



California 2040
TRANSPORTATION PLAN
Integrating California's Transportation Future

The logo features a stylized 'C' composed of multiple colored lines (blue, green, yellow, orange, red) that fan out to the right. Below the 'C' are seven circular icons representing different modes of transportation: a car, a bus, a train, a ship, a truck, an airplane, and a person walking. The year '2040' is written vertically in a large, bold, blue font to the right of the icons.



DRAFT-March 2015



California’s transportation system is influenced by many statewide, national, and international trends that affect travel demand, system operation, and implementation of new projects and services. These trends can present challenges and must be understood in order to accurately predict needs and gaps in the statewide multimodal transportation system. The sections below highlight some economic, demographic, and policy trends and challenges that influence today’s transportation system and should be taken into account in long-range planning. These trends and challenge areas are:

- Demographics;
- Economic prosperity;
- Transportation funding;
- Climate change and GHG reduction;
- Freight mobility;
- Fuel, energy and technology;
- Sustainability in rural communities and small towns;
- Sustainability in tribal communities;
- Public health; and
- Housing and land use.

Housing siting and density

DEMOGRAPHICS

California is one of the most diverse states in the nation (see Table 7).¹ The annual growth rate is expected to be one percent throughout the forecasted years.² A growing and diversifying population will present challenges for transportation planners.

Transportation entities do not have sufficient resources to respond to anticipated increases in transportation demand by a population that is aging and diversifying. The States’ transportation planning must serve the unique needs of all, while creating a system that can respond and adapt to future shifts in travel preference.

TABLE 7. CALIFORNIA ETHNIC DIVERSITY COMPARED TO NATIONAL ETHNIC DIVERSITY

ETHNIC GROUP	CALIFORNIA	USA
American Indian and Alaska Native alone	1.6%	1.2%
Asian alone	13.6%	5.2%
Black or African American alone	6.3%	12.9%
Hispanic or Latino	36.9%	16.7%
Native Hawaiian and Other Pacific Islander alone	0.5%	0.2%
White alone, not Hispanic or Latino	37.5%	61.4%
Two or more Races	3.6%	2.4%

Source: United States Census Bureau, U.S. Department of Commerce, 2010

POPULATION GROWTH

The State’s population today is over 38 million,³ and it is projected to reach 48 million by 2040.⁴ There are approximately 24 million licensed drivers and 32 million vehicles registered annually in the State.⁵

Population growth amplifies the need to improve the transportation system’s connectivity and efficiency to meet future demands. Today, approximately 95 percent of California’s population lives in urbanized areas. By 2040, the most populous coastal metropolitan areas, such as the San Francisco Bay Area, Los Angeles and San Diego, will

population, environmental concerns, and delayed marriage and childbirth also influence travel behavior. In order to adequately plan for a transportation system that meets the State's needs in 2040, demographic trends and influential factors should be closely monitored and addressed.

California will surpass the national average for age by 2040 even though it is currently the sixth youngest state in the nation with only 11 percent of its population 65 and older. Baby boomers are the primary reason for this demographic change, as they are projected to make up 19 percent of the population that is 65 years and older by 2030. The ratio between people over the age of 65 and people of working class age (25 to 64) is expected to increase to 36.0 seniors per 100 working age residents by 2030, compared to a 21.6 to 100 ratio in 2010. As people age, they are less likely to drive due to health limitations, requiring alternative transportation modes.

Alternative forms of transportation, such as high-speed rail, transit, carsharing, and active transportation, will be important to accommodate potential shifts in travel behavior. Demographic shifts demonstrate the need for the CTP 2040 to plan for a comprehensive transportation system that incorporates all transportation modes. The CTP 2040 presents an array of transportation options and system recommendations needed to create a comprehensive multi-modal system that connects people to crucial destinations.

ECONOMIC PROSPERITY

California continues to recover from the "Great Recession" that lasted from December 2007 to June 2009. Since the Great Recession, unemployment and housing foreclosures have decreased and the credit rating of municipalities and the State has steadily improved. In 2013, the State regained its title as the eighth-largest economy in the world, with a gross domestic product of \$2 trillion.¹⁰ Even more promising is the State's expected \$2.4 billion surplus in 2014.¹¹ California's positive economic outlook is sustainable by creating an attractive business climate, continuing to build confidence in the economy, and improving the transportation system. Transportation helps stimulate the economy by providing Californians with access to jobs, education, goods and services, and recreational facilities.

Goods and services reach international, national, tribal, and regional markets through the transportation system. California businesses export approximately \$162 billion worth of goods to over 225 foreign countries.¹² With the recent positive economic outlook, businesses have begun to reinvest in the economy by increasing jobs and wages (see Table 9). Future advancements in transportation technology will continue to foster industrial growth and economic opportunities for Californians.

California's economy is dependent on the well-being of businesses and households. Businesses depend on a reliable transportation network to create products and offer services that ultimately reach consumers

TABLE 9. CALIFORNIA'S EMPLOYMENT STATISTICS

YEAR	POPULATION (THOUSANDS)	TOTAL JOBS (THOUSANDS)	TOTAL JOBS MEAN SALARY	TRANSPORTATION JOBS (THOUSANDS)	TRANSPORTATION JOBS MEAN SALARY
2003	35,389	14,513	\$40,640	1,019	\$27,680
2004	35,753	14,535	\$41,510	1,039	\$27,950
2005	35,986	14,724	\$42,510	1005	\$28,950
2006	36,247	15,066	\$44,180	1,034	\$29,360
2007	36,553	15,203	\$45,990	1,013	\$31,050
2008	36,857	15,213	\$48,090	996	\$32,190
2009	37,078	14,533	\$49,550	916	\$33,090
2010	37,309	14,002	\$50,730	894	\$33,620
2011	37,570	14,039	\$51,910	891	\$34,070
2012	37,872	14,304	\$52,350	907	\$34,170
2013	38,205	14,715	\$53,030	947	\$34,220

Source: Bureau of Labor Statistics

at a reasonable cost. Households depend on an integrated, accessible, and dependable transportation network to provide them access to education, jobs, and recreational activities. A sustainable, time-efficient, and cost-effective transportation system helps alleviate increasing business competition from neighboring states and Mexico. The CTP 2040 recommendations encourage policymakers to support an efficient and effective transportation network that is cost effective for businesses and households.

TRANSPORTATION FUNDING

The expected rise in transportation needs and decline in transportation funds present a fundamental problem for California. For nearly thirty years, transportation spending has been underfunded. Caltrans is working closely with the regional transportation agencies and the US Department of Trans-

portation to maximize every dollar of investment in a multimodal system. Nevertheless, a recent assessment prepared by the CTC¹³ highlights deep gaps in funding available for basic transportation system maintenance and operation alone, not to mention addressing population growth and transportation preference shifts. At the same time, the transportation system is under greater pressure to accommodate the mobility needs of California's growing population and underserved groups – such as those with disabilities, veterans, and the elderly – and to address climate change. The aging physical system needs modernization, upkeep, and maintenance to meet expected demand increases. This is impossible without adequate funding.

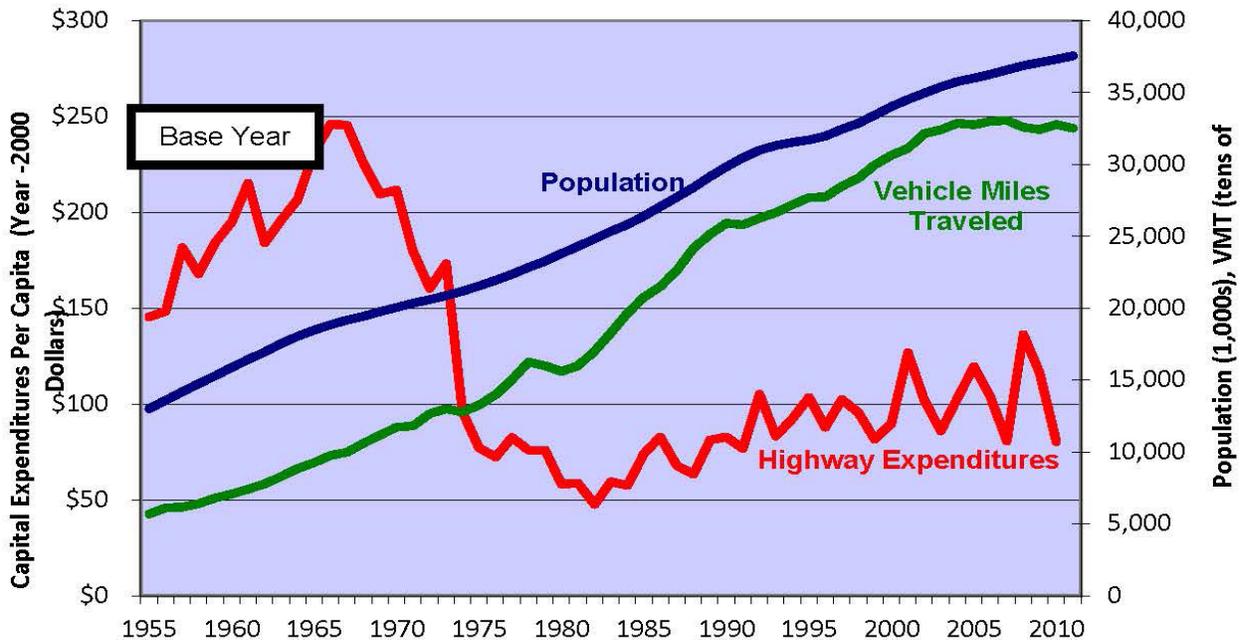
The traditional approach to funding transportation projects in California is based on user fees, including fuel taxes, sales taxes,

vehicle weight fees, transit fares, and tolls. However, more reliable revenue sources are needed. Excise taxes on gasoline and diesel fuels are primary revenue sources for federal and state governments. The State has struggled to raise funds to maintain and improve the transportation infrastructure because these sources have not been indexed for inflation or adjusted for technological advancements and trends. Fuel taxes are collected on a per-gallon basis, which means that lower revenues will be generated if people drive fewer miles or vehicles become more fuel efficient (see Figure 1).

Legislative efforts such as AB 32 to reduce GHG emissions from all sources through improved technology and regulation, and

SB 375 coordinating transportation and land use planning, attempt to decrease GHG emissions from automobiles by promoting active transportation and trans... While improving the natural environment, these legislative mandates also impact long-range funding of transportation projects. To reduce their "carbon footprint," individuals may buy vehicles that are more fuel efficient, reduce driving by bundling trips, take public transportation more often, or choose to live in communities that offer transportation, housing, and land use options. All of these choices will lessen negative environmental impacts associated with transportation; however, with transportation funding based on user fees, these choices can negatively impact the resources available for trans-

FIGURE 1. HISTORICAL POPULATION, TRAVEL AND PER CAPITA HIGHWAY CAPITAL EXPENDITURES 1955-2010*



* Includes expenditures for local assistance and state highway capital outlay. Source: Office of State Planning-Economic Analysis Branch, 08/2013

The transportation system helps shape communities and vice versa. Transportation and land use decisions can promote public health by making it easier and safer for people to walk, bike, and take public transit. As the connections are made, parties responsible for land use and transportation decisions tend to work together to coordinate plans, projects, and services.

Safety continues to be a major public health concern for transportation. Safety is a concern not only for drivers and passengers but also for pedestrians and bicyclists. The design of transportation infrastructure increasingly takes into consideration public health impacts as well as safe accommodation of all modes. All levels of government have stepped up efforts to encourage more responsible driving habits that will make transportation safer for all users. National and state campaigns have been launched to raise public awareness about the dangers of distracted driving and driving under the influence.³⁹

Limited access to transportation can affect health, particularly among vulnerable populations, such as the poor, the elderly, children, the disabled, and various ethnic communities. These populations may not own cars, may be unable to drive, or may have no convenient, affordable access to reliable public or private transportation. Thus, it is critical to improve transportation access for all people to enjoy the benefits. A safe and accessible transportation system would allow reliable transportation for communities to travel to supermarkets for fresher foods, to integrate daily walking as a form of exer-

cise to meet exercise goals,⁴⁰ and access better health care facilities, education, jobs, recreation, and other needs that all link to improved health. Transportation solutions at the community level are needed to serve these basic, daily needs.⁴¹

Inactivity is a significant factor in obesity, which contributes to many chronic diseases. Creating opportunities for people to incorporate active transportation opportunities – walking, biking, and public transportation – into everyday travel is important to improving public health. Active transportation is a critical component in developing and implementing SCS's, reducing greenhouse gas emissions, and making regions more enjoyable to live, work, and play.



Photo: Ruben de Rijcke, Wikimedia Commons

The transportation sector is a major source of air pollution, which results from an accumulation of emissions and small particulates in the exhaust from fossil fuel combustion engines on most trucks, cars, trains, planes, and ships.⁴² These emissions are linked to increased incidence of several chronic respiratory and cardiovascular diseases. Federal and State regulations have already done much to improve air quality, but ad-

ditional improvements are needed. New technological advances in alternative fuels and vehicles, together with government policies and industry innovations to support them, are needed to further improve our air quality.⁴³

HOUSING AND LAND USE

Despite the recent lows of the Great Recession from December 2007 to June 2009 and the current recovery, the cost of housing as a proportion of local wages in California continues to rank highest in the nation.⁴⁴ For more than 25 years, the State, local governments, and redevelopment agencies have helped facilitate availability of affordable housing and engage in community development. With the loss of redevelopment agencies in 2013, many local resources that promote the building of affordable housing are no longer available.

A challenge is to develop housing that is affordable, safe, and healthy. Housing in California is becoming an even more important issue as the State's demographics change.⁴⁵ It is increasingly important to consider location efficiency and compact development patterns as methods of restraining housing and transportation costs. Another challenge is promoting a land use development pattern that aligns with where people live and work in urban, suburban, and rural areas. It is crucial that regions work together to provide housing and transportation options for all Californians.

Land use, housing, and transportation plans need to be coordinated between the cities and counties – the entities typically respon-

sible for local land use decisions – and regional agencies and the State, which are responsible for regional and interregional transportation decisions. Planning and land use decisions have a tremendous impact on our communities. Historic land use practices have often contributed to increases in traffic congestion, commute times, and air pollution; the loss of open spaces; and a reliance on automobiles. Now, with the improvement of the housing outlook and new construction, a challenge is to provide residents with a mix of housing options. In more urbanized areas, demand for multi-unit housing near transit is expected to increase.

Past development trends included low-density growth planning, resulting in considerable land consumption and urban sprawl that required higher infrastructure investments. The SCSs and other legislation calls for transportation planning, housing projections, and land use planning to be considered in concert, as opposed to separately. To help preserve open space and discourage sprawl, SB 375 encourages local governments and regions to consider alternative land use patterns that promote compact urban infill. Since each SCS program is part of an RTP effort and ultimately feeds the larger CTP 2040 plan, housing and land use are keys to developing the vision of the CTP 2040.

One solution to discourage urban sprawl and coordinate land use and transportation is to support focused housing development in locations close to transit and multimodal services, with consideration for noise and air quality issues. This is often referred to

Ch. 3 Trends and Challenges _ Housing and Land Use (pg. 36-37)

- Propose to substitute the following revision/reorganization of existing draft text:

Planning and land use decisions have a tremendous impact on our communities. Historic land use practices have often contributed to increases in traffic congestion, long commute times, and air pollution, loss of open space, and dependence on auto use, frequently single occupancy vehicles. In more urbanized areas, demand for multi-unit housing near transit is expected to increase.

A prevalent strategy to discourage urban sprawl and coordinate land use and transportation is to support focused housing development in locations close to transit and multimodal services, with consideration for noise and air quality issues. This is often referred to as a key component of “smart growth” or “transit-oriented development” (TOD) and it has the potential to increase the accessibility, affordability, and diversity of housing, as well as to support new jobs.

Land use development that supports the viability of rural communities, agricultural operations, and natural habitats is essential. The CTP 2040 supports sustainable development to alleviate pressure to develop open spaces and agricultural lands. Location-efficient development within established urban growth boundaries or urban limit lines will help preserve the natural beauty of California, increase agricultural productivity, and promote habitat continuity. Infill development and mixed-used development promote multimodal transportation and encourage more walking, biking, transit use, and shorter auto trips. Mixed-use development typically results in shorter vehicle trips and higher rates of non-motorized travel.

The location and affordability of housing has a fundamental influence on transportation planning and investment for sustainable communities. Despite the recent lows of the Great Recession from December 2007 to June 2009 and the recovery, the cost of housing as a proportion of local wages in California continues to rank highest in the nation.¹ California’s high housing costs tend to cause workers to live further from where they work, resulting in long commutes, as noted in a March 2015 report by the California Legislative Analyst’s Office:

¹ City Rating <http://www.cityrating.com/cost-of-living/california/#.Ui-tONLksuc>

“Faced with expensive housing options, workers in California’s coastal communities commute 10 percent further each day than commuters elsewhere, largely because limited housing options exist near major job centers.”²

Housing in California is becoming an even more important issue as the State’s demographics change. It is increasingly important to consider location efficiency and compact, higher density development patterns as methods of restraining housing and transportation costs. It is crucial that all levels of government work together to provide housing and transportation options for all Californians, with land use development patterns that align where people live and work in urban, suburban, and rural areas. Land use, housing, and transportation plans need to be coordinated between the cities and counties – the entities typically responsible for local land use decisions – and regional agencies and the State, which are responsible for regional and interregional transportation decisions, and allocation of housing assistance.

State housing planning goals are to provide a mix of housing types for all income levels, and access to areas of opportunity – particularly locations where jobs and educational opportunities are concentrated. Realization of these objectives is dependent on the goals established for the transportation system, including greater mode choice. Coordination of housing planning and investment with transportation is especially critical because residential land use accounts for the largest share of urbanized land use and represent household locations points of origin used in trip modeling for transportation investments.

Enactment of SB 375 increased synchronization of regional transportation planning and regional housing need allocation processes via the Sustainable Community Strategies. This is intended to change course from past development patterns of low-density planning resulting in urban sprawl. To help preserve open space and discourage sprawl, SB 375 encourages local governments and regions to consider alternative land use patterns that promote compact urban infill. The housing and land use assumptions of the RTPs of the major metropolitan areas inform the development of the CTP, and have been keys to developing the vision, goals and strategy recommendations of the CTP 2040.

² California’s High Housing Costs: Causes and Consequences, Mac Taylor, Legislative Analyst, March 17, 2015. <http://lao.ca.gov/Publications/Detail/3214>

Draft CTP 2040_ HCD Comments, Pt. 2

There has been growing recognition of the importance of the combination of housing and transportation costs on cost of living, particularly to low and moderate income households and employees. As has been acknowledged in RTPs, spatial and economic mis-match between housing and employment contributes to congestion and sometimes is considered an impediment to environmental justice, e.g. when workers are priced out of job-rich areas, or job-rich areas lack accessibility by transportation modes other than autos.³ Strategies will be needed in high demand areas of concentrated transportation and other public investment to avoid displacement of lower income households and neighborhood businesses due to escalating property values that result from public investment in transportation systems.

A variety of Federal funds and tax credits, State bond funds, and local government assistance have facilitated availability of affordable housing and community development. Sharp reductions in all of these sources, including the loss of redevelopment agencies in 2013, have rendered resources for preservation and construction of affordable housing extremely scarce, increasing housing affordability challenges. In this environment, the feasibility and affordability of new housing construction is particularly sensitive to increasingly high impact fees imposed for transportation and other improvements. Parking management, including lower parking standards in infill areas served by transit, are an example of strategies with potential mutual benefit to transportation, housing and land use objectives.

Through the goals, policies, strategies, and performance measures established by this plan, public health, environmental justice, and social equity will be integrated into transportation planning and decision- making for transportation services and housing development statewide. To ensure success, it is critical to create partnerships, build relationships, and collaborate when making housing and land use decisions at local, regional, and State levels.

³ SCAG 2012-2035 Regional Transportation Plan, Environmental Justice Appendix, p. 61.
http://rtpscsc.scag.ca.gov/Documents/2012/final/SR/2012fRTP_EnvironmentalJustice.pdf

Draft California Transportation Plan 2040, HCD Draft Comments 4.13.15

Ch. 1: Purpose and Context, Planning Framework, Caltrans Planning Initiatives (pgs. 7-13)

- This chapter should provide the compelling needs the CTP and its implementation plans have to address – helping people understand the nature and magnitude of the transportation funding challenge the State is facing – readers need a reason to read the rest of the plan (before the discussion pgs. 26-27). Rather than merely describing the purposes of the numerous plans and initiatives, isn't this the opportunity to address "why do any of these plans matter" – introducing some of the gargantuan transportation needs the state faces that is identified in some of the plans identified, and setting the stage for the subsequent Trends and Challenges chapter? It would be desirable to include some of the graphics from some of these reports, e.g. the illustration of "Revenue Loss Due to Increases in Fuel Economy," or "What the 18 Cent Gas Tax is Worth Today," from the CTIP report.
- **Performance Measures** (pgs. 5-6) – Unsure whether this is the most appropriate place for this section. (Table 1. Is not legible on a single page... is this being reformatted to be legible?) The section begs explanation of how the performance measures identified are to be applied or implemented, perhaps referencing the various plans identified later, or perhaps the (later) description of the individual plans indicate which of the performance measures would be applicable or may be considered?
- It would seem more appropriate to begin this section with a description of **the (5) modal plans** that are key to implementing the CTP, moving the intro and Table 2 (from pg. 8 to pg. 7). Some of the description in Table 2, i.e., re: the Freight Plan (CFMP), and Strategic Transit Plan, should be expanded and updated. As is, there is earlier (pg. 7) and more description (pg. 13) of ARB's Sustainable Freight Transport Initiative (which is still underway) than the adopted Freight Plan. It would, for example be relevant to describe how plans like the Freight Plan are incorporated into the national Freight Plan.
- Pg. 7 re: Regional or District role in implementation of modal plans – Given that most of the implementation of the modal plans occurs at the regional level, via Caltrans district offices, MPOs and RTPAs (via District Systems Management Plans (DSMPs) and RTPs/RTIPs), it seems a description of this should be included in the Planning Framework section of the CTP. It might be helpful to include some of the diagrams from the "Transportation 101" powerpt.
- Pg. 9 & 11 re: RTPs/SCS – The description should describe the role of RTPs in programing of transportation funds by the CTC, including the development of projects included in Regional Transportation Improvement Plans (RTIPs). It should explain that RTPs are used to develop the Federal Transportation Improvement Program (FTIP). It should also indicate that RTPs are the key planning vehicle for integrating transportation and land use planning, as their Sustainable Community Strategies are required to accommodate the Regional Housing Need Allocations (RHNA), as determined by the Department of Housing and Community Development (HCD). It would be helpful if it included reference/hyperlink to the [Regional Transportation Plan Guidelines 2010](#). (it is unclear what this opening clause of the second par. on pg. 9 means: "Unlike their regional counterparts . . .").

The text referencing the ARB Scoping Plan should indicate that the examples cited are projections – (their realization is dependent on significant uncertainty, including the availability of key transportation investments).

- Pg. 12 re: CTC Transportation Needs Assessment & CTIP– Perhaps among the most important information for the CTP to include is characterization of the actual transportation needs that have been identified... this The CTP ought to include some of the key findings and recommendations of the CTC TNA and the CTIP exemplifying the magnitude of the need (the hyperlink for this in the draft doesn't connect), e.g.

“The total cost of all system preservation, system management, and system expansion projects during the ten-year study period is nearly \$538.1 billion. Of this total, the cost of system preservation projects (both rehabilitation projects and maintenance costs) during the study period is \$341.1 billion.”
- Pg. 12 re: AB 32 Scoping Plan – Particularly given the opening sentence of the Introduction to the CTP (pg. 1), it would be desirable for this plan to describe the context for the important role of GHG reduction in the transportation sector, and why it is the leading sector for GHG reduction (could reference pg. 91 or other of the Scoping Plan or more recent info, and the url for the [Transportation Appendix C](#) of the Scoping Plan could also be provided). Accordingly, it would also be appropriate to describe how transportation, including transportation and land use, is one of the key investment sectors of the auction proceeds from the State's Cap and Trade Program, as set forth in [First Three-Year Investment Plan \(May 2013\)](#), scheduled to be updated in 2016. (The CC and GHG section pgs. 28-29 is predominantly about sea level rise).

Ch. 2 The Transportation System (pgs. 16-21)

- Overall – couldn't some need-related information/figures be worked into the descriptions of the various components? For example, given the substantial role being advocated in various plans and programs for increasing transit ridership and the role transit is expected to play in mode shift, the draft CTP, either in this or other chapters (acknowledging the MTC and SCAG transit shares mentioned on pg. 27 of Ch. 3), includes very little information about the needs of the State's public transit systems. See below.

Ch. 3 Trends and Challenges (pgs. 22- 37)

SEE ALSO HCD Comments Part 2 re: Housing and Land Use section, pgs. 36-37

- While the recommendations of the CTF include reference to a “**Fix-it-First**” need (pg. 65) , it would be beneficial to first introduce the need to focus resources on repair and maintenance of the existing transportation system in this chapter (as a section heading). For example, this information included in a CalSTA blog by Secretary Kelly, might be relevant to include:

“Through a one-time cash infusion under Proposition 1B, about 59 percent of California’s pavement is in excellent condition and 25 percent requires routine maintenance to stay in good condition, while the remaining 16 percent is in poor condition. Reaching our goal of 90 percent healthy pavement will not only require substantial commitments to preventive maintenance on about 12,000 miles of existing pavement, but also reconstruction of nearly 3,000 miles of pavement that suffers major structural distress.”

Source: <https://calstablog.wordpress.com/2015/03/05/secretary-kelly-emphasizes-fix-it-first-strategy-comprehensive-accounting-of-life-maintenance-costs/>

- gs. 24-25, re: Economic Prosperity – Recommend adding the following clause to recognize the importance of transportation accessibility of workforce housing to employers.

“ .. Businesses depend on a reliable transportation network to create products and offer services that ultimately reach consumers, as well as for efficient and reliable access to the housing accommodating their workforce needs.” (Add a footnote citing to this publication as an example: 2015 Orange County Workforce Housing Scorecard, Orange County Business Council, March 2015. <http://www.ocbc.org/research/workforce-housing-scorecard/>)

- As, according to the salary figures in Table 9, transportation salaries haven’t kept pace with the rate of salary increase for total jobs, this table doesn’t offer very strong support for the economic assertion on pg. 24 (The transportation salaries indicate how low the salaries are and one of the reasons labor issues are so prevalent in the transit industry).
- The challenges of competition of different modes (bus/rail/BRT/streetcar) or target audiences (core low income vs. “choice” riders) within the transit sector seems an important challenge to acknowledge in this chapter. The priority needs identified by the *Statewide Transit Strategic Plan*, including the need for financial stability in particular, are important to highlight in the CTP (if not in this chapter, then perhaps in Ch. 3 in the “Transportation Funding” section, although there are many issues beyond financial ones). It might also be appropriate to reference some more recent reports with recommendations for improvements to local transit systems. e.g., *Seamless Transit - How to make Bay Area public transit function like one rational, easy-to-use system*, by SPUR http://www.spur.org/sites/default/files/publications_pdfs/SPUR_Seamless_Transit.pdf
- It should be noted that the availability, accessibility and quality of transit is critical to the policy objectives of reducing GHG via integration of transportation and land use, including transit oriented development (TOD) affecting the housing and other planning and investment sectors.
- Pgs. 29-30 Freight Mobility – Recommend moving the first par. on pg. 30 to the earlier portion of the discussion on pg. 29, and wouldn’t it be appropriate to include the **map of the Primary Freight Network (PFN)**?

Ch. 6 The Plan

Pg. 58 – 83 - It would seem appropriate to incorporate, or at least directly reference, the goals of the California Freight Mobility Plan (copied below) into the corresponding sections of Chapter 6:

Economic Competitiveness

Improve the contribution of the California freight transportation system to economic efficiency, productivity, and competitiveness

Safety & Security

Improve the safety, security, and resilience of the freight transportation system

Freight System Infrastructure Preservation

Improve the state of good repair of the freight transportation system

Environmental Stewardship

Avoid and reduce adverse environmental and community impacts of the freight transportation system

Congestion Relief

Reduce costs to users by minimizing congestion on the freight transportation system

Innovative Technology & Practices

Use innovative technology and practices to operate, maintain, and optimize the efficiency of the freight transportation system while reducing its environmental and community impacts

Ch. 7 Analysis and Outcomes

- VMT/GHG Reduction Strategies Used in the Alternatives, pg. 90 –
 - Many of the strategies evaluated are based on very aggressive assumptions for behavioral change (dependent on many resources and other issues) during the projection period. The high degree of uncertainty inherent in modeling assumptions at this scale should constrain the applicability of the estimated GHG emission changes in any formal or regulatory context.
 - They include a number that, as acknowledged, lack a policy basis for the assumption, e.g. “double bike shares,” and thus it is difficult to assess whether the assumption is at all realistic, nor evident how the estimated VMT reduction would be captured, especially absent baseline figures. Given the distinction explained between the effect of whether the strategies in Table 17 are based on a policy enabling modeling of the associated VMT reduction vs. an objective, not based on specific policy, where recommendations are made regarding these strategies in Ch. 8, it may be appropriate to note those strategies which more specific policies enabling quantification of their VMT benefits might be captured.
 - Pg. 92 re: road Pricing Strategy – For a number of reasons, i.e., given that this is estimated to yield by far the greatest VMT reduction, the length of time that pricing strategies have been advocated yet not advanced, and the practical and political challenges with implementing them, it would be appropriate to include more than the brief paragraph describing this strategy, describing for example, some of the issues involved in implementing such strategies.
- CSTDM Alternatives Equity Analysis, Pg. 96 – 97 – There would inevitably be a great deal of geographically-based variability in the equity impacts described, as well as by ethnicity and age that would be important to evaluations of strategies shown in Table 17, including any road pricing strategy in particular. The need for such more detailed analysis should be acknowledged in the text.

Ch. 8 Recommendations and Next Steps

- Sustainability – Foster Livable/Healthy Communities and Social Equity- (or possibly within the subsequent Multi-Modal section) Recommend adding preceding narrative and the following or similar short-range action:
 - Pg. 110 – Add: There is opportunity for applications for federal funding for transit projects to take advantage of provisions to maintain or increase the share of affordable housing in transit corridors.
 - Pg. 111 – Add these or similar actions:
 - Promote inclusion of affordable housing plans, policies and projects within applications for federal funds to take advantage of scoring criteria for these in programs such as the FTA’s New Starts Program.
 - Promote mixed-use activity nodes incorporating place-making urban design principles in conjunction with transportation improvements

Economic Vibrancy recs, Pg. 113 –

- Rec. adding the short-term actions:
 - Support regional and local government planning for investments improving the proximity of jobs-housing relationships.
 - Allocate transportation project funding in a manner incentivizing improved accessibility of housing and major employment centers, restraining commuting distances and the combined cost of housing and transportation.
- Delete or modify the first proposed action:
 - Avoid projects with high health and environmental costs, ~~such as general land uses.~~
- Rec. revising the following, as the implications of this proposed action could be problematic/unrealistic for transit:
 - To the extent reasonable, Adjust pricing of transportation modes to reflect the total cost for each mode, including health and environmental costs, providing subsidies to accommodate ability to pay.
- Revise the following proposed action to preclude it being interpreted/used to require housing developments to have specified environmental benefits:
 - Improve the linkages between transportation, housing and land use ~~by tying policies to~~ with incentives ~~with~~ for environmental benefit.

Obtaining Permanent Funding –

- Pg. 113 – Modify this proposed action, e.g:
Support efforts ~~of a pricing strategy~~ evaluating pricing strategies, including consideration of accounting for equity impacts, contingent upon capacity to simultaneously improve transit services (per discussion on pg. 97)
- Pg. 113 – Add a short-range action, e.g.:
 - Encourage inter-governmental cross-sector collaboration in developing financing mechanisms, including cross-sector financing of transportation corridors and supportive land uses.
- Pg. 115 – Add action to: Encourage employer-assisted housing and use of TDM policies with employers in transit corridors.
- **Re: Improve Multimodal Mobility and Accessibility for All - Pg. 118 –**
 - Move the existing TOD first action item in the “Mid-Range” category to the “Short-Range” category.
 - Add the following action items to the “Short-Range” category:
 - Encourage strategies to support siting of affordable housing within joint development and related development activities of transit agencies, e.g., land banking, identification of surplus land, site acquisition by public or nonprofit entities.
 - Promote planning for and support “First-Mile, Last Mile” improvements increasing accessibility to transit stations and use of transit by people and freight.

- **Pg. 122 Re: short-range actions for Investing Strategically** – While the first item proposed is likely intended to support a “Fix-it-First” orientation, it could be problematic if current wording is taken too literally; instead recommend the following revisions:
 - 1) moving what is now the 3rd short-term recommendation to be the first one; and
 - 2) unless what is now) the first recommendation -“*Avoid funding projects that add road capacity and increased maintenance costs.*” is qualified or caveated, it risks being interpreted literally to preclude any increase in road capacity (and therefore any new subdivision, including ones within infill areas) and used by anti-growth advocates beyond the objective of prioritizing road repair and rehabilitation. Sometimes the development of “managed lanes” accommodating express transit for example, involves increasing the capacity of the existing roadway.