goals (green solid line), accompanied by a

¹ For more information on progress made toward achieving climate goals under SB 375 see: <https://ww2.arb.ca.gov/resources/documents/tracking-progress>

² For more information on the Advanced Clean Cars II regulations adopted by CARB's board on August 25, 2022, see: <https://ww2.arb.ca.gov/our-work/programs/advanced-clean-cars-program/advanced-clean-cars-ii>

trajectory whereby average per capita daily driving continues to increase at its historic average growth rate (red line with dashes and dots).³ The blue dotted line shows a trajectory where average per capita daily driving remains unchanged from 2019 levels. Substantial and immediate action is needed to reverse current trends in order to reduce VMT to support achieving carbon neutrality by 2045.

Figure W. VMT trajectories and California’s GHG goal



2.2 Sustainable and equitable communities reduce GHG emissions beyond the transportation sector, too.

Beyond having a direct impact on GHG emissions from cars, reducing individuals’ need to drive to fulfill daily needs can also support emissions reductions in other sectors. For example, more compact infill development generally generates lower emissions because attached building types and smaller residential unit sizes require fewer emissions to construct and less energy to heat and cool.^{4,5} Studies have estimated that infill development uses 10 to 20 percent less residential energy due to changes in unit types, sizes, and locations. Additional benefits include reduced heat island effects from paved

³ There is considerable range in potential future VMT based on many exogenous, socioeconomic, and technological factors. This line represents historical VMT trends from 2001-2019 extended to 2045, normalized by the future forecasted population.

⁴ Elkind, E. N., Galante, C., Decker, N., Chapple, K., Martin, A., & Hanson, M. 2017. “Right Type, Right Place: Assessing the Environmental and Economic Impacts of Infill Residential Development through 2030.” Available at: <https://turnercenter.berkeley.edu/research-and-policy/right-type-right-place/>

⁵ Ewing, Reid & Rong, Fang. 2008. “The impact of urban form on U.S. residential energy use.” *Housing Policy Debate*, 19(1), 1-30. Available at: <https://www.tandfonline.com/doi/abs/10.1080/10511482.2008.9521624>

surfaces like parking lots, which lowers long-term building energy use, and reduced emissions from the construction of infrastructure.⁶

In contrast, the conversion of natural and working lands to residential or commercial development causes emissions from loss of carbon stored in these systems, as well as reduces the capacity of these lands to sequester carbon from the atmosphere.⁷

The 2022 Scoping Plan Update calls for reductions in GHG emissions from these sectors. More sustainable and equitable development patterns and transportation choices will support these reductions.

2.3 Departing from the status quo would ease inequitable burdens on California's low-income and BIPOC communities.

California can offer accessible, safe, and healthy communities for all by moving away from a legacy of transportation and land use decision-making that has marginalized all too many, but to a much greater extent BIPOC communities. California's transportation agencies have acknowledged that racist policies and decisions made when building and expanding the transportation system divided communities of color and primarily benefited white suburban commuters.⁸ Discriminatory land use, lending, and real estate practices and policies also excluded and harmed BIPOC households and led to lasting inequality.

Some of these impacts have included less access to jobs and services, reduced household income and wealth generation, reduced social mobility, the burden of vehicle ownership, and the risk of job loss if a vehicle breaks down.

Rather than continuing these practices, California can make decisions that allow for integrated communities that are rich with services and culture. Shifting California's development patterns and transportation systems is critical to address existing injustices by making livable, affordable homes with multi-modal connections to jobs, services, open space, and education available to all Californians, not just the white and the wealthy.

⁶ Ford, Jonathan. 2010. "Smart Growth & Conventional Suburban Development: An infrastructure case study completed for the EPA." Adapted from "Comparative Infrastructure & Material Analysis" under EPA contract EP-W-05-25. Available at:

<https://archive.epa.gov/epa/sites/production/files/2014-07/documents/mbd-epa-infrastructure.pdf>

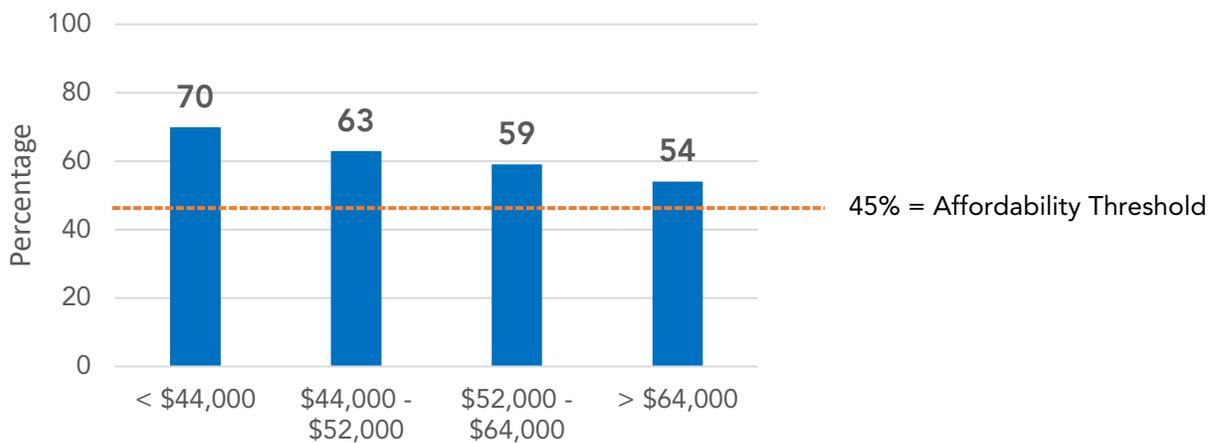
⁷ California Air Resources Board. Accessed May 5, 2022. California Natural & Working Lands Inventory. Available at: <https://ww2.arb.ca.gov/nwl-inventory>.

⁸ See the equity and VMT policy discussion beginning on page 107 of the California Air Resources Board's 2020 Mobile Source Strategy, available at: https://ww2.arb.ca.gov/sites/default/files/2021-12/2020_Mobile_Source_Strategy.pdf.

The Burden of Housing and Transportation Costs

An example of these racial and social inequities is the unequal impact of housing and transportation costs. Low-income households pay a significantly higher portion of household income for housing and transportation. In California counties that have a median household income of \$44,000 or less, housing and transportation cost the average household over 70 percent of their income, when the recommended affordability threshold is 45 percent (Figure X).⁹ Given the high cost of car ownership and operation, this housing and transportation cost burden has the highest impact on communities where people have few options but to drive.

Figure X. Percentage of Income Spent on Housing and Transportation in California by Median County Household Income



Source: H+T Index 2017, ACS 2015

2.4 Reducing the need to drive advances other quality of life outcomes and opportunities.

Communities with shorter driving distances and more options for active travel produce benefits beyond the environment and equity, including reduced financial burden, better access to opportunities, and improved public health.

- Reduced financial burden:** Reducing the need to drive saves households substantial sums of money. U.S. households spent an average of nearly \$10,000 in 2019 on vehicles and fuel.¹⁰ Driving fewer miles reduces fuel and maintenance expenses and may even allow a household to reduce the number of vehicles owned.

⁹ Center for Neighborhood Technology. Accessed May 5, 2022. Housing + Transportation Index. Available at: <https://cnt.org/tools/housing-and-transportation-affordability-index>.

¹⁰ U.S. Department of Transportation, Bureau of Transportation Statistics. Accessed May 5, 2022. Transportation Economic Trends. Available at: <https://www.bts.gov/product/transportation-economic-trends>.

- **Better access to opportunities:** Changes to the built environment that increase alternatives to driving give households more and affordable options to access services, jobs, and other activities, and thus expand economic and social opportunities.¹¹ These changes empower people who do not own cars and people who cannot drive, such as seniors, children, and people with disabilities, protecting their ability to hold a job, run errands, or connect with others.
- **Economic efficiency:** A development pattern that enables the same level of economic interaction with less dependence on driving can sustain the economy at a far lower cost to the public by decreasing highway maintenance costs, which have ballooned to over \$500 million per year in California.¹² Infill development can also reduce road and utility line lengths, as well as the travel distances needed to provide public services like police, garbage collection, and emergency response.^{13,14,15} Across the U.S., congestion cost the equivalent of \$190 billion in 2019 in fuel costs and lost time.¹⁶ Being able to access destinations more efficiently will reduce these effects on the economy.

¹¹ Lucas, K. 2012. "Transport and social exclusion: Where are we now?" *Transport Policy*, 20, 105-113. Available at: <https://www.sciencedirect.com/science/article/pii/S0967070X12000145>

¹² U.S. Department of Transportation. Accessed May 5, 2022. Highway Statistics 2015. Available at: <https://www.fhwa.dot.gov/policyinformation/statistics/2015/sf12.cfm>

¹³ Burchell, Robert W., & Mukherji, Sahan. 2003. "Conventional Development Versus Managed Growth: The Costs of Sprawl." *American Journal of Public Health*, 93 (9), 1534-1540. Available at: <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1448006/>

¹⁴ Busch, Chris, Lew, Erika, & DiStefano, Joe. 2015. "Moving California Forward: How Smart Growth Can Help California Reach Its 2030 Climate Target While Creating Economic and Environmental Co-Benefits." Joint report by Energy Innovation Policy and Technology LLC, and Calthorpe Analytics. Available at: <https://energyinnovation.org/wp-content/uploads/2015/11/Moving-California-Forward-Full-Report.pdf>

¹⁵ Litman, Todd. 2016. "Understanding Smart Growth Savings: Evaluating Economic Savings and Benefits of Compact Development." Victoria Transport Policy Institute. Available at: <https://trid.trb.org/view/1685041>

¹⁶ Texas A&M Transportation Institute. 2021 *Urban Mobility Report*. Available at: <https://mobility.tamu.edu/umr/report/>

People want to drive less!

While many Californians find traveling by car a necessity, many would in fact prefer to drive less. A survey in Santa Clara County in 2020,¹⁷ before the COVID-19 pandemic, showed that 89 percent of people believed they had to drive for daily needs, but fully half wanted to drive less. Twenty percent of respondents said owning a car was a financial strain, creating a burden on disadvantaged groups. Cars also created higher levels of stress, with 41 percent of drivers reporting that they find their daily travel stressful, but only 35 percent of bicyclists and 28 percent of transit riders feeling the same.

Furthermore, Public Policy Institute of California polls in 2019 and 2020 found that fully three quarters of respondents favored encouraging local governments to change land use and transportation planning so that people could drive less.¹⁸

3. Framework for Action

California's predominant development patterns and transportation systems are not conducive to building sustainable and equitable communities with low VMT. Reversing the current VMT growth trend to achieve carbon neutrality requires immediate and decisive steps to address the core issues that give individuals no choice but to drive. Accordingly, the framework for action detailed in this section aims to offer a set of key policy objectives and actions that can be attained within the planning horizon of the 2022 Scoping Plan Update to effectively support more compact development and increase transportation options that reduce VMT no later than 2045.

There is no single or immediate solution to transform the ways California builds and connects communities; instead, as all available models demonstrate, reducing VMT requires a broad range of actions across all levels of government that achieve multisectoral synergies in transportation, land use, and housing.^{19,20}

This framework is structured around the following four strategy areas:

¹⁷Fang, Kevin. 2020. "Surveying Silicon Valley on Cycling, Travel Behavior, and Travel Attitudes." Mineta Transportation Institute. Available at: <https://transweb.sjsu.edu/research/1947-Survey-Silicon-Valley-Cycling>

¹⁸ Baldassare, Mark, Bonner, Dean, Dykman, Alyssa, & Lawler, Rachel. 2019 and 2020. "Californians and the Environment." Public Policy Institute of California. Available at: <https://www.ppic.org/publication/ppic-statewide-survey-californians-and-the-environment-july-2019/> and <https://www.ppic.org/publication/ppic-statewide-survey-californians-and-the-environment-july-2020/>

¹⁹ California Department of Transportation. *California Transportation Plan 2050*, pages 97-98. Available at: <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/ctp-2050-v3-a11y.pdf>

²⁰ Brown, A. L., Sperling, D., Austin, B., DeShazo, JR, Fulton, L., Lipman, T., et al. 2021. "Driving California's Transportation Emissions to Zero." UC Office of the President: University of California Institute of Transportation Studies. Available at: <https://escholarship.org/uc/item/3np3p2t0>

1. **Plan and invest in a sustainable transportation system.** Identify policies to address the way California plans, invests in, and funds its transportation system to reduce the need to drive and provide high-quality alternatives that are more convenient, efficient, and low-cost than driving.
2. **Manage the use of the transportation system to advance climate and equity goals.** Consider policies to optimize the use of California’s transportation infrastructure by prioritizing the movement of people over vehicles.
3. **Shape the deployment of new mobility options.** Explore policies to leverage the potential of new mobility options to increase transportation choices, enable car-light lifestyles, and mitigate inherent risks that could increase car travel.
4. **Improve alignment of land use planning and development with climate and equity goals.** Consider policies to accelerate infill development, affirmatively further fair housing, and increase natural and working lands protection, in furtherance of the State’s planning priorities.

For each strategy area, this framework offers: i) a vision for the year 2045 that would be consistent with meeting California’s carbon neutrality goal while advancing equity; ii) policy objectives that should be achieved to deliver the vision for that strategy area; and iii) selected actions that should be taken as quickly as possible, especially by the State, to implement those policy objectives.

3.1 Strategy Area 1: Plan and Invest in a Sustainable Transportation System

The institutional framework for planning and funding California’s transportation system has reflected and perpetuated a car-centric bias. For many decades, the majority of federal, State, and local transportation investments has been devoted to building, operating, and maintaining a network of highways, roads, and streets. While more recently other modes of transportation have received increased funding, the dominance of car-centric investments remains unchanged.²¹

In order to help meet the State’s climate goals, the California Transportation Plan 2050 identifies the need to achieve a significant shift toward non-auto modes, amounting to 23 percent of trips occurring by bicycling, walking, transit, or other non-auto modes by 2050.²² Achieving carbon neutrality no later than 2045 requires a transportation system that works more efficiently for all Californians, regardless of their income, race, ability, or where they live. This vision offers a future in which most individuals have access to high-

²¹ Considering new capacity, operations, maintenance, and rehabilitation investments. For a historic review, see California Air Resources Board, *2018 Progress Report: California’s Sustainable Communities and Climate Protection Act*, available at https://ww2.arb.ca.gov/sites/d89efault/files/2018-11/Final2018Report_SB150_112618_02_Report.pdf. The more recent data is documented in the California Transportation Assessment (pursuant to AB 285), specifically Barbour, Elisa, et al, *MPO Planning and Implementation of State Policy Goals*, UC Berkeley: Institute of Transportation Studies at UC Berkeley, page 4, available at <https://escholarship.org/uc/item/7p8096mh>.

²² California Department of Transportation. *California Transportation Plan 2050*, page 96. Available at: <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/ctp-2050-v3-a11y.pdf>

quality rail and public transit services and high-quality active transportation infrastructure, so that driving is a choice and not the only option.

However, this vision will not be possible without effecting a structural realignment of the State's framework for planning and funding transportation to prioritize investing in rail, transit, active transportation, and building more sustainable communities.²³ The quality of rail, public transit services, and active transportation infrastructure needs to be improved so that these modes become more time- and cost-competitive to driving.

3.1.1 Vision

To help meet the State's carbon neutrality goal no later than 2045 and advance equity, the vision is for California to have:

- A. Transportation planning and funding frameworks that are clearly aligned and prioritize the State's climate, air quality, and equity goals at all levels of government.
- B. Affordable, accessible, and integrated rail and transit networks that deliver equal or higher levels of accessibility to key destinations as private cars.
- C. Complete networks of safe and accessible bicycle and pedestrian infrastructure that make active transportation the preferred travel mode for short distances.

3.1.2 Objectives

To achieve this vision, the State should lead efforts to:

1. **Reimagine roadway projects that increase VMT in a way that meets community needs and reduces the need to drive.** The most critical step of this realignment of the structure for planning and investing in the transportation system will be reimagining roadway projects that increase VMT in a way that meets community needs and reduces the need to drive. It has been long proven that adding highways, interchanges, and major roadways in densely populated, suburban, and rapidly growing areas only alleviates congestion in the short-term, while increasing VMT, congestion, low-density and car-oriented development, and GHG emissions in the long-term.^{24,25} Another reason to re-envision investments in highway and major roadway projects that induce VMT is that such investments take away

²³ Governor Newsom's Executive Order N-19-19 and the subsequent development of the Climate Action Plan for Transportation Infrastructure (CAPTI) call for this change and provide a general framework to achieve it, respectively. See California State Transportation Agency, *Climate Action Plan for Transportation Infrastructure*, available at: <https://calsta.ca.gov/-/media/calsta-media/documents/capti-july-2021-a11y.pdf>

²⁴ California Department of Transportation. *Transportation Analysis Framework, First Edition*, pages 28-29. Available at: <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/sb-743/2020-09-10-1st-edition-taf-fnl-a11y.pdf>

²⁵ Handy, Susan, & Boarnet, Marlon G. 2014. "Impact of Highway Capacity and Induced Travel on Passenger Vehicle Use and Greenhouse Gas Emissions." California Air Resources Board Policy Brief. Available at: https://ww2.arb.ca.gov/sites/default/files/2020-06/Impact_of_Highway_Capacity_and_Induced_Travel_on_Passenger_Vehicle_Use_and_Greenhouse_Gas_Emissions_Policy_Brief.pdf

resources from investments in high-quality rail, transit, bicycling, and walking in both the short- and the long-term.²⁶ In other words, beyond the direct impact of inducing VMT, such projects can limit government's ability to improve transportation options that facilitate mode shift and help reduce VMT.

Actions:

- Adjust the present project pipeline of State transportation investments and reconfigure the California Department of Transportation's (Caltrans) planning processes to rescope VMT and GHG-increasing projects. Caltrans and other State agencies have committed to working with stakeholders to evolve projects in their design and suite of investments to address access and connectivity challenges while ensuring their alignment with the State's climate and equity goals and other key outcomes.
- Implement all the recommendations in the Climate Action Plan for Transportation Infrastructure (CAPTI)²⁷ and apply the CAPTI framework to other transportation investments to prioritize allocation of transportation funding based on projects' climate, equity, and safety impacts. This includes reviewing program eligibility criteria accordingly and advocating for legislation to support the CAPTI vision when necessary.
- Increase funding for State programs that are well-aligned with climate and equity goals, such as the Active Transportation Program (ATP), the Transit and Intercity Rail Capital Program (TIRCP), and the Low Carbon Transit Operations Program (LCTOP), as recommended in the Strategic Growth Council's California Transportation Assessment.

- 2. Double local transit capacity and service frequencies by 2030.** The CTP 2050 determined that, to reach the target mode shifts that deliver the State's carbon neutrality goal, California needs to double the capacity and service frequencies of the existing local public transit networks. This type of expansion of transit services would be a massive undertaking in any time, but it is more so now given the loss of ridership and associated revenue during the COVID-19 pandemic, which forced transit service to contract. Transit's fiscal crisis has only exacerbated the adverse equity impacts of the pandemic, considering people with low-income, people with disabilities, and BIPOC communities are all commonly transit dependent populations and the services available to them are now more limited. Accordingly, securing the necessary funding to return transit operations to pre-pandemic levels in the short term needs to be considered both a priority climate and equity action for the State. Increasing equitable transit investment should serve as the

²⁶ Considering the budgetary impact of developing new highway infrastructure and the ensuing lifespan of operation and maintenance costs.

²⁷ California State Transportation Agency. *Climate Action Plan for Transportation Infrastructure*. Available at: <https://calsta.ca.gov/-/media/calsta-media/documents/capti-july-2021-a11y.pdf>

foundation for building a broader transit program that delivers the requisite doubling of capacity and frequencies by 2030. This type of improvement will amount to having transit stops much closer to where people need to go and offering (on average) 15-minute frequencies in urban areas, 30-minute frequencies in suburban areas, and 60-minute frequencies in rural areas for all services.

Actions:

- Secure the necessary funding to return transit operations to pre-pandemic levels in the short-term.
- Complete a new update of the State’s Transit Strategic Plan by 2023, fleshing out how the proposed transit service expansion would be implemented to optimize efficiency, accessibility, climate, and equity outcomes. This Plan should be developed in close collaboration with underserved communities across local jurisdictions to prioritize improvements where needs are greatest. Beyond increasing service, additional investments will need to be made to ensure affordability for low-income and other disadvantaged populations.
- Reduce the voter approval threshold for future locally funded transportation sales tax measures that exclusively fund investments in transit or active transportation.
- Explore the feasibility of introducing consultation and reporting requirements that enhance transparency and clarity around local tax measure climate and equity impacts and mitigation strategies prior to a ballot vote.
- Remove California Constitution Article XIX restrictions on using gas tax monies for transit operational funding or other sustainable transportation-related uses.

- 3. Complete the High-Speed Rail (HSR) System and other elements of the intercity rail network by 2040.** Providing efficient, high-quality alternatives to the car for intercity travel is another important element for enabling car-free and car-light lifestyles that reduce VMT and advance equity for those who do not have the means to own a car and for those who can use their car less. The California Transportation Plan 2050 (CTP 2050) identified the completion of the full 2018 State Rail Plan²⁸ vision by 2040 as a requirement to achieve the State’s carbon neutrality goal.²⁹ This vision includes: the main HSR line connecting San Francisco, the Central Valley, and Los Angeles, and HSR extensions to Sacramento, the Inland Empire, and San Diego; the San Francisco Downtown Extension and a new Transbay tube; key corridor investments in the Los Angeles Basin; new regional

²⁸ California Department of Transportation. *California State Rail Plan*. Available at: <https://dot.ca.gov/programs/rail-and-mass-transportation/california-state-rail-plan>

²⁹ California Department of Transportation. *California Transportation Plan 2050*, page 86. Available at: <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/ctp-2050-v3-a11y.pdf>

services in the Central Valley, on the Central Coast, and in the North Bay; and an overall intensification of services, with more frequencies and higher speeds.³⁰

- 4. Expand and complete planned networks of high-quality active transportation infrastructure.** The other piece of the puzzle to achieve the target mode shift away from car travel is supporting active transportation mode users, such as bicyclists and pedestrians. The vision is to ensure every city has fully realized networks of active transportation infrastructure that ensure coverage, connectivity, accessibility, and safety to all travelers, making active transportation the preferred choice for short distance travel, and improving access to public transit services. These improvements should be developed in collaboration with community-based organizations and local leaders to address the needs and priorities of historically marginalized and underserved communities.

Actions:

- Require complete street enhancements, including minimum space allocations for bicycle and pedestrian infrastructure, in all State-funded transportation investments.
- Expand State funding for active transportation projects to support a broader set of project types and investments than currently funded through the Active Transportation Program.

- 5. Increase availability and affordability of bikes, e-bikes, scooters, and other alternatives to light-duty vehicles, prioritizing needs of underserved communities.** One key action to increase access to opportunities and overcome the financial burden of driving or using transit and new mobility services is to increase low-income people's direct access to bikes, e-bikes, scooters, and other alternatives to light-duty vehicles. Similar to existing rebate programs for electric vehicles, the State and other levels of government could do more to subsidize discounts or the full purchase of these alternatives to light-duty vehicles, considering their potential contributions to both reducing VMT and advancing equity goals. As is the case with other objectives shared above, these programs should be developed in close collaboration with community-based organizations and community members to prioritize specific needs and priorities of low-income and disadvantaged communities at the local level.

Actions:

- Increase funding and expand eligibility of bikes, e-bikes, scooters, and other alternatives to light-duty vehicles in State incentive/rebate programs.

³⁰ The 2040 Vision projects 88 million daily passenger miles diverted to rail from highways, and an increase of 92 million daily passenger miles on rail as a result of the investments outlined in the California Department of Transportation's California State Rail Plan, page 14, available at:

<https://dot.ca.gov/programs/rail-and-mass-transportation/california-state-rail-plan>

6. Shift revenue generation for transportation projects away from the gas tax into more durable sources by 2030. The need to implement a replacement to the gas tax was identified by the Legislature in 2014 through SB 1077 (DeSaulnier, Chapter 835, Statutes of 2014), which described the gas tax as an “ineffective mechanism for meeting California’s long-term revenue needs.”³¹ SB 1077 appointed the CTC in consultation with CalSTA to form a technical advisory committee to study mileage-based fees, a system in which all drivers, regardless of the fuel used by their vehicles, pay their fair share for the road maintenance and repair needs associated with their VMT, as an alternative to the gas tax. Since then, the technical advisory committee has developed recommendations and implemented a first pilot; more pilot and demonstration work is scheduled for implementation in 2023. Implementing an alternative to the gas tax by 2030 is imperative to ensuring the viability of transportation funding that can be reinvested in sustainable transportation options.

Actions:

- Complete mileage-based fee pilots by 2025.

3.2 Strategy Area 2: Manage Use of the Transportation System to Advance Climate, Air Quality, and Equity Goals

In California, most of the highways, roads, and streets are utilized by single-occupancy vehicles (SOV),³² which take up the highest amount of road space of any transportation mode relative to the amount of people moved.³³ Accordingly, the outcomes of this SOV-centric travel pattern are ever-growing levels of congestion, increasing VMT, economic inefficiency, and inequity in terms of who has easier access to jobs, services, and key destinations.³⁴

As detailed in Strategy Area 1, building more roadway lanes is not an answer to these problems. Instead, the solution requires reframing the use of California’s transportation infrastructure, and primarily its roadways, to maximize and prioritize getting more people where they need to go rather than prioritizing moving cars. For example, implementing

³¹ Because over half of vehicles on the road by 2040 will be zero-emission vehicles that need not buy any gasoline, the Standardized Regulatory Impact Assessment (SRIA) for the Advanced Clean Cars II Regulations estimated cumulative losses through 2040 of \$13.4 billion to local governments and \$17.7 billion to the State. See Tables 55 and 56 on page SRIA-113 and SRIA-116 of the [Advanced Clean Cars 2 SRIA](#) (January 26, 2022).

³² California Air Resources Board. *2018 Progress Report: California’s Sustainable Communities and Climate Protection Act*. Available at: https://ww2.arb.ca.gov/sites/default/files/2018-11/Final2018Report_SB150_112618_02_Report.pdf

³³ This concept is best demonstrated through images comparing road space usage by mode. See a popular example developed by i-SUSTAIN for downtown Seattle, available at: <https://www.i-sustain.com/i-impact>. The National Association of City Transportation Officials makes a similar case comparing the carrying capacity of 10-foot lane by mode, as seen in their Transit Street Design Guide, available at: <https://nacto.org/publication/transit-street-design-guide/introduction/why/designing-move-people/>.

³⁴ Namely, those who can afford cars for all members of the household or the cost of housing in high accessibility locations.

dedicated bus lanes, transit signal priority schemes, and other measures could enhance transit operations on major thoroughfares and other key corridors. Likewise, it is essential to prioritize the expansion of bike lanes, sidewalks, and other active transportation pathways to increase system capacity and improve accessibility for all, including people using wheelchairs and other types of mobility devices. This shift would be effectuated by leveraging the existing infrastructure to optimize for accessibility, equity, and climate outcomes through prioritizing the needs of more efficient modes of transportation, such as transit, bicycling, and walking.

3.2.1 Vision

To help meet the State's carbon neutrality no later than 2045 and advance equity, the vision is for California to have:

- A. A transportation system that clearly prioritizes the movement of people over cars.
- B. Restructured pricing for all modes to clearly represent the costs and benefits that each mode represents to California.
- C. The necessary road space for transit and active transportation to thrive and offer high-quality services.

3.2.2 Objectives

To achieve this vision, the State should lead efforts to:

1. **Authorize and implement roadway pricing strategies and reallocate revenues to equitably improve transit, bicycling, and other sustainable transportation choices.** Pricing strategies take many forms and can include fees for miles driven, cordon fees for operating vehicles in designated areas, parking fees, fees on congestion impact of ride-hailing services, and dynamic fees on highway lanes and other strategic roads to manage congestion.

Authorizing transportation pricing strategies is essential to promote more efficient use of cars and to further transit and active transportation improvements. Pricing strategies present an opportunity to fund the transportation system in a more equitable and fiscally sustainable way than current funding sources, promote more efficient functioning of existing infrastructure, and fund new transportation options, especially for those who do not own a vehicle or do not drive. Some recent analyses indicate California will not meet its climate goals without implementing equitable roadway pricing strategies as these strategies are projected to achieve up to 27 to 37 percent of the needed per capita VMT reduction.³⁵ The four largest MPOs have included multiple pricing strategies in

³⁵ See Brown, A. L., Sperling, D., et al, 2021, "Driving California's Transportation Emissions to Zero," pages 237-253, UC Office of the President: University of California Institute of Transportation Studies, available at: <https://escholarship.org/uc/item/3np3p2t0> and California Department of Transportation, *California Transportation Plan 2050*, page 86, available at: <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/ctp-2050-v3-a11y.pdf>.

their adopted sustainable communities strategies (SCSs) to reduce regional GHG emissions.³⁶

Pricing strategies would need to be implemented with an emphasis to ensure equitable outcomes, and in accordance with local needs and context. In particular, pricing strategies need to consider the potential travel options available for low-income and other disadvantaged populations to ensure they are not unduly impacted by the strategy.

Actions:

- Permit implementation of a suite of roadway pricing strategies by 2025 in support of adopted SCSs.

- 2. Prioritize addressing key transit bottlenecks and other infrastructure investments to improve transit operational efficiency over investments that increase VMT.** Offering high-quality transit services that represent a viable alternative to driving will require multiple coordinated efforts. The proposed investments to expand service capacity and increase frequencies (described in Strategy Area 1) will be ineffective if those transit vehicles end up stuck in traffic or have limited space to operate efficiently. Transit agencies and local jurisdictions across California should come together to identify, plan, and implement strategies to prioritize transit speeds and reliability over general roadway level of service and private car needs. Those strategies, which include capital investments in the strategic redistribution of the right-of-way, signaling, and supportive traffic regulations, should be prioritized in federal and State funding programs and local investment plans.

Actions:

- Permit the conversion of general-purpose lanes to transit-only lanes or toll lanes and full facility tolling of state-owned facilities.
- Establish requirements to demonstrate that addressing transit bottlenecks and other transit efficiency investments are a priority in local jurisdiction and transit agency investment plans, such as a prerequisite for overall transportation project funding eligibility.

- 3. Develop and implement a statewide transportation demand management (TDM) framework with VMT mitigation requirements for large employers and large developments.** The goal of TDM is to provide people with information, incentives, and other support programs that help them utilize sustainable

³⁶ These metropolitan planning organizations are the Metropolitan Transportation Commission (MTC), the Sacramento Area Council of Governments (SACOG), the San Diego Association of Governments (SANDAG), and the Southern California Association of Governments (SCAG).

transportation options such as transit, ridesharing, bicycling, and walking and rely less on cars. A strategic point of focus for TDM program implementation could be large employers (more than 100 employees), which often incentivize driving alone by offering free parking, gas stipends, and similar perks, and do not offer similar levels of support to employees to take transit, ride their bicycle, or walk.

Employer-based TDM strategies are needed to achieve widespread implementation for the State to meet its climate goals, including commute trip reduction programs, ride-sharing programs, on-site bicycle facilities, vanpool and shuttle services, transit fare subsidies, and parking cash-out. Another strategic point of focus for TDM programs could be large developments, particularly new ones, that through decisions such as their location, design, transportation, parking infrastructure, and their treatment and general interaction with their surrounding environment ingrain high or low VMT travel patterns for decades to come.

Actions:

- End the State’s subsidies for employee parking and take additional actions to move away from subsidizing public spaces for car parking more generally while expanding efforts to promote pedestrian, bicycle, and transit travel. As the State of California employs over 200,000 people, it can expand its TDM programs, which currently vary by agency and employee union.
- Build on existing resources to further support the development and enforcement of local TDM ordinances and help begin developing a statewide TDM framework.³⁷

3.3 Strategy Area 3: Shape the Deployment of New Mobility Options

In the last 20 years, California has been a hub for the development of new mobility services, new technologies, and new business models for how local transportation services can be both provided and consumed. These include, among others: shared-use mobility services such as car-share, ride-hailing, and micro-mobility services; app-based services for integrated trip planning, booking, and payment; and new travel technologies such as automated vehicles (AVs) and delivery robots and drones. These services have significantly improved mobility and access to opportunities for some people who do not own or want to rely on cars. However, without additional State actions these services could also increase VMT and GHG emissions and exacerbate equity issues related to access and costs.

Achieving carbon neutrality no later than 2045 will require leveraging the benefits of new mobility to offer high-quality alternatives to driving that reduce overall VMT, while

³⁷ Such as: California Air Pollution Control Officers Association. *Quantifying Greenhouse Gas Mitigation Measures - A Resource for Local Government to Assess Emission Reductions from Greenhouse Gas Mitigation Measures*. Available at: <http://www.capcoa.org/wp-content/uploads/2010/11/CAPCOA-Quantification-Report-9-14-Final.pdf>

mitigating its risks and negative impacts. For example, rather than competing with public transit, new mobility services should complement transit services, providing flexible options in locations and times of the day where and when fixed-route transit is not efficient, and facilitating trip planning, booking and payment for multimodal trips. No single mobility service alone is the answer for the diverse needs of any given community or individual; instead, the goal is to foster a rich ecosystem of strategically integrated mobility services, with transit playing the role of anchor mode, that together deliver high-quality solutions in accordance with travelers' needs.

Another critical step is ensuring equitable access and equitable impact of new mobility options. So far, new mobility's track record on equity is mixed. On the one hand, new mobility has made new forms of travel more readily available for numerous people, increasing access to key destinations for communities with limited transportation options. On the other hand, new mobility services have catered to more affluent customers and have been slow to offer special provisions for low-income customers, people with disabilities, and low-English proficiency populations, leaving many people unable to benefit.

3.3.1 Vision

To help meet the State's carbon neutrality goal no later than 2045 and advance equity, the vision is for California to have:

- A. A transportation system that leverages the combined potential of new mobility, transit, and active transportation to offer high-quality travel alternatives that enable car-free or car-light lifestyles for all.
- B. Seamless integration in trip planning, booking, and payment systems across all mobility providers, both public and private.
- C. A new mobility ecosystem that, as a whole, offers equitable access to all Californians regardless of race, income, age, disability, or language proficiency to live, work, and play with ease.

3.3.2 Objectives

To achieve this vision, the State should lead efforts to:

1. **Prevent uncontrolled growth of autonomous vehicle (AV) VMT, particularly zero-passenger miles.** A critical objective of achieving this vision will be managing and regulating the use of private AVs and AV-based taxi services. AVs could offer important access, safety, and network performance benefits, such as opening the use of cars for people who cannot drive. However, according to modeling conducted for the CTP 2050 and the University of California's "Driving California's Transportation Emissions to Zero" report, the arrival of AVs will be one of the main sources of VMT increase in California during the next 25 years – the only question is by how much. Because AVs eliminate the need for a dedicated driver, they eliminate the labor costs of taxis and ride-hail services and enable individuals to conduct any number of activities (from working to resting) while traveling. This could make car travel more convenient for those with access to AVs, cause people

to shift away from public transit and non-motorized modes, and encourage people to live further from their destinations. Whether privately owned or as taxi services, AVs will have the ability to drop off passengers and either return to their owner's garage or roam around with zero occupants looking for new passengers, further increasing congestion and its adverse impacts. In response to this risk, the CTP 2050 recommends channeling the deployment of AVs to ensure that they are shared, electric, supportive of efficient land use, and aligned with key principles for healthy and sustainable communities.³⁸ This will require decisive action by the State, working with industry, to implement regulations and policies, including pricing policies, that drive a more efficient use of AVs and limit their potential negative impacts.

Actions:

- Authorize pricing of empty/zero-passenger miles at higher rates than for other levels of occupancy.

- 2. Channel new mobility services towards pooled use models, transit complementarity, and lower VMT outcomes.** The State has demonstrated leadership in this area by implementing Senate Bill 1014 (SB 1014) (Skinner, Chapter 369, Statutes of 2018) and its associated Clean Miles Standard and Incentive Program,³⁹ which encourage ride-hail services to provide pooled services⁴⁰ and enable connections to transit. Additional funding and synergistic policy initiatives could help strengthen those use cases through lower rates, integrated fares, and strategic fleet deployments. Providers of other new mobility options, such as carshare and micro-mobility services, among others, could also be encouraged to pursue partnerships with transit providers as well as to curb the VMT impact of their operations. Similarly, there could also be opportunities to optimize the VMT impact of delivery service providers while upholding service quality.

Actions:

- Develop and adopt regulations and incentive programs that encourage new mobility providers to prioritize higher occupancy use, transit partnerships, and lower VMT impact.

³⁸ California Department of Transportation. *California Transportation Plan 2050*, page 120. Available at: <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/ctp-2050-v3-a11y.pdf>

³⁹ California Air Resources Board. Accessed May 5, 2022. Clean Miles Standard. Available at: <https://ww2.arb.ca.gov/our-work/programs/clean-miles-standard>

⁴⁰ Pooled is an industry term used to refer to when multiple passengers that are not traveling together share a ride-hail vehicle.

3. Establish an integrated statewide system for trip planning, booking, payment, and user accounts that enables efficient and equitable multimodal systems.

While the arrival of new mobility services has increased access to destinations for certain populations, their potential to reduce VMT relies on their ability to operate in an integrated manner with public transit services as well as with each other. The foundation for this integration is customers' ability to review schedules and availability, plan multimodal trips, book rides, pay fares, and access discounts in integrated platforms that bring together the universe of mobility services in any given region. Caltrans, through the California Integrated Travel Project (Cal-ITP),⁴¹ aims to develop a statewide system that enables those multimodal connections, while some transit agencies are also conducting their own pilots on this front.

Actions:

- Provide adequate resources to support State and transit agency initiatives to continue building integrated systems to ultimately break down existing silos between providers and regions, create a consistent statewide structure, and ensure easy access to a multimodal ecosystem of mobility services for all.

4. Provide financial support for low-income and disadvantaged Californians' use of transit and new mobility services. Transit agencies throughout California offer reduced fares for low-income and other disadvantaged populations. However, no matter the location or the quality of the local public transit system, transit services cannot offer an efficient solution to all travel needs for every individual. This is particularly true for low-income people who often have less traditional work schedules or work or reside in places that do not have high-quality public transit services, and it commonly forces people to travel by car even though they cannot easily afford to. New mobility could be the solution for many of these people, given its extended service hours and potentially larger geographic reach. Unfortunately, the cost of new mobility services can be prohibitive, especially if used frequently. The key to unlocking this potential will be to develop and scale up programs to subsidize free or reduced costs for new mobility services for low-income and disadvantaged Californians. Some jurisdictions in California are already piloting this idea by creating a "mobility wallet," which provides a monthly budget that eligible users can apply to transit and new mobility services.

Actions:

- Increase funding to support low-income and disadvantaged Californians' use of transit and new mobility services and streamlining its operational support for "mobility wallet" programs.

⁴¹ California Department of Transportation. Accessed May 5, 2022. CAL-ITP: A modern and consistent transportation experience throughout California. Available at: <https://www.calitp.org/>

- 5. Expand universal design features for new mobility services.** There is a large community of Californians with disabilities who cannot drive, enter the passenger seat of a regular car without assistance, operate a regular bike, or use conventional smart phone applications, yet the new mobility industry, with some exceptions, seems to be growing without addressing the needs of these persons. For example, micro-mobility services lack inclusive alternatives such as tricycles, hand-pedaled cycles, or recumbent bicycles; ride-hail services do not offer equivalent quality of service on wheelchair accessible vehicles; and mobile phone apps may not be Americans with Disabilities Act (ADA) compliant. Addressing these issues and more is a crucial goal to advance equity and a more inclusive society and may also reduce reliance on often-strained paratransit services and costly private vehicles. New regulations, incentive programs, and pricing strategies could elevate universal design standards for new mobility providers, including support of and access to adaptive modes that are designed for people with disabilities and that can carry equipment like wheelchairs.

Actions:

- Require all new mobility providers to meet minimum fleet percentages of adaptive devices and placement requirements.

3.4 Strategy Area 4: Improve Alignment of Land Use Planning and Development with Climate and Equity Goals

Achieving carbon neutrality no later than 2045 requires land use planning and development activities that are consistent with and advance State planning priorities⁴² by significantly augmenting growth in transportation-efficient, resource-rich, accessible, and inclusive communities for all Californians. This vision is aligned with the CTP 2050's and University of California researchers' latest modeling and analyses,⁴³ which indicated that California would not meet its climate goals without future growth in population and employment happening primarily within the state's most densely populated areas and improving the balance of housing, employment, shopping, and other key services within

⁴² The State Planning Priorities generally include (1) promoting infill development, (2) protecting natural and working lands, and (3) encouraging efficient development patterns and investments that are consistent with adopted plans in areas appropriately planned for growth. The State Planning Priorities are "intended to promote equity, strengthen the economy, protect the environment, and promote public health and safety in the state, including in urban, suburban, and rural communities" The full text of the State Planning Priorities is defined in California Government Code, § 65041.1. "Statewide Environmental Goals and Policy Report." Available at:

https://leginfo.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV§ionNum=65041.1

⁴³ See Brown, A. L., Sperling, D., Austin, B., DeShazo, JR, Fulton, L., Lipman, T., et al. 2021. "Driving California's Transportation Emissions to Zero." UC Office of the President: University of California Institute of Transportation Studies, page 236. Available at: <https://escholarship.org/uc/item/3np3p2t0> and California Department of Transportation. *California Transportation Plan 2050*, page 287. Available at: <https://dot.ca.gov/-/media/dot-media/programs/transportation-planning/documents/ctp-2050-v3-a11y.pdf>

any given community. Although MPOs create SCSs that identify how each region may accommodate its growth in patterns that help meet GHG reduction targets set by CARB, these plans are not being fully implemented.⁴⁴

Implementing the land use strategies in SCSs and moving towards improved planning frameworks would address the fact that local land use policies and development practices across California have often favored low-density, single-family zoning, and car-oriented development patterns and carry the legacy of racist government policies, covenants, and lending practices from the past.^{45,46,47} These historic policies and practices have resulted in restricted infill development, limited access to opportunity, and disinvestment in existing neighborhoods for decades.^{48,49,50} As such, they have played a key role in furthering car dependence, rising GHG emissions, and growing inequity in California's communities.

Barriers to infill development have been one factor fueling California's housing crisis, now a half century in the making. After decades of underproduction, supply is far behind need, and purchase and rental costs are soaring. Today, more than a third of households in the state cannot afford their housing costs,⁵¹ forcing a growing number of households to either move to more remote locations with more affordable housing but more limited access to jobs, shopping, and other regular destinations, or to live in overcrowded conditions.

3.4.1 Vision

To help meet State's carbon neutrality goal no later than 2045 and advance equity, the vision is for California to have:

⁴⁴ California Air Resources Board. *2018 Progress Report: California's Sustainable Communities and Climate Protection Act*. Available at: https://ww2.arb.ca.gov/sites/default/files/2018-11/Final2018Report_SB150_112618_02_Report.pdf

⁴⁵ Florida, R. 2016. "How Zoning Restrictions Make Segregation Worse." *Bloomberg*. Available at: <https://www.bloomberg.com/news/articles/2016-01-04/how-zoning-restrictions-make-segregation-worse>.

⁴⁶ California Environmental Protection Agency. 2021. *Pollution and Prejudice: Redlining and Environmental Injustice in California*. Available at: <https://storymaps.arcgis.com/stories/f167b251809c43778a2f9f040f43d2f5>.

⁴⁷ Rothstein, R. 2017. *The Color of Law: A Forgotten History of How Our Government Segregated America*.

⁴⁸ California Air Resources Board. *2020 Mobile Source Strategy*, page 107. Available at: https://ww2.arb.ca.gov/sites/default/files/2021-12/2020_Mobile_Source_Strategy.pdf.

⁴⁹ Jaffe, E. 2016. "Where Sprawl Makes It Tougher to Rise Up the Social Ranks." *Bloomberg*. Available at: <https://www.bloomberg.com/news/articles/2016-01-27/where-urban-sprawl-makes-it-tougher-for-the-poor-to-rise-up-the-social-and-economic-ranks>.

⁵⁰ Lucas, K. 2012. "Transport and social exclusion: Where are we now?" *Transport Policy*, 20, 105-113.

⁵¹ One in three households in the state doesn't earn enough money to meet their basic needs, per the Statewide Housing Plan. California Department of Housing and Community Development. 2022. *Statewide Housing Plan*. Available at: <https://www.hcd.ca.gov/docs/statewide-housing-plan.pdf>

- A. Future growth focused on infill sites and other climate-friendly, transportation-efficient areas appropriately planned for growth.⁵²
- B. The ability for every Californian to live, work, and play in climate-smart, transportation-efficient communities that provide travel choices and access to opportunity.⁵³

3.4.2 Objectives

To achieve this vision, the State should:

1. Accelerate infill development in existing transportation-efficient places and deploy strategic resources to create more transportation-efficient locations.

Notwithstanding the recent passage of laws that expand property owners' ability to create multiple units on single-family lots and limit local governments' ability to block new housing in certain circumstances, many barriers to infill development remain in place, discouraging this important development type in ways that need to be addressed. One critical barrier is the high cost of infill development, including the high cost of urban land, parking requirements, construction costs, and the necessary infrastructure upgrades to make sites development-ready.⁵⁴ Since the elimination of redevelopment agencies in California,⁵⁵ there is often not the fiscal capacity to take on these costs at the required scale. Also, insufficient land may be zoned for housing, and developers may have to navigate numerous and opaque regulatory hurdles and fees in the local approval process.⁵⁶ Implicit biases in real estate practices and deliberate action from current residents who are resistant to the addition of new residents and to neighborhood change also represent important obstacles to infill development and perpetuate present-day neighborhood disparities rooted in historic discriminatory housing and land use practices such as redlining.^{57,58}

⁵² Building on the State's Planning Priorities as defined in California Government Code, § 65041.1. "Statewide Environmental Goals and Policy Report." Available at: https://leginfo.legislature.ca.gov/faces/codes_displaySection.xhtml?lawCode=GOV§ionNum=65041.1

⁵³ Building on California Department of Housing and Community Development's vision statement. Available at: <https://www.hcd.ca.gov/about/mission.shtml>.

⁵⁴ California Department of Housing and Community Development. 2022. *Statewide Housing Plan*. Available at: <https://www.hcd.ca.gov/docs/statewide-housing-plan.pdf>

⁵⁵ There are replacements to redevelopment, such as Enhanced Infrastructure Financing Districts (EIFDs), the Infill Infrastructure Grant Program (IIG), and impact fees; they are just much smaller, not widely utilized, and may offer their own barriers.

⁵⁶ California Department of Housing and Community Development. 2022. *Statewide Housing Plan*. Available at: <https://www.hcd.ca.gov/docs/statewide-housing-plan.pdf>

⁵⁷ Rothstein, R. 2017. *The Color of Law: A Forgotten History of How Our Government Segregated America*.

⁵⁸ California Environmental Protection Agency. 2021. *Pollution and Prejudice: Redlining and Environmental Injustice in California*. Available at: <https://storymaps.arcgis.com/stories/f167b251809c43778a2f9f040f43d2f5>.

To increase investment in under-resourced communities and expand access to high-resource neighborhoods, the State should pursue a combination of the following actions: i) providing financial and educational tools, resources, and incentives; ii) streamlining review processes; iii) strengthening protections for natural and working lands; iv) facilitating collaboration with key partners; and v) providing and requiring anti-displacement protections for existing residents and businesses.

Actions:

- Continue to commit State funding for existing and new programs supporting predevelopment work and infrastructure improvements that accelerate climate-smart and equitable infill development.
- Eliminate State funding of infrastructure, development, or leases outside of infill areas in locations that do not demonstrate clear alignment with State guidelines on VMT, climate, and equity outcomes. (For examples of this, see Appendix D on Local Actions).
- Expand tax increment financing options and other financing tools for infill-supportive infrastructure (e.g., water, sewer, electrical, telecommunications, active transportation, urban greening, and parks). Direct these financing tools to support affordable housing, local businesses, neighborhood services and amenities, and other community-identified priority projects with a focus on under-resourced and disinvested communities.
- Continue to encourage the utilization of underutilized public sites for mixed-use development, and expand opportunities for multi-modal transportation facilities.
- Establish guidance for regional and local agencies on how to administer SB 743 mitigation banking or exchanges and how revenue should be spent to support projects that reduce VMT.

- 2. Encourage alignment in land use, housing, transportation, and conservation planning in adopted regional plans (RTP/SCS and RHNA) and local plans (e.g., general plans, zoning, and local transportation plans).** SCSs illustrate future land use and transportation changes that would lead to reductions in VMT and GHG emissions to meet the regional GHG emission reduction targets set by CARB. However, as noted earlier, SCS implementation is lagging significantly across the state. As detailed in the California Transportation Assessment Report (pursuant to AB 285 (Friedman, Chapter 605, Statutes of 2019)), MPOs, which develop the SCS plans, do not have adequate instruments to implement them and do not have the authority to ensure alignment of local land use decisions – as reflected in cities and counties’ general plans – with the SCSs. The goal of this objective is to strengthen regional plan implementation and funding and the ability of regional plans to achieve regional GHG targets. Advancing California regions’ visions for accelerating infill development and climate-smart housing production will require a collective discussion about establishing more coordinated MPO-local

government relationships that lead to codifying those regional visions into land use plans and ordinances at the local level.⁵⁹

Actions:

- Establish a requirement that all local general plans demonstrate consistency with the assumptions and growth allocations in regional RTP/SCSs at least every 8 years consistent with existing RHNA and housing element update timelines.
- Explore measures to ensure or require greater consistency and alignment between regional RHNA allocations, SCSs, and regional plans such as strategic planning that prioritizes green space and conservation and encourage greater integration of state housing and conservation policy priorities to minimize/prevent conflict.

- 3. Accelerate production of affordable housing in forms and locations that reduce VMT and affirmatively further fair housing policy objectives.** Another critical objective is to accelerate production of a greater diversity of housing types in climate-smart locations. According to the latest Statewide Housing Plan (SHP), California must build at least 2.5 million new homes in the current eight-year housing need cycle and no fewer than one million of those homes must meet the needs of lower-income households.⁶⁰ The State’s vision, as articulated in the SHP, is to provide these homes in climate-smart areas, areas with high access to opportunities and services that reduce the need to drive and mitigate climate change while also reducing costs to government in infrastructure development, operations, and maintenance. Efforts to accelerate housing production should be complemented with bold initiatives to preserve existing affordable housing and protect vulnerable residents through continuation of expiring affordability covenants, anti-displacement and tenant protection services and resources, and climate adaptation upgrades to existing affordable housing.⁶¹

Key actions are needed across multiple fronts including easing local and State barriers to increasing density and encouraging greater diversity of housing types in existing neighborhoods. Although research has shown that the California

⁵⁹ This type of coordination would also address the need for continued accountability in existing housing laws regarding additional density, affordability, and infill under the purview of California Housing and Community Development Department’s Housing Accountability Unit or the Department of Justice.

⁶⁰ California Department of Housing and Community Development. 2022. *Statewide Housing Plan*. Available at: <https://www.hcd.ca.gov/docs/statewide-housing-plan.pdf>

⁶¹ Potential conversion of affordable housing to market-rate housing is an ongoing and critical statewide problem. In California, there are approximately 149,000 units of privately owned, federally assisted, multifamily rental housing, plus additional tax-credit and mortgage-revenue bond properties, many with project-based rental assistance. A large percentage of these units may convert to market rate as subsidy contracts or regulatory agreements expire. These at-risk units are home to seniors and families with lower incomes who cannot afford to pay market-rate rents and who could be displaced if the developments convert. More info: <https://www.hcd.ca.gov/policy-research/preserving-existing-affordable-housing.shtml>.

Environmental Quality Act (CEQA) is not a primary barrier to infill housing relative to other challenges, further attention to issues in its implementation can help resolve any challenges it does pose.⁶² Affordable housing should be prioritized in many types of communities, including those that are already resource-rich and transportation-efficient. Additionally, affordable housing should be coordinated with supportive community investments in under-resourced communities.

Actions:

- Further ease local regulatory and California Environmental Quality Act (CEQA) barriers to increasing density and affordable housing development, especially in transportation-efficient areas, and establish protections in the law against tactics to obstruct developments that advance State equity and climate goals.
 - Increase funding for affordable housing and infill-supportive developments that accelerate VMT-reducing housing production in alignment with the SCS through programs such as Regional Early Action Planning of 2021 (REAP 2.0), Affordable Housing and Sustainable Communities (AHSC), and Transformative Climate Communities (TCC).
 - Scale up factory-built housing production, including investing in workforce development, boosting participation in the construction industry, and establishing labor standards, to reduce the time and cost of delivering multifamily infill housing and accelerate the infill housing pipeline.
 - Leverage the State’s Prohousing designation by expanding incentives in State funding programs – including transportation and other non-housing programs – for local jurisdictions to adopt pro-housing policies, especially in ways that increase infill housing and reduce VMT.
 - Support programs and policies to enable different housing ownership models to expand housing access such as through community land trusts, mutual housing, and cooperative ownership models.
 - Incentivize conversion of a broader array of opportunity sites for affordable housing construction including redevelopment of aging malls, office parks, and other major reuse sites.
- 4. Reduce or eliminate parking requirements (and/or enact parking maximums, as appropriate) and promote redevelopment of excess parking, especially in infill locations.** Building parking for infill development makes construction costs more prohibitive, considering parking can cost up to \$100,000 per stall, which takes away both physical space and budget from the construction of housing and other needed services and amenities. Yet minimum requirements for parking in new developments are regularly set by local jurisdictions, financiers, or others.

⁶² O’Neill, Moira and Biber, Eric and Gualco-Nelson, Giulia and Marantz, Nicholas and Marantz, Nicholas. (September 18, 2021). *Examining Entitlement in California to Inform Policy and Process: Advancing Social Equity in Housing Development Patterns*. Available at SSRN: <https://ssrn.com/abstract=3956250>

Particularly where viable transportation alternatives are available, eliminating parking requirements and/or providing a “cap” on allowable parking can make infill development more financially feasible and is more conducive to lowering VMT. Measures to reduce parking in new developments can also be paired with funding or incentives for car share, electric vehicles, electric bikes and scooters, and other driving alternatives. AB 2097 (Friedman, Chapter 459, Statutes of 2022)⁶³ will help with this in certain areas, but there is still work to be done.

Actions:

- Develop financing and incentives programs that facilitate conversion of excess parking to housing and other strategic uses for communities.
- Enact parking maximums (caps).

- 5. Preserve and protect existing affordable housing stock and protect existing residents and businesses from displacement and climate risk.** Identifying and preserving the existing affordable housing stock – both subsidized and “naturally occurring” affordable housing – is key to maintaining the economic accessibility and vitality of existing communities while investing in new development and ensuring that low-income residents are not displaced when new infill development occurs. Additionally, preserving all types of affordable housing requires climate mitigation and adaptation improvements to ensure the future safety and viability of those residences. One action the State could undertake could be to identify potential changes to federal and State policies to increase incentives to preserve existing affordable housing, implement climate adaptation improvements to existing affordable housing, and reduce and mitigate displacement of existing low-income residents.

Actions:

- Identify potential changes to federal and State policies to increase incentives to preserve existing affordable housing, implement climate adaptation improvements to existing affordable housing, and reduce and mitigate displacement of existing low-income residents.

⁶³ See https://leginfo.legislature.ca.gov/faces/billTextClient.xhtml?bill_id=202120220AB2097.